MENNEKES®

Plugs for the world

# Industrial plugs and sockets



2015
International
Edition

Overview Index

# Brand commitment



Excellent
brand quality.
Innovation.
Absolute
reliability.

"I only use professional products, on which I can rely, even under the toughest conditions."

**MENNEKES Elektrotechnik GmbH & Co. KG**
Industrial plugs and sockets
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MENNEKES®
Plugs for the world

# Service

**Contact persons at MENNEKES in Germany**
**The company**
**Sales support**
**References**
**Regulations and standards**
**Index of part number**
**Terms and conditions**





# Receptacles

**Wall mounted receptacles**
**Panel mounted receptacles**
**Flush mounted receptacles**
**Receptacles switched and interlocked, fused**





# Plugs and connectors

**Plugs**
**Inlets**
**Phase inverter plugs**
**Test plugs**
**Connectors**





# Receptacle combinations

**Wall mounted**
**Flush mounted**
**Free standing**
**Hanging**
**Mobil**





# Grounding-type plugs and sockets

**SCHUKO®**
**Grounding-type according to various national standards**





# Special plugs and sockets

**Extended versions**
7 pole | 600V to 690V | Special 1h earth position | Low voltages | Isolating transformer
DC | Zone 22 - hazardous areas | 200A to 400A | CEEplus
**Industrial Ethernet / Automation**
**Custom-designed**
Reefer containers | Camping | Military purpose | Event and entertainment technology
Fire brigade and civil protection | Emergency power supply





# Special devices

**Cable connection boxes**
**Switch disconnectors**
**Hinged windows**






Overview Index

# Service

## Contact persons at MENNEKES



**Contact persons at MENNEKES in Germany**

Pages 4 - 5

## The company



**Values, tradition, and cohesion**

Pages 6 - 7



- **Regional market presence and internationality**
- **People and partnerships**
- **Service and special solutions**

Pages 8 - 13



- **Developing the new. Improving the good.**
- **Practical solutions based on practical experience.**
- **Any time. In any situation. All over the world.**

Pages 14 - 19

## Sales support



**Sales support and advertising material**

Pages 20 - 21

## References



**References**

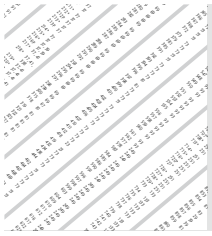
Pages 22 - 31

## Regulations and standards

**Regulations and standards for plugs and sockets**

Pages 32 - 48

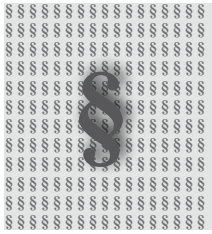
## Index



**Index of part number**

Pages 49 - 55

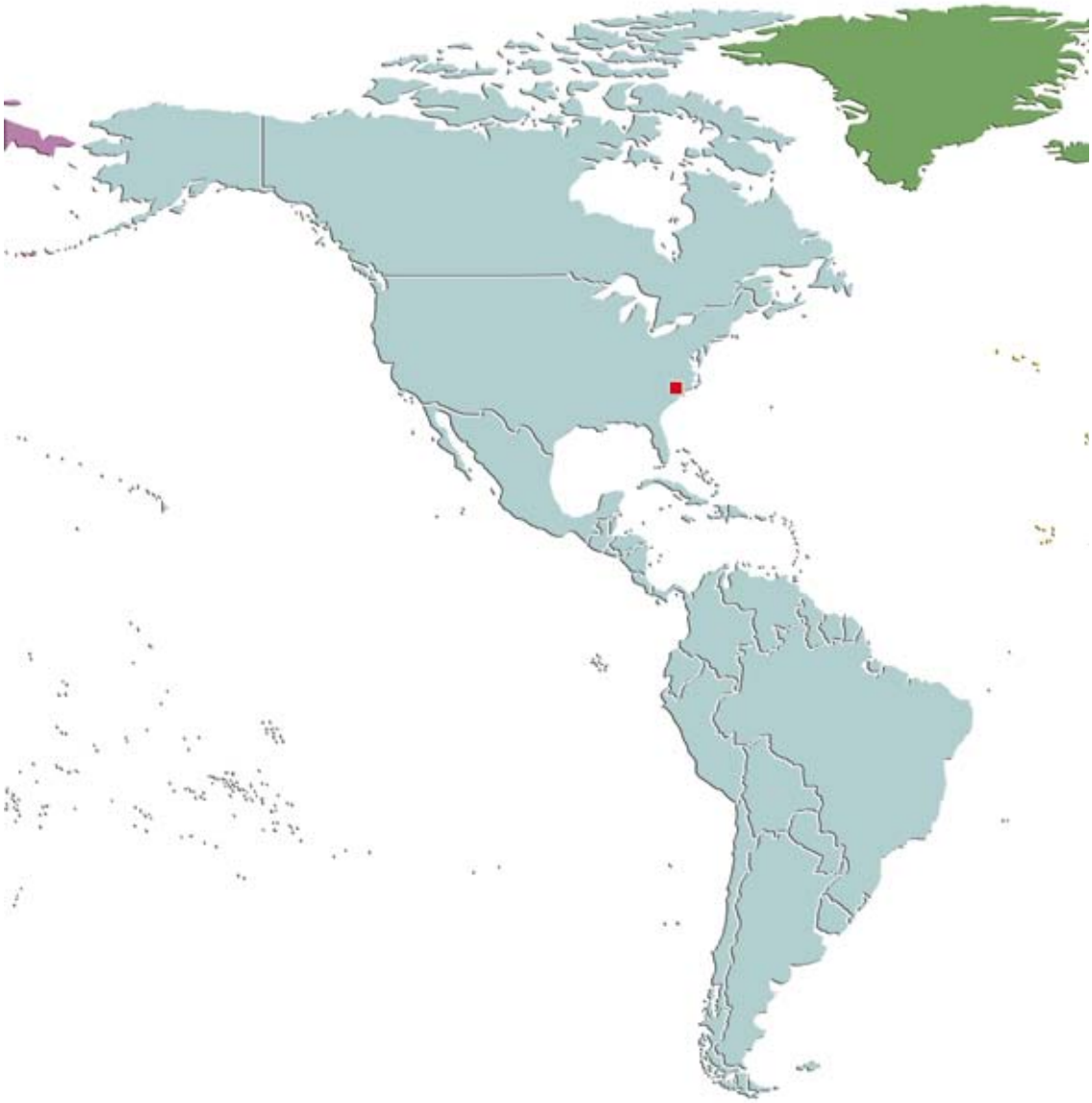
## Terms and conditions



**Terms and conditions**

Pages 56 - 57

# Your contact at MENNEKES in Germany



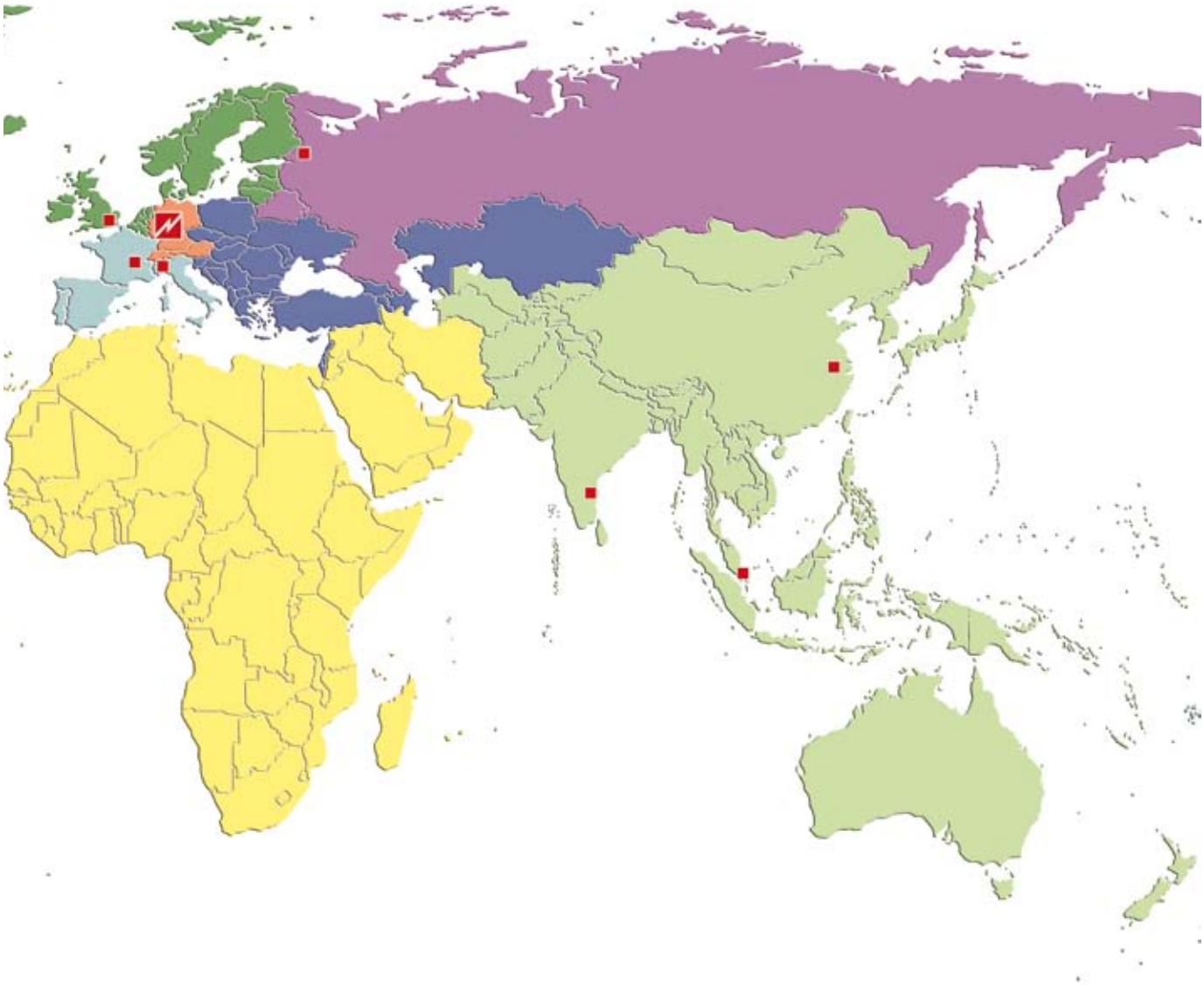
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**International branches**

You will find the contact information of our international branches on the back page of this catalogue

# „Our brand is a promise.“

Christopher Mennekes
Managing Director (CEO)

Values, tradition, and cohesion.





Overview Index

## MENNEKES family

For more than 75 years the MENNEKES name has been the byword for unmistakable products in the markets of the world. Every expert and end user in the electrical industry knows: Only those products which carry the MENNEKES brand name, contain MENNEKES quality. We give you a promise of quality and service. For our family-owned company this promise is one of the main reasons why brands are irreplaceable.

You can rely on MENNEKES. This is and remains the driving force of our 1000 employees worldwide. It is through their daily dedication where they prove their commitment to the MENNEKES brand, whether it is in Germany, in Great Britain or in any other part of the world.

A good mix of employees with decades of experience and young ambitious colleagues is one of the success factors.

A family work climate, above-average commitment to training as well as social responsibility are other typical characteristics of our corporate culture. Consequently we have been awarded the „Top Job“ seal and are ranked as one of the 100 best employers among Germany‘s small and medium-sized businesses.

Tradition and a strong feeling for our homeland and its people are important to us. The regional heritage is always a distinctive part of globality and a stable identity. Consequently MENNEKES has always been intensively engaged regionally, for example, the Sauerland Initiative, a regional marketing association that is involved throughout Germany in establishing an even better image of the Sauerland.

We have a clear identity which makes MENNEKES the ideal partner for you, our customers and the end user, being a reliable supplier of an irreplaceable brand.




From grandfather, to father, to son: What the company‘s founder, Aloys Mennekes, started in 1935 is continued today jointly by Walter Mennekes and his son Christopher Mennekes.




Wolfgang Clement presents the „Top Job“ award as one of the 100 best employers among Germany‘s middle-class businesses to human resources director, Dietmar Spurk, and managing director, Walter Mennekes.

# „We think globally – and act locally“

Andreas Sprecker
Managing Director, Sales and Marketing

Regional market presence and internationality.





Overview Index

## Presence

Plugs for the world: This statement reflects the company's aim and policy. MENNEKES is positioned internationally and is represented in 90 countries around the world.

Our domestic market, Germany is supported from our corporate headquarters in Kirchhundem, as well as by 16 sales agencies and our own field service team.

With our many subsidiaries, we are represented by own employees in the most important growth markets, such as China, Russia, and India. At MENNEKES more than half of the entire turnover is earned in export.



Kirchhundem headquarters

In this regard, we never lose sight of the respective local market and are close to the action. Being present on site in the world markets is an important success factor. Consequently, we have competent contacts in the world markets who take care of their individual requirements locally. This is the only way that we can ensure optimal service and customer orientation.

This also includes an appropriate delivery capability that we ensure through local logistics and stock-keeping.



MENNEKES subsidiaries
MENNEKES partners

# „We like to be in contact with you.“

Michael Schäfer
Director Sales

People and partnerships.






Overview Index

## Commitment

Dialogue on an equal footing, at Mennekes this also means the openness to learn from each other, in order to improve what's good and to develop new things. For example, at Mennekes there is no anonymous hotline. There are only personal contact people who deal with your concerns. We are an open enterprise and each year we welcome several thousand visitors to our main production facility in Kirchhundem for factory tours. Moreover, we enjoy the many personal contacts at our exhibition booth during one of the many electrical industry exhibitions.

MENNEKES is a member, active promoter and initiator of many associations and organizations. In these associations and organizations we are committed to the interests of brand-oriented industry, of the electrical trade and of our region.

Since its founding in the year 1935 MENNEKES has been a member of the Electrical Engineering Guild of the Olpe district. On national level, and on international level we were one of the first companies to recognize the potential of strong brand communication.

Through the active support of sustainable initiatives, such as „Elektromarken. Starke Partner" (Electrical brands. Strong partners), as well as the „E-Marke" (E-Brand) of the ZVEH (Central Association of the German Electrical and IT Trades), we actively lend our support in the interests of all customers for more orientation and safety, and in strengthening brand awareness.




Every year the „Elektromarken. Starke Partner" (Electrical brands. Strong Partners) initiative presents the „ELMAR" – the brand award of the electrical industry to electrical trade companies with a particular brand awareness. The photo shows the 2011 prize winners together with the jury, the advisory board and the marketing work group.

ELEKTRO MARKEN STARKE PARTNER

MENNEKES is a founding member of the „Elektromarken. Starke Partner" (Electrical brands. Strong Partners) initiative. In this initiative 17 leading brand manufacturers bundle the reliable competence and the proven quality of the German electrical engineering industry.

ZVEI

The ZVEI represents the economic, technology, and environmental interests of the German electrical engineering industry on the national, European and international level, MENNEKES is active member of this organization in various committees.

# „As our customers, you deserve excellent service.“

Kerstin Born
Team Manager Sales

Service and customer orientation.






Overview Index

## Added value

We do not just sell you a product. We will also give you all the help you need to sell it successfully.

Eye-catching material for your showroom or promotional flyers for your customers – our service organization helps you to increase your sales.

We present our full range of products at many industry exhibitions, throughout Germany and also internationally. We invite you to visit our training centre in Kirchhundem; we know that extensive information and product knowledge helps you to successfully act on the market.

In addition to standard products, we also offer you our competent consulting and project planning services for individual project requirements. In this regard our technical field service organization would also be pleased to support you on-site. Thus we work out customer specific solutions for you. Contact us.






The MENNEKES stand at the „Light+Building“ in Frankfurt a.M.



The MENNEKES website: With online product catalogue for quick product searches, product datasheets, downloadable brochures, contact details and much more information to support you in your day-to-day business activities.




The MENNEKES Training Centre: Your knowledge edge for more success.

# „We think ahead, so that you can keep a step ahead of the rest.“

Thomas Herbig
Sales Manger OEM

Developing the new. Improving the good.



## Leap Forward

When we have developed a new product, this does not mean that our work is finished. Because only an ongoing development process ensures that you always get the best possible product. For instance, with our AMAXX® receptacle combinations. After the successful market introduction for the energy sector and careful thinking we further developed the product line with solutions for the areas of Industrial Ethernet and automation.

With this product line we offer you system solutions, variably configured with network and automation components. All from one product line: AMAXX® Evolution in an attractive, distinctive design, in many variations for virtually all areas of implementation.



reddot award product design

Bronzemedaillie 2004 Deutscher Designer Club

DESIGN PLUS Award 2004

product design award 2005

DESIGNPREIS 2006 NOMINIERT DESIGNPREIS DER BUNDESREPUBLIK DEUTSCHLAND

Award-winning: Prestigious design prizes for MENNEKES products.

# „You are our best developers.“

Peter Jürgens
Technical Sales

Practical solutions based on practical experience.





Overview Index

## A hands-on approach

Our ongoing, in-depth dialogue with you, our customers, tells us which products are needed in real-life situations. Our R&D department then makes sure that these requirements are realised.

Innovations from MENNEKES always impress thanks to their wellconceived, practical details that make your work easier. Like the new PowerTOP® Xtra plugs and connectors for the toughest conditions.

The unique rubber coating on the gripping surfaces ensures a firm hold even in damp or dirty environments or snowy conditions. In addition, it guarantees increased impact resistance. Screws are needed only for conductor connection. And, as the cable gland is always located directly on the plug and connector bodies and the seals are molded into the flap lid and plug front, safe and clean operation is always ensured.




Further information about PowerTOP® Xtra

**Protected:**
PowerTOP® Xtra 63A in IP 44 and IP 67, while 125A is available in IP 67.

# „It's tough out there. That's why our products have to be tougher."

Peter Steinbeck
Technical Field Sales

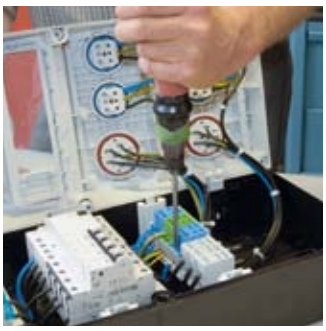


## Endurance test

When a MENNEKES product leaves our factory, it has already survived the harshest testing. In our test lab it is exposed to cold, heat, dust and water over and over again. Only the products that withstand these tests are worthy of the name MENNEKES. Our products are of course certified to national and international standards by recognised institutions. Like the MENNEKES company itself:

Our international quality management system is certified to DIN EN ISO 9001.



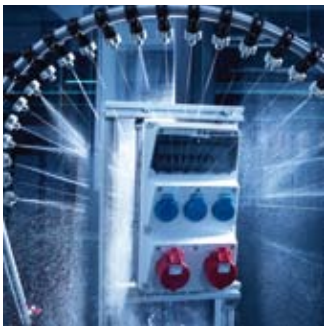


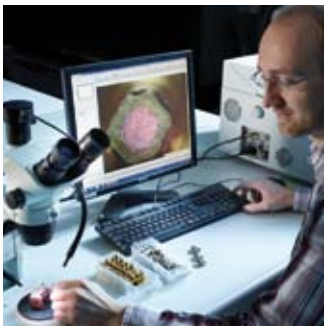





Only the combination of first-class raw materials and advanced manufacturing processes guarantees a premium product. This is why we use only first-grade granules which are processed by a highly skilled workforce in state-of-the-art production facilities to create certified MENNEKES products.







We guarantee the high quality standard of our products by our own test laboratory. This laboratory is approved and will be used for product tests of our products to get test marks acc. to DIN EN 60309 by approval authorities like the VDE etc.

Independent test organizations certify that our products offer the highest levels of safety, quality and trouble-free use.

# „The sales promotion from MENNEKES really promotes my sales.“

Daniel Schmidt
Electrical wholesaler

Proven in practice and effective.






Overview Index

## Guarantors of success

We help you in optimally presenting your competence. To do this, use our eye-catching sales promotion materials and offer your customers a professional showroom with „MENNEKES“ quality you can feel. This facilitates your sales discussions, the advantages of the products become „tangible“ and you can convince your customers with practical examples of the MENNEKES brand quality. In this regard, you can select from an abundant offering of promotional materials. With our modular Sales Promoter variants, sample display panel, counter displays or the sample case, you always keep your customers up-to-date in regard to new developments or new products.





**BMW Motorcycle Plant, Hall 7**, Berlin, Germany




**KORDSA GLOBAL A.S., Industrial Yarn and Cord Factory,** Izmit, Turkey



Overview Index




**Jos. L. Meyer-Werft, AIDAbella**, Papenburg, Germany



**Jos. L. Meyer-Werft**, Papenburg, Germany



**HDW Shipbuilding,** Kiel, Germany



**Container Terminal,** Le Havre, France



**Container Terminal,**
Altenwerder, Germany



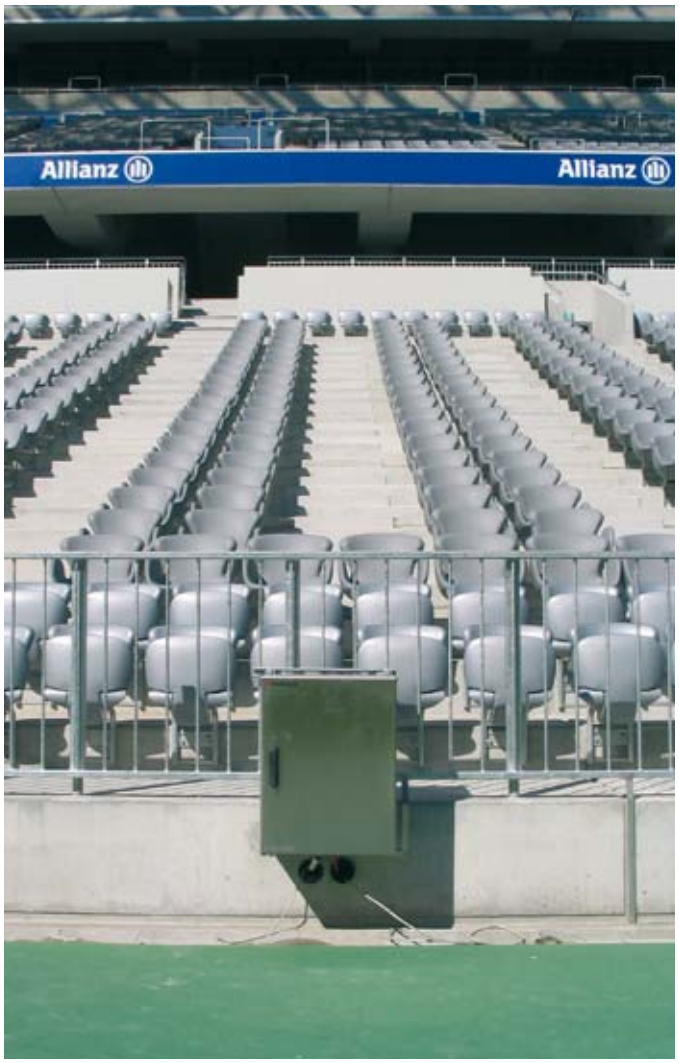
Overview Index




**Constitution, (Oil Rig, Gulf of Mexico), Heerema Marine Contractors NL B.V.,** Netherlands

**Container Terminal,**
Salalah, Oman






**Football Stadium "Allianz Arena",** Munich, Germany




**Football Stadium "Arena Auf Schalke",** Gelsenkirchen, Germany



**Olympia Stadium,** Berlin, Germany




**Football Stadium "Signal Iduna Park",** Dortmund, Germany



Overview Index



**Bahrain International Circuit, (Formula 1 Race Course),** Bahrain




**Shanghai International Circuit, (Formula 1 Race Course),** Shanghai, China




**Yas Marina Circuit, (Formula 1 Race Course),** Abu Dhabi, UAE




**Brunnenmarkt, (Market Square)**, Vienna, Austria

**Bauernmarkt, (Market Square),** Hannover, Germany





Overview Index



**Internet Data Center**, Seoul, South Korea

**Linea 1, Metro de Lima,** Lima, Peru



**Oman Cement Company (S.A.O.G)**, Muscat, Oman





**Ceramica Marca Corona**, Sassuolo, Italy



Overview Index



**Barbara Erzbergbau GmbH, (Underground Ore Mining)**, Porta Westfalica, Germany

**Kali + Salz GmbH**,
**(Salt Mine),**
Plant Zielitz,
Germany



# Service ■ Regulations and standards

While correct to the best of our knowledge, the information we provide with respect to laws and regulations is in no way binding. Such information is provided purely by way of assistance and makes no claim to completeness.

The nature and composition of our appliances are exclusively as quoted in the product description to which the part numbers refer directly.

**Installation guidelines**

It is best to proceed carefully with the installation and the use of electrical devices. The valid directives and standards, as well as the legal accident prevention regulations must be complied with. The installer is responsible for compliance with the respective regulations.



MENNEKES CEE plugs and sockets conform to the following standards and regulations
IEC 60309-1
IEC 60309-2
EN 60309-1
EN 60309-2
IEC 60309-1/VDE 0623 part 1
IEC 60309-2/VDE 0623 part 20

**Applications**
CEE plugs and sockets can and, under certain circumstances, must be used in industry, in commerce, in agriculture, in parks, in damp and wet environments, outdoors, on building sites, in caravans, on boats and yachts, on camp sites, for dockside power supply installations (marinas), on works premises where there is a fire hazard, at markets and fairground booths and for trailers and mobile homes.

Using CEE plugs and sockets will usually enable the planners and builders of electrical installations to comply with the "regulations for the construction of low voltage systems as per DIN VDE 0100".

**AMAPLAST**
This plastic material used by MENNEKES (PA, PC) has the following outstanding characteristics: good electrical insulation, virtually unbreakable, wear resistant, abrasion resistant, dimensionally stable, self-extinguishing, heat resistant, highly resistant to cold temperatures, resistant to ageing, sea-water, oil and gasoline.

**AMELAN®**
This plastic material (PBT) combines outstanding mechanical, thermal and electrical properties with excellent dimensional stability and resistance to chemicals.

**Enclosures and inserts**
The enclosures and inserts of the currently available CEE plugs and sockets are moulded from AMAPLAST, a high quality thermoplastic material which is virtually indestructible. The long service life of the inserts means that there is no need to keep a stock of spares. Accordingly, spare inserts have not been included in this catalogue. In areas where the presence of chemicals or other aggressive substances requires the use of another plastic material, MENNEKES propose a further top quality product line with enclosures moulded from high-grade **AMELAN®**.

**Contact material, small parts**
Female and male contacts are made of brass; screws, springs, etc. are made of rust-proof material or surface-coated steel.

**Characteristics of CEE plugs and sockets**
MENNEKES CEE plugs and sockets are distinguished by the following features, which keep maintenance costs to a minimum:

- Easy to install
- Wiring space easily accessible
- Power screwdrivers can be used for installation mostly fitted with Pozidriv screws (size 2)
- High contact pressure
- Low effort required for insertion and withdrawal
- Low transition resistance
- Easy-to-grip plugs

# Service ■ Regulations and standards

## Application

CEE plugs and sockets with operating voltages up to 1000V DC or AC, frequencies up to 500Hz and rated currents up to 800A, including plugs and receptacles for low voltage systems have become the standard all over the world. Basically suitable for indoor and outdoor applications in industry, they are also used on building sites, farms, commercial premises, for caravans, mobile homes, boats, yachts and in households. CEE plugs and sockets are polarised and non-reversible.

## Ambient temperature

CEE plugs and sockets are suitable for ambient temperatures between -25°C up to +40°C.

## Chemical resistance of combination units and wall mounted receptacles, switched and interlocked, switched, fused

For the production of combination units and wall mounted receptacles, MENNEKES use a high quality polycarbonate material which has excellent optical and electrical insulating properties. It also has a very good resistance to mechanical and thermal stresses. However, in contact with very aggressive chemical materials, oils, leaches or solvents this polycarbonate material could be adversely affected. Therefore, under very aggressive conditions, we recommend the use of AMELAN®, a thermoplastic material with a high resistance to chemicals and aggressive substances. In chapters receptacles and receptacle combinations, you will find a selection of combination units and switched interlocked receptacles made from this material.

## Material properties of solid rubber products

Solid rubber blends are preferably used wherever products are exposed to high mechanical and/or chemical loads. Solid rubber excels by its outstanding dimensional stability; it is largely resistant to acid and lye and has a high resistance to breakdown and leakage current. Products made from solid rubber blends, e.g. MENNEKES EverGUM, are resistant to weather and ageing. Under UV radiation, colour pigments may fade with time. This is inevitable even to the latest state of the art yet it does not compromise the function in any way.

## Low voltage directive 2006/95 EG

CEE plugs and sockets are subject to the EC low voltage directive and must therefore be provided with the CE mark to ensure free traffic of goods within the EU. A manufacturer's declaration is available on request.

## Declaration of Conformity

Current plugs and sockets have been tested by the VDE Test and Certification Institute in Offenbach, Germany. Furthermore, various other certificates from international inspection authorities have been obtained. A copy of test certificates is available on request.

The CE mark is not a compliance mark. MENNEKES CEE plugs and sockets satisfy the requirements specified in the low voltage directive and the device and/or the packaging bears the "CE" mark „CE“.

## Cable glands

| Metric | Typical sealing area | Typical capacity of terminal |
|---|---|---|
| M 12 | 2.5 – 6.5 mm | 3.0 – 6.5 mm |
| M 16 | 2.5 – 8.0 mm | 3.5 – 8.0 mm |
| M 20 | 5.0 – 12.0 mm | 6.0 – 12.0 mm |
| M 25 | 9.0 – 18.0 mm | 12.0 – 18.0 mm |
| M 32 | 14.0 – 25.0 mm | 17.0 – 25.0 mm |
| M 40 | 18.0 – 32.0 mm | 20.0 – 32.0 mm |
| M 50 | 24.0 – 38.0 mm | 26.0 – 38.0 mm |
| M 63 | 30.0 – 44.0 mm | 30.0 – 44.0 mm |

# New standard for low voltage switchgear and control gear assemblies - IEC 61439

**The new standard, IEC 61439, replaces IEC 60439 and describes the design and the test specifications for low-voltage switchgear and control gear assemblies. The new standard has influence on the distribution of electrical energy in industry, the domestic electrical installation and on construction sites.**

In 2012, the restructuring and revision of the safety requirements for low-voltage switchgear was finalized with publication of the standard, IEC 61439-1:2012. The preceding standard, IEC 60439-1 will be replaced by IEC 61439-1:2012. The former Standard IEC60349 is valid until Sept. 2014. After this specified date, the use of IEC61439 is mandatory (for all new designed switchgear and control gear assemblies) the planning and documentation must be executed in accordance with IEC 61439-1:2012 and its parts.

The purpose of this standard is the harmonisation of most of the general regulations and requirements for low-voltage switchgear and control gear assemblies to achieve uniform requirements and verifications for switchgear and control assemblies and to avoid the necessity of verifications in accordance with other standards. All requirements of the different switchgear and control gear assemblies have been combined in this fundamental standard, together with topics of broad interest and application, e.g heating, insulation properties, etc.

In the future two main standards will be required for each design of a low-voltage switchgear and control gear assembly:

- The basic standard that is referenced as "Part 1" in the specific standards;
- The applicable parts 2 to 7 of the switchgear and control gear assembly standard that deals with the particularities of the application.

The new IEC 61439 consists of the following parts:

| New IEC ... | Replaces IEC ... |
|---|---|
| 61439-1: General definitions | 60439-1 |
| 61439-2: Power switchgear and control gear assemblies | 60439-1 |
| 61439-3: Distribution boards | 60439-3 |
| 61439-4: Assemblies for construction sites | 60439-4 |
| 61439-5: Public cable distribution cabinets | 60439-5 |
| 61439-6: Busbar trunking systems | 60439-2 |
| 61439-7: Draft – specific installations on public sites, marinas, campsites, market squares, and EV charging stations | 60439-7 |

Requirements in this standard, which are object of an agreement between manufacturer of the switchgear and control gear assemblies and user, are summarized on page 37 and 38. This listing facilitates provision of information concerning basic conditions and supplemental user definitions.

### Replacement of TSK and PTSK through design verification

The previous terms, like type-tested (TSK) and partially type-tested low-voltage switchgear and control gear combinations (PTSK), as well as the type test for confirmation of compliance with standard specifications in accordance with IEC 60439 do, no longer apply. Instead, the design verification is now used. In addition to this design verification, a piece verification must also be provided, which ensures a correct installation in accordance with the standard, the exclusion of material defects, and compliance with electrical safety requirements.

### Definition – "original manufacturer" and " manufacture of the switch gear control gear assembly"

#### Original manufacturer

Organisation / enterprise that executed the original design and the associated verifications in accordance with the standard.

#### Manufacturer of the switchgear and control gear assembly

Organisation that completes a device and assembles it into a functional unit. The manufacturer is responsible for piece verification and thus for the product (Declaration of Conformity).

Significance for Mennekes products:
For ready-wired devices Mennekes is simultaneously the original manufacturer and the manufacturer. The responsibility and provision of verifications rest with us. We cannot declare partially wired devices that we manufacture as standard compliant. In this case the "finishing entity" becomes the manufacturer and must declare conformity.
It is required to forward information to this organisation so that the device ultimately can get a "Declaration of Conformity".

### Heating

The max. ambient temperature is +40°C. The average value of the ambient temperature over a period of 24 hours must not be higher than +35°C.

The verification of heating can be provided through various methods. Through testing of the switchgear and control gear combination, or through derivation of a known reference, and through an expert assessment, e.g in accordance with applicable design rules.
Regardless of the method that is selected to determine the heat and thus the maximum current load of the combination, compliance with the appropriate temperature limit values must be ensured.

The switchgear and control gear assembly and its electrical circuits must be capable of bearing their rated currents under defined conditions and the rated values of the components, their suitability and application must be taken into account, without exceeding limit values specified in IEC 61439-1 Table 6, Part 1. The limit temperatures in Table 6 apply for the average ambient temperature of +35°.
▶ The limit temperatures of the installed equipment must be taken into account!

### Heating – replacement of components

A device/component may only be replaced through a similar, identically constructed device a of a series other than the series used in the verification, if the power loss, and thus the heating of the connections is less than or equal to that of the device that is being replaced.

### Load of the largest electric circuit and of all outgoing circuits individually with rated current

The requirement of IEC 61439 is, that all electric circuits must be individually capable to carry their rated current, without exceeding temperature limit values in the process. If additional power circuits are added, a rated load factor can be set.

### Rated values - InA, Inc, RDF

- **Standard definition – $I_{nA}$**

The rated current of the switchgear and control gear assembly, $I_{nA}$, is the total current that the main busbar can distribute in the respective installation of the assembly, without exceeding the temperature limit values mentioned in IEC 61439-1 Section 9.2!

The current, $I_{nA}$, is considered to be the maximum current that the assembly can distribute via its outgoing circuits at 100% continuous duty (CD)

- **Standard definition – $I_{nc}$**

The rated current of an electric circuit is the value of the current that can be carried by this electric circuit under standard operating conditions when it is operated alone. The assembly must be capable of carrying this current without exceding the max. temperaturelimits of the individual components specified in IEC 61439-1 section 9.2.

- **Standard definition – rated diversity factor RDF**

The RDF is the specified percentage value of the rated current with which the (individual) outgoing circuits $I_{nc}$ of a switchgear and control gear assembly can be continuously and simultaneously be used with due consideration of the opposing thermal influences. In this process the $I_{nA}$ must not be exceeded.

**Table 101 from IEC 61439-3 – Values for assumed load**

| Number of main electric circuits | Assumed load factor |
|---|---|
| 2 and 3 | 0.8 |
| 4 and 5 | 0.7 |
| 6, up to and including 9 | 0.6 |
| 10 (and more) | 0.5 |

This table provides guide values, if in doubt the manufacturer's specification always applies.



Overview Index

## MENNEKES standard values in accordance with Table C of IEC 61439

The information below represents specified standard values for MENNEKES catalogue assemblies. If there are deviations from this standard or in the case of special project planning, appropriate coordination must take place beforehand between user and manufacturer. These agreements must be arranged between Mennekes and the user / customer during the quotation phase (prior to production and prior to sale).

The table below is a "blank" that is applicable for approximately 98% of the Mennekes devices. Special project planning is not covered by the specifications, and must be separately disclosed by the user prior to project planning. In these special cases, it is required that additional details be considered with the aid of the standards cited and their product sub-standards (see Section 7.2, in Part 1).

| Characteristic | Standard value | Normative option | MENNEKES standard |
|---|---|---|---|
| System according to type of earth connection | Design in accordance with the local requirements | TT / TN / IT | TN |
| Rated voltage | In accordance with local installation conditions | max. 1000V AC or 1500V DC | 400V AC |
| Transient overvoltages | determined through the electrical system | Overvoltage category I / II / III / IV | Cat. III / plugs and sockets Cat. II |
| Occasional overvoltages | min. rated voltage + 1200V | See Table 8 + 9 or 10 for the values | 1890V (AC) |
| Rated frequency | in accordance with installation conditions | DC / 50Hz / 60Hz | 50 Hz |
| Short circuit resistance | determined through the system | N + PE max. 60% of the outer conductor values | $I_{cc}$ max. ≤ 10 kA |
| SCPD in the supply | in accordance with installation conditions | yes / no | no |
| Coordination between short-circuit protection devices inside or outside of the switchgear and control gear assembly | in accordance with installation conditions | present / install / integrate | Item-dependent |
| Information of loads that could possibly contribute to short-circuit current | No loads are permitted that could possibly contribute to the short-circuit current | none | none |
| Type of protection against electric shock – basic insulation | Basic protection | Comply with local requirements | Basic protection |
| Type of protection against electric shock – earth fault protection | Protection against indirect contact / comply with local requirements | Automatic shutdown / protective disconnect / protective insulation | Item-dependent |
| Installation site | Execution of the manufacturer | Indoors / outdoors | Item-dependent |
| Protection type | Indoors min. IP 2x / outdoors min. IP 23 | IP xx (A-D) | IP 44 |
| Protection against mechanical effects | | if necessary specification of the IK code (IEC 62208) | Information on request |
| Resistance to UV radiation | | Required for housings in outdoor installation | Information on request |
| Resistance to corrosion | For indoor and outdoor installation | none | Standard values! see product for deviations |
| Ambient temperature limit values | Indoors: min. -5 °C<br>Outdoors: min. -25 °C<br>High limit (both): +40 °C<br>max. average value (24h): +35 °C | Outdoors:<br>100% at max. +25 °C<br>Indoors:<br>50% at +40 °C | Standard values! see product for deviations |
| Pollution degree | Industrial environment 3 | 1, 2, 3, 4 | 3 |
| Altitude | ≤ 2.000 m | Pay attention to the factors | ≤ 2.000 m |

| Property | Standard value | Normative option | MENNEKES standard |
|---|---|---|---|
| EMC environment | A or B | A / B | B |
| Special operating conditions (vibration, Ex-zone, strong magnetic fields or contamination) | No particular conditions | none | Not defined! |
| External structural shape | in accordance with manufacturer's specifications | Open / closed / standing/ in-wall installation & on-wall installation / console | closed |
| Mobile or stationary | in accordance with manufacturer's specifications | yes / no | Item-dependent |
| Dimensions and masses | in accordance with manufacturer's specifications | none | Item-dependent |
| Type of conductors introduced from outside | Cables | Cables / busbar trunking systems | Cables |
| Materials of the conductors introduced from the outside | Copper | Copper / aluminum | Copper |
| Cross-sections of the outer conductors, PE, N & PEN conductors | As specified in the standard | none | none |
| Special requirements imposed on the marking of connections | in accordance with manufacturer's specifications | none | Manufacturer execution |
| Requirements imposed on storage & transport (type of transport, deviating ambient conditions, max. dimensions, packaging requirements) | Standard of the manufacturer | none | Information on request |
| Operability (access, activation rights, disconnect) | Easy reachability | Authorized persons, ordinary persons, etc. | Item-dependent |
| Requirements imposed on accessibility for operation, inspection, maintenance or extension | Inspection, component replacement, extension, maintenance, etc. only by specialized persons (requirement) | none | Inspection, replacement, extension, maintenance, etc. only through specialized persons |
| Separation of the outgoing electric circuits | in accordance with manufacturer's specifications | Individually / in groups / all | Item-dependent |
| Type of interior subdivision | in accordance with manufacturer's specifications | Form 1, 2, 3, 4 | none |
| Rated current of the switchgear and control gear assembly | Manufacturers standard; in accordance with the application | none | Item-dependent |
| Rated current of the electric circuits ($I_{nC}$) | Manufacturers standard; in accordance with the application | none | Item-dependent |
| Rated diversity factor (RDF) | STANDARD specification | RDF for electric circuits/ RDF for the entire switchgear and control gear assembly | Item-dependent |
| Cross-section ratio between outer conductor and N | Ø ≤ 16 mm² = 100%<br>Ø > 16 mm² = 50%<br>(min. 16 mm²) | For currents in N to 50% of the outer conductors, otherwise a special agreement is necessary! | Outer conductor = neutral conductor cross-section |



Overview Index

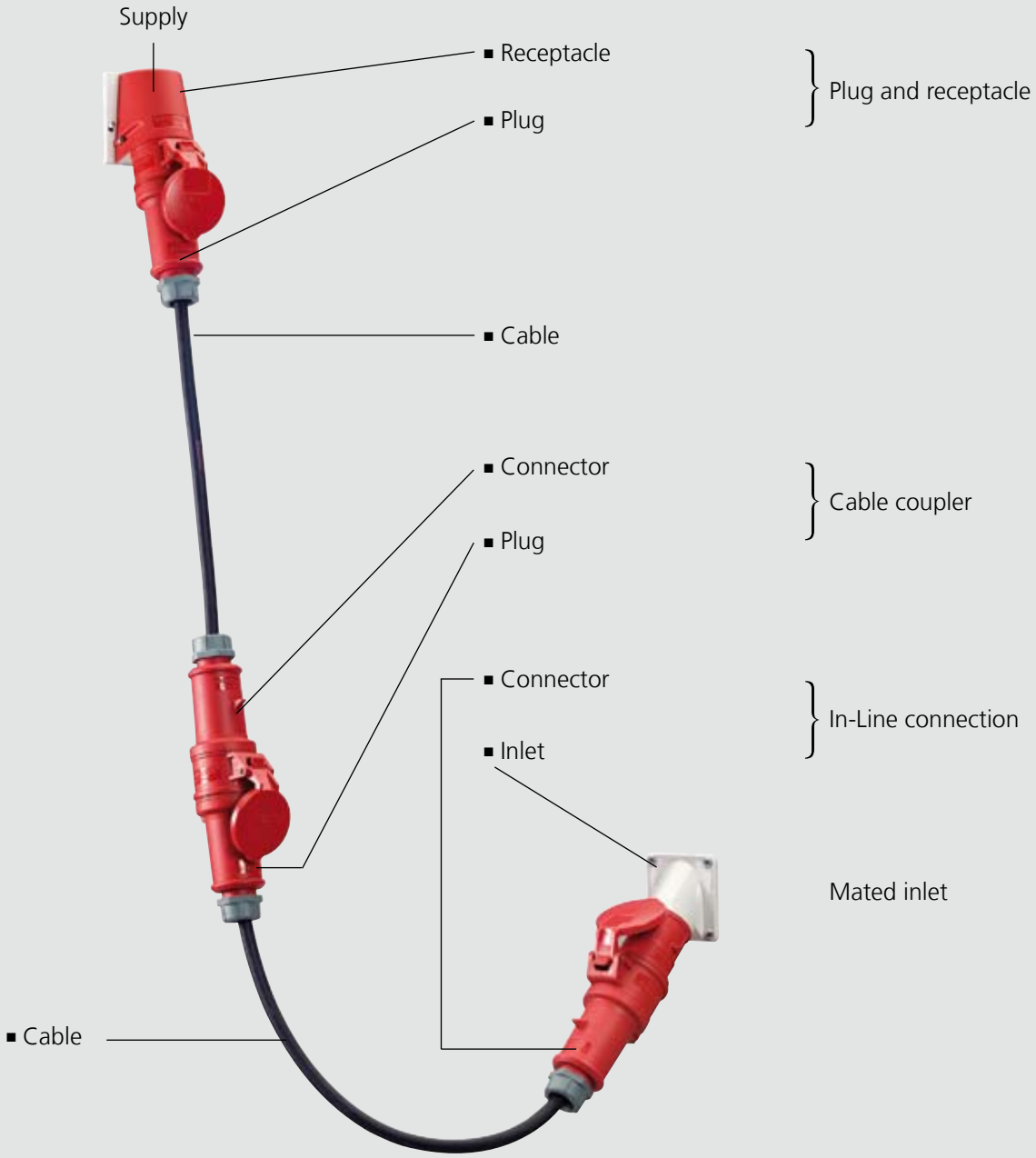
**Definitions to IEC 60309**
Throughout this catalogue, CEE plugs and sockets are named as provided for by IEC 60309-1 (VDE 0623 part 1):2013-02, paragraph 2.

Rated current is the current intended for the plugs and sockets by the manufacturer.

Insulation voltage is the voltage intended for the plugs and sockets by the manufacturer to which voltage testing, creep distance and clearance refer.

Rated operating voltage is the nominal voltage of the power source for which these plugs and sockets are intended.

The illustration shows how to use CEE plugs and sockets (IEC 60309-1:2013-02).



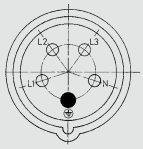
# Service ■ Regulations and standards

**Position of the earth contact sleeve with respect to the polarizing keyway for various voltages and frequencies, identified by clockface positions in accordance with table 104 taken from EN 60309-2:1999 + A1:2007 + A2:2012**

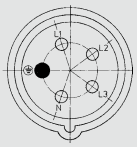
| Type | Frequency | Rated operating voltage | Position of ground contact[1] | |
|---|---|---|---|---|
| | | | 16/20A* | 63/60A* |
| | Hz | V | 32/30A | 125/100A |
| 1P+N+⏚* | 50 and 60 | 100 to 130 | 4 | 4 |
| | 60 | 277 | 5 | 5 |
| 2P+⏚ | 50 and 60 | 100 to 130 | 4 | 4 |
| | | 200 to 250 | 6 | 6 |
| | | 380 to 415 | 9 | 9 |
| | | 480 to 500 | 7 | 7 |
| | | with isolating transformer | 12 | 12 |
| | 100 to 300 | above 50 | 10 | 10 |
| | above 300 to 500 | above 50 | 2 | 2 |
| | DC | above 50 to 250 | 3 | 3 |
| | | above 250 | 8 | 8 |
| 2P+N+⏚* | 50 and 60 | 125/250 single phase | 12 | 12 |
| 2P+N+⏚ | 50 and 60 | with isolating transformer | 12 | 12 |
| 3P+⏚ | 50 and 60 | 100 to 130 | 4 | 4 |
| | | 200 to 250 | 9 | 9 |
| | | 380 to 415 | 6 | 6 |
| | 60 | 440 to 460[2] | 11 | 11 |
| | 50 and 60 | 480 to 500 | 7 | 7 |
| | | 600 to 690 | 5 | 5 |
| | 50<br>60 | 380<br>440[3] | 3 | 3 |
| | 50 and 60 | 1000 | – | 8 |
| | 100 to 300 | above 50 | 10 | 10 |
| | above 300 to 500 | above 50 | 2 | 2 |
| 3P+N+⏚ | 50 and 60 | 57/100 to 75/130 | 4 | 4 |
| | | 120/208 to 144/250 | 9 | 9 |
| | | 200/346 to 240/415 | 6 | 6 |
| | | 277/480 to 288/500 | 7 | 7 |
| | | 347/600 to 400/690 | 5 | 5 |
| | 60 | 250/400 to 265/460[2] | 11 | 11 |
| | 50 and 60 | with isolating transformer | 12 | 12 |
| | 50<br>60 | 220/380<br>250/440[3] | 3 | 3 |
| | 100 to 300 | above 50 | 10 | 10 |
| | above 300 to 500 | above 50 | 2 | 2 |
| All types | All rated voltages and all frequencies not covered by other configurations<br><br>This clock-hand position can additionally be used in special applications for which a differentiation to standardized positions is required. | | 1 | 1 |

Examples:

Front view of receptacle



400V = 6h



230V = 9h

[1] The position of the earth contact is given as a clockface number.

[2] Mainly for marine installations.

[3] Only for reefer containers (ISO standard)

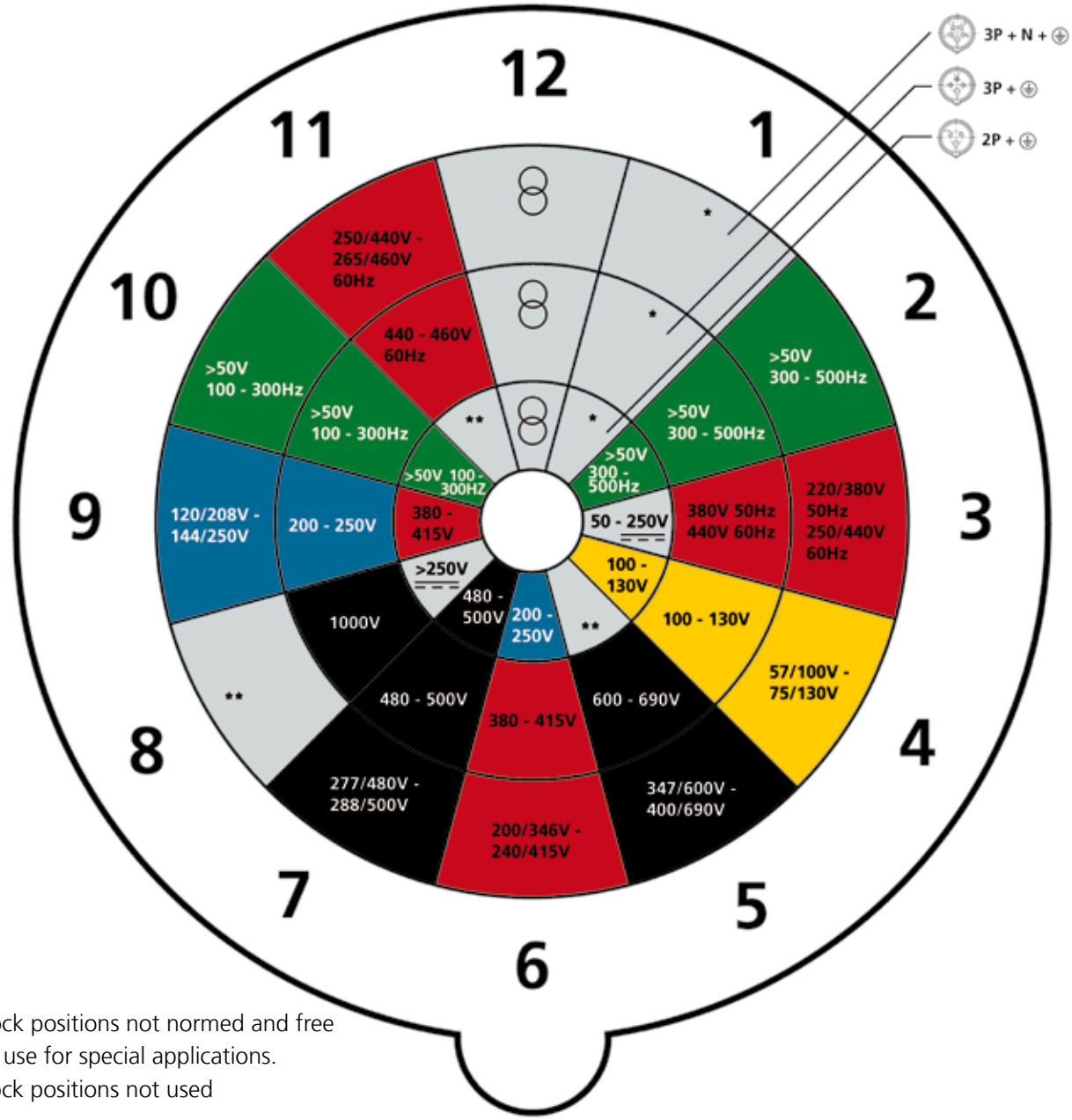
Positions marked with a dash (-) are not standardised

* Devices of series II are mainly used in the US and in Canada.

The amperage, 20A, 30A, 60A and 100A apply for Series II devices.

# Clock positions
## acc. to EN 60309-2:1999 + A1:2007 + A2:2012, Series I (Europe)

**Position of ground contact sleeve with respect to major keyway for various voltages and frequencies. The colour codes correspond to the nominal voltage.**




* Clock positions not normed and free for use for special applications.

** Clock positions not used

### Colour coding

If the rated operating voltage is indicated by a colour coding in addition to compulsory markings, such colour coding must be in accordance with IEC 60309-1:2013-02, table 2:

| Rated operating voltage and frequency | Colour code | RAL* |
|---|---|---|
| 100 to 130V | yellow | 1021 |
| 200 to 250V | blue | 5007 |
| 380 to 480V | red | 3013 |
| 500 to 1.000V | black | 9005 |
| above 60 to 500Hz | green | 6010 |

* RAL determined by MENNEKES, as in EN 60309-1:1999 no specification is provided for.

# CEE plugs and sockets for rated operating voltages above 50V

### Position of the earth contact

Plugs and sockets with rated voltages above 50V must have an earth contact. To prevent incorrect insertion, a nose on the plug fits into a keyway in the receptacle, thus ensuring that the earth contact pin or tube is correctly positioned in accordance with the required electrical standard.

The earth contact positions for the various frequencies and voltages are assigned a clockface position, in accordance with table 104 taken from EN 60309-2:1999 + A1:2007 + A2:2012.

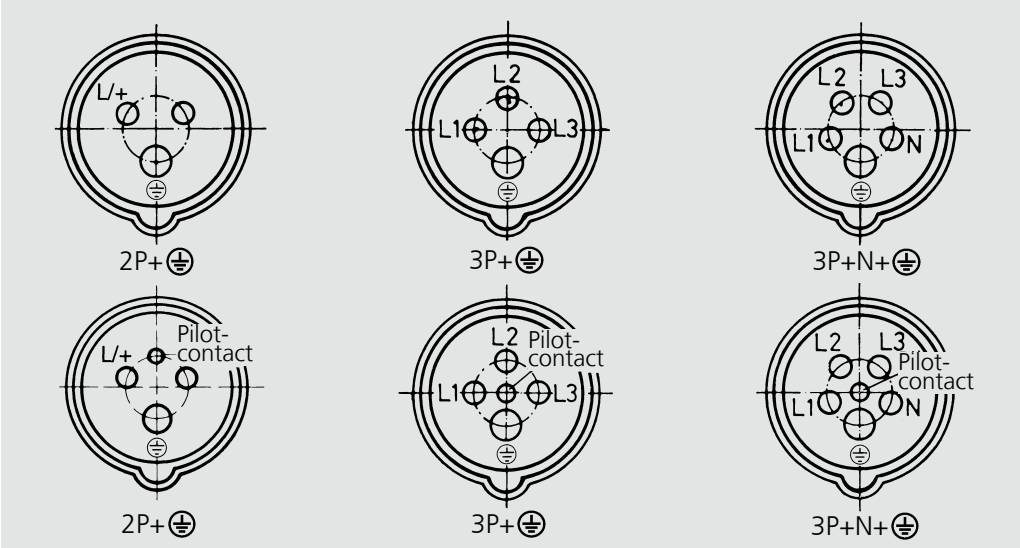
### Marking and position of contacts

Receptacles and connectors U > 50V (EN 60309-2:1999; standard sheet 2-I).

16A and 32A

Receptacles and connectors U > 50V (EN 60309-2:1999; standard sheet 2-III a).

63A and 125A




Viewed from the front, the pins of plugs and inlets must be arranged in the opposite way.

On rewirable plugs and sockets the contacts must be marked with symbols as follows:

- Where there are three phase conductors the phase contacts are to be marked L1, L2, L3 or 1, 2, 3; the neutral contact (if present) is to be marked N and the earth contact is to be marked ⏚.
- Where there is one phase conductor the live pole L/+ is to be marked with a symbol ⏚ for the earth contact, if applicable.

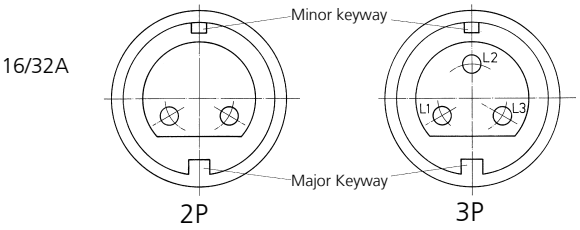
The contact tubes of receptacles and connectors with rated voltages above 50V must be arranged clockwise as viewed from the front.



Overview Index

# CEE plugs and sockets for rated voltages of up to 50V (low voltage)

Since no earth contact is required in plugs and sockets of rated voltage up to 50V, two keyways instead of one are provided the collar. They are accordingly termed the major and minor keyways. The major keyway is always in the 6 o'clock position. Depending on voltages and frequencies, the minor keyway is always in accordance with table 103 taken from EN 60309-2:1999 + A1:2007 + A2:2012, standard sheet 2-VIII (and in the following drawings).




Drawing: receptacles and connectors U = 40 to 50V, 50 to 60Hz, minor keyway in 12 o'clock position

**Arrangement of the minor keyway (major keyway 6 o'clock) for various voltages and frequencies using clockface positions in accordance with table 103 taken from EN 60309-2:1999 + A1:2007 + A2:2012**

| Rated operating voltage V | Frequency Hz | Clockface position of keyway (major keyway = 6 o´clock) |
|---|---|---|
| 20 to 25 | 50 and 60 | no minor keyway |
| 40 to 50 | 50 and 60 | 12 |
| 20 to 25 and 40 to 50 | 100 to 200 | 4 |
| | 300 | 2 |
| | 400 | 3 |
| | above 400 to 500 | 11 |
| | DC | 10 |
| 25 | DC* | 8 |

* for portable electrical incubators – use with 12 V 24 V direct-current voltage in ambulances or helicopters.

Positions 1 and 9 are reserved for future standards. For design reasons, positions 5, 6 and 7 are not available for use.

## Colour coding

If the rated operating voltage is indicated by a colour coding in addition to compulsory markings, such colour coding must be in accordance with IEC 60309-1:1999, table 2:

| Rated operating voltage | Colour code | RAL* |
|---|---|---|
| 20 to 25V | violet | 4001 |
| 40 to 50V | white | 7035 |

* RAL determined by MENNEKES, as in EN 60309-1:1999 no specification is provided for.

## Interlocks and breaking capacity

Plugs and sockets without an interlock must have an adequate breaking capacity, i.e. it must be possible to insert and withdraw plugs in the manner specified and as often as specified. After testing they must exhibit no damage that would impair further use, and the holes for the plug contacts must not show any significant sign of damage. Receptacles and connectors that do not meet the test requirements for breaking capacity and service characteristics must be fitted with an interlock. An interlock is a mechanical or electrical device which ensures that voltage is only applied to the contacts of a plug once they have been inserted into a receptacle or connector as intended, which prevents a plug being withdrawn with the power switched on or which makes contacts voltage-free before disconnecting. A distinction is made between interlocked plugs and sockets with

- mechanical interlocks
- electrical interlocks.

In the case of receptacles and connectors ≥ 63/60A, EN 60309-2 requires that a distinction is made between products used with or without interlocks. As MENNEKES plugs and sockets have adequate breaking capacity, standard ≥ 63/60A versions are fitted with short contact tubes without pilot contact. In the 63A and 125A versions, the short contact tubes meet the finger-touch requirements of IEC 60529. Receptacles and connectors ≥ 63/60A for electrical interlocking are fitted with long contact tubes and pilot contact for leading and lagging. The interlock makes up for the lack of finger-touch safety.

**Plugs and sockets with mechanical interlocks**
Mechanical interlocks for plugs and sockets with a rated operating voltage greater than 50V must conform to EN 60309-2:1999, standard sheet 2-V. The mechanical switch of a mechanically interlocked receptacle or connector must not be operational until the proper plug has been inserted. Built-in switches for mechanical interlocking of switched AC receptacles must have a breaking capacity conforming at least to IEC 60947-3 (VDE 0660 part 107), utilisation category AC 22. The breaking capacity must be suitable for the appliance connected.

**Plugs and sockets with electrical interlocks**
In the case of plugs and sockets ≥ 63/60A with a rated operating voltage greater than 50V intended for electrical interlocking (part no. + index "P"), a built-in pilot contact can be used to switch off power to a receptacle or connector. The requisite switch can either be provided in the receptacle or on the corresponding circuit distribution board. In the case of receptacles with an integrated auxiliary switch fitted behind the pilot tube, the switch is triggered by the pilot pin of the plug. The advantage of this solution is that the pilot tube itself is not live (PCS interlock).

## Plugs and sockets for isolating and switching purposes

In accordance with IEC 0100-460, each electrical circuit must be capable of being disconnected from all active conductors of the power supply. This also applies for every piece of electrical equipment, which must be capable of being disconnected from the power supply via an installed or assigned switch. For the term, "disconnect", the term "isolate" is also used. As a rule, electrical equipment must be disconnected from the power grid for mechanical and electrical maintenance tasks.

According to DIN VDE 0100-537, plugs and sockets isolating all conductors are suitable for the disconnection of power for maintenance purposes if they are able to switch off the load current in the electrical equipment in question. A plug and socket connection is a simple way of satisfying the requirement for "visible isolation".

**Shock hazard protection**
Shock hazard protection must be achieved in accordance with EN 60309-1:1999 section 9 by designing plugs and sockets in such a way that, when engaged properly, no live parts of receptacles, connectors, plugs and inlets are exposed so that they may be touched.

It must also be impossible to establish a connection of plugs and connectors while any of the contacts are exposed to touch.

Neutral contact tubes and pilot contacts of receptacles and connectors are deemed to be live parts.



Overview Index

## Protection type

Plugs and sockets used to be classified according to the degree of protection against the entry of moisture:
– splashproof ➔ drop in a triangle
– watertight ➔ 2 drops

Today, complete IP protection according to IEC 60529, EN 60529 is specified for plugs and sockets, as they are tested in line with this standard.

IP 44 = Protection from solid bodies with a diameter ≥ 1 mm, splashproof

IP 67 = Protection from dust ingress, protection against immersion

Information on IP protection (IP code) can be found in IEC 60529:2000-09 (VDE 0470 part 1).

Having been properly installed, receptacles and connectors must provide the degree of protection defined by the rating, whether the plug is inserted or not.

The protection type for plugs and inlets only applies if they are in contact with the matching piece of the connector or with a fixed cover, if applicable.

CEE plugs and sockets must be IP 44 or IP 67.
CEE plugs and sockets with rated currents of 100/125A must be IP 67.

100/125A receptacles that are fastened to an enclosure or form a structural unit with the enclosure can be IP 44.

For receptacles IP 67, a bayonet system has been adopted as the standard in order to simplify their use especially under rough working conditions.

IP 44 or IP 67 is indicated on the appliances.

**Notice for the use of mobile power distribution boxes:**
Please consider when using SCHUKO® receptacles that due to the construction the degree of protection is achieved only when the lid is closed.
Otherwise the ingress of water at the ground contact area may not be prevented (see DIN VDE 0620-1 and DIN 49440 et sqq.)

**Degree of protection of SCHUKO® plugs and sockets. Standard change of DIN VDE 620.**
For use in mobile devices, in accordance with the current specifications, attachment receptacles that satisfy the IP X4 degree of protection requirements with closed flip-lid cover and with a plugged-in plug in every operating position. Before the standard change in February 2010, the IP X4 degree of protection was considered as fulfilled if the conditions are satisfied with vertical install position of the receptacles. For receptacles for stationary implementation, this also continues to be the case.

**Important application instructions concerning the change in the standard.**
- The latest amendment of IEC 620 (March 2013) makes a distinction in the case of IP X4 SCHUKO® receptacles, between stationary and mobile implementation conditions.
- SCHUKO® IP X4 receptacles for stationary and mobile implementation conditions differ in their design (mobile with additional sealing collar, stationary unchanged).
- SCHUKO® IP X4 connectors, like mobile SCHUKO® IP X4 receptacles likewise have a supplemental sealing collar.

**Attention!**
- SCHUKO® plugs > IP X4 (in accordance with DIN 49442, resistant to pressurised water) when plugged into mobile IP X4 SCHUKO® receptacles or connectors do not achieve adequate contacting due to the design And thus they must **not** be operated with such receptacles!
- The same applies for AC adapters and angled right angle plugs < IP X4!
- On the appropriate SCHUKO® receptacles or connectors this circumstance is presented with an engraved right angle SCHUKO® plug with IP X4 mark.

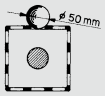
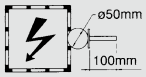
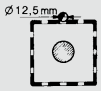
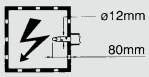
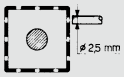
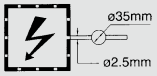
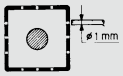
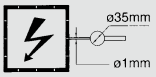
**Before processing, ensure that the SCHUKO® articles at hand correspond to the implementation conditions for which they are intended.**

**Notice for the use of mobile power distribution boxes with RJ45 data sockets:**
The installed data sockets without lid and the Micro Lynx lamps have a degree of protection of IP 20 which is reducing the degree of the whole unit accordingly.

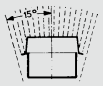
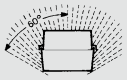
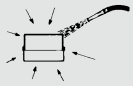
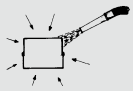
# Service ■ Regulations and standards

**IP protection types for enclosures in accordance with IEC 60529, EN 60529, IEC 60529 (VDE 0470 part 1)**

**1st number of the code:**
Protection against the ingress of foreign bodies and shock hazard protection.

| Code | Description | | | |
|---|---|---|---|---|
| | Enclosure protected against ingress of: | Test | Protection against contact with: | Test |
| **0** | | | | |
| **1** | Solid body larger than 50 mm |   Gauge plug diameter Ø 50 mm | Back of hand |   Gauge probe diameter Ø 50 mm |
| **2** | Solid body larger than12,5 mm |   Gauge plug diameter Ø 12.5 mm | Finger |   Jointed metal finger |
| **3** | Solid body larger than 2,5 mm |   Gauge plug diameter Ø 2.5 mm | Tool |   Gauge probe diameter Ø 2.5 mm |
| **4** | Solid body larger than 1 mm |   Gauge plug diameter Ø 1 mm | Wire |   Gauge probe diameter Ø 1 mm |
| **5** | Dust in harmful quantities |  Talc | | |
| **6** | Dust overall |  Talc | | |

**2nd number of the code:**
Protection against the ingress of moisture

| Code | Description | |
|---|---|---|
| | Enclosure protected against ingress of: | Test |
| **0** | | |
| **1** | Drop of water falling vertically |  |
| **2** | Drop of water falling vertically on enclosure inclined by up to 15° |   |
| **3** | Water spray |   |
| **4** | Splash water |  |
| **5** | Water jet |  |
| **6** | Strong water jet |  |
| **7** | Temporary immersion |   |
| **8** | Continuous immersion | By arrangement between manufacturer and user. Extra severe test conditions as compared to code 7 |



Overview Index

# Power supply systems

Excerpt from DIN VDE 0100-100:2009-06

Power supply systems are identified by the following abbreviations depending on their type (AC, DC) and the number of live conductors and earth connection:

First letter – earthing of the power source (312.2):

T direct earthing of one point
I insulation of all live parts from earth or earthing of one point via a source of impedance.

Second letter – earthing of exposed conductive parts of the electrical installation:

T exposed conductive part with direct earthing, irrespective of whether a point of the electrical installation is earthed.

N exposed conductive part directly connected to the earthed point of the electrical installation (in AC systems the earthed point is generally the star point or, in absence of a star point, a phase conductor).

Other letters that may be used – arrangement of neutral conductor and protective earth conductor:

S protection using a conductor which is separate from the neutral conductor or the earthed phase conductor (in DC systems earthed negative or positive conductor).

C functions of neutral conductor and protective earth conductor combined in one conductor (PEN conductor).

## Networks

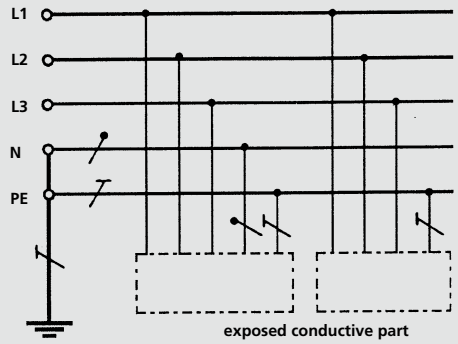



Fig. 6: **TN-S system**

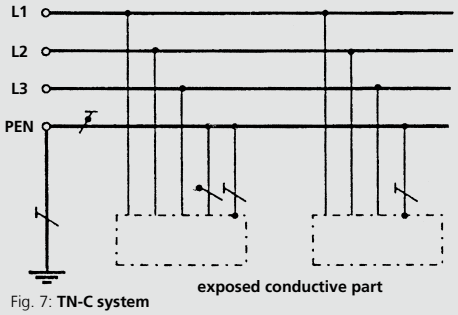



Fig. 7: **TN-C system**

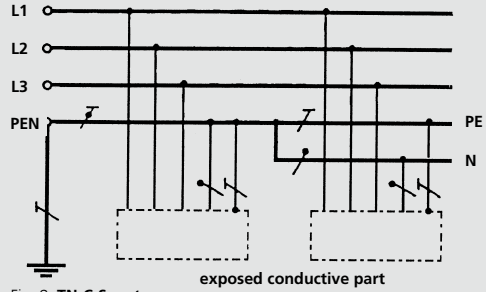



Fig. 8: **TN-C-S system**

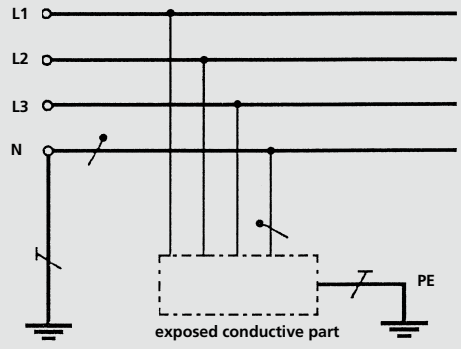



Fig. 9: **TT system**

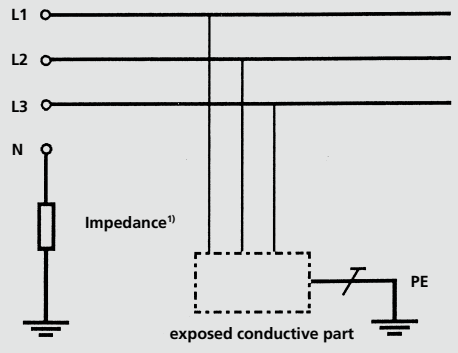



Fig. 10: **IT system**

1) The system may be disconnected from earth. The neutral conductor may be, but must not be, spreaded.

### TN systems (312.2.1)

In TN systems, one point is directly earthed; the exposed conductive parts of the electrical installation are connected with this point via protective earth conductors.

One can differentiate between three types of TN systems according to arrangement of neutral and protective earth conductors:

- TN-S system: A separate protective earth conductor throughout the system, fig. 6.
- TN-C system: Functions of neutral and protective earth conductors are combined in one conductor throughout the system, fig. 7.
- TN-C-S system: In part of the system, functions of neutral and protective earth conductors are combined in one conductor, fig. 8.

### TT system (312.2.2)

In a TT system one point is earthed directly; the exposed conductive parts of the electrical installation are connected to earthing electrodes which are electrically separated from the system earthing electrode, fig. 9.

### IT system (312.2.3)

In an IT system all live parts are disconnected from earth, or one point is earthed via a source of impedance; the exposed conductive parts of the electrical installation are either

- earthed separately or
- earthed jointly or
- all connected to the earthing of the system, fig. 10.

### Symbols according to IEC 60617-11

Neutral conductor (N)

Protective earth conductor (PE)

PEN conductor:
combines the functions of neutral and protection-earth conductor (PEN)



Overview Index

| Part no. | Page |
|---|---|
| 1 | 67 |
| 2 | 67 |
| 3 | 129 |
| 4 | 129 |
| 5 | 147 |
| 6 | 147 |
| 13 A | 129 |
| 14 A | 129 |
| 15 A | 147 |
| 16 A | 147 |
| 31 | 77 |
| 32 | 77 |
| 33 | 129 |
| 34 | 129 |
| 35 | 147 |
| 36 | 147 |
| 121 | 147 |
| 122 | 147 |
| 123 | 117 |
| 125 | 147 |
| 126 | 147 |
| 127 | 147 |
| 128 A | 67 |
| 129 A | 67 |
| 130 A | 67 |
| 131 A | 67 |
| 132 A | 67 |
| 133 A | 67 |
| 134 A | 67 |
| 135 A | 67 |
| 136 A | 67 |
| 137 | 69 |
| 138 | 69 |
| 139 | 69 |
| 140 | 69 |
| 141 | 69 |
| 142 | 69 |
| 143 | 69 |
| 147 A | 129 |
| 148 A | 129, 319 |
| 149 A | 129 |
| 151 A | 129 |
| 152 A | 129 |
| 153 A | 129 |
| 154 | 117 |
| 155 | 117 |
| 156 | 117 |
| 157 A | 129 |
| 159 | 129 |
| 160 | 129 |
| 163 | 129 |
| 164 | 129 |
| 165 | 129 |
| 169 A | 129 |
| 179 A | 147 |
| 180 A | 147 |
| 180 AC | 320 |
| 181 A | 147 |
| 193 A | 147 |
| 194 A | 147 |
| 195 A | 147 |
| 199 A | 147 |
| 201 | 147 |
| 202 | 147 |
| 204 A | 101 |
| 205 A | 101 |
| 206 A | 101 |
| 207 A | 101 |
| 208 A | 101 |
| 209 A | 101 |
| 210 A | 101 |
| 211 A | 101 |
| 212 A | 101 |
| 213 A | 101 |
| 215 A | 101 |
| 216 A | 101, 105 |
| 217 A | 103 |
| 218 A | 103 |
| 219 A | 103 |
| 220 A | 103 |
| 221 A | 103 |
| 222 A | 103 |
| 223 A | 103 |
| 224 A | 103 |
| 226 A | 103 |
| 227 A | 103 |
| 228 A | 103 |

| Part no. | Page |
|---|---|
| 229 A | 103 |
| 230 A | 103 |
| 231 A | 103 |
| 232 A | 103 |
| 233 A | 103 |
| 234 A | 103 |
| 235 A | 103 |
| 236 A | 103 |
| 237 A | 103 |
| 238 A | 103 |
| 239 A | 103 |
| 240 A | 103 |
| 247 | 129 |
| 248 | 129 |
| 249 | 129 |
| 250 | 129 |
| 251 | 129 |
| 252 | 129 |
| 253 | 129 |
| 254 | 129 |
| 255 | 129 |
| 256 | 129 |
| 257 | 129 |
| 259 | 129 |
| 260 | 129 |
| 260 ZD | 335 |
| 261 | 129 |
| 262 | 129 |
| 263 | 129 |
| 264 | 129 |
| 265 | 129 |
| 266 | 129 |
| 267 | 129 |
| 268 | 129 |
| 269 | 129 |
| 277 | 129 |
| 278 | 129 |
| 279 | 129 |
| 280 | 129 |
| 281 | 129 |
| 282 | 129 |
| 283 | 129 |
| 284 | 129 |
| 285 | 129 |
| 286 | 129 |
| 287 | 129 |
| 288 | 129 |
| 289 | 129 |
| 290 | 129 |
| 291 | 129 |
| 292 | 129 |
| 293 | 129 |
| 294 | 129 |
| 295 | 129 |
| 296 | 129 |
| 297 | 129 |
| 298 | 129 |
| 299 | 129 |
| 300 | 129 |
| 308 | 147 |
| 309 | 147 |
| 310 | 147 |
| 312 | 147 |
| 313 | 147 |
| 314 | 147 |
| 315 | 129 |
| 318 | 135 |
| 319 | 135 |
| 321 | 135 |
| 322 | 135 |
| 325 | 135 |
| 327 | 135 |
| 328 | 135 |
| 329 | 143 |
| 330 | 143 |
| 331 | 137 |
| 332 | 137, 319 |
| 333 | 137 |
| 334 | 137 |
| 335 | 137 |
| 336 | 137 |
| 337 | 137 |
| 338 | 135 |
| 339 | 135 |
| 340 | 137 |
| 341 | 137 |
| 342 | 137 |

| Part no. | Page |
|---|---|
| 343 | 137 |
| 344 | 137 |
| 345 | 137 |
| 346 | 137 |
| 347 | 137 |
| 348 | 137 |
| 349 | 137 |
| 352 | 137 |
| 353 | 137 |
| 354 | 137 |
| 355 | 137 |
| 356 | 137 |
| 357 | 137 |
| 358 | 137 |
| 359 | 137 |
| 360 | 137 |
| 361 | 137 |
| 362 | 137 |
| 363 | 137 |
| 364 | 137 |
| 365 | 137 |
| 367 | 137 |
| 368 | 137 |
| 372 | 139 |
| 373 | 139 |
| 379 | 139 |
| 381 | 139 |
| 385 | 139 |
| 391 | 139 |
| 392 | 139 |
| 393 | 139 |
| 394 | 139 |
| 395 | 139 |
| 396 | 135 |
| 397 | 135 |
| 398 | 139 |
| 399 | 139 |
| 400 | 139 |
| 401 | 139 |
| 402 | 139 |
| 403 | 139 |
| 404 | 139 |
| 405 | 139 |
| 406 | 139 |
| 407 | 139 |
| 410 | 139 |
| 411 | 139 |
| 412 | 139 |
| 418 | 77 |
| 419 | 77 |
| 420 | 77 |
| 421 | 77 |
| 422 | 77 |
| 432 | 139 |
| 434 | 139 |
| 438 | 139 |
| 444 | 139 |
| 461 | 139 |
| 462 | 139 |
| 464 | 139 |
| 467 | 139 |
| 468 | 139 |
| 469 | 139 |
| 473 | 139 |
| 474 | 139 |
| 476 | 139 |
| 477 | 139 |
| 479 | 139 |
| 480 | 139 |
| 509 | 147 |
| 509 ZC | 335 |
| 510 | 147 |
| 511 | 147 |
| 512 | 147 |
| 513 | 147 |
| 514 | 147 |
| 515 | 147 |
| 516 | 147 |
| 517 | 147 |
| 518 | 147 |
| 519 | 147 |
| 521 | 147 |
| 522 | 147 |
| 522 ZB | 335 |
| 523 | 147 |
| 524 | 147 |
| 525 | 147 |

| Part no. | Page |
|---|---|
| 526 | 147 |
| 527 | 147 |
| 528 | 147 |
| 529 | 147 |
| 530 | 147 |
| 531 | 147 |
| 539 | 147 |
| 540 | 147 |
| 541 | 147 |
| 542 | 147 |
| 543 | 147 |
| 544 | 147 |
| 545 | 147 |
| 546 | 147 |
| 547 | 147 |
| 548 | 147 |
| 549 | 147 |
| 550 | 147 |
| 551 | 147 |
| 552 | 147 |
| 553 | 147 |
| 554 | 147 |
| 555 | 147 |
| 556 | 147 |
| 557 | 147 |
| 558 | 147 |
| 559 | 147 |
| 560 | 147 |
| 561 | 147 |
| 562 | 147 |
| 577 | 279 |
| 578 | 279 |
| 583 | 279 |
| 584 | 279 |
| 585 | 279 |
| 586 | 279 |
| 590 | 279 |
| 591 | 279 |
| 596 | 279 |
| 597 | 279 |
| 598 | 279 |
| 599 | 279 |
| 603 | 279 |
| 604 | 279 |
| 609 | 279 |
| 610 | 279 |
| 611 | 279 |
| 612 | 279 |
| 616 | 279 |
| 617 | 279 |
| 622 | 279 |
| 623 | 279 |
| 624 | 279 |
| 625 | 279 |
| 629 A | 281 |
| 630 A | 281 |
| 635 A | 281 |
| 636 A | 281 |
| 637 A | 281 |
| 638 A | 281 |
| 642 A | 281 |
| 643 A | 281 |
| 645 | 147 |
| 646 | 147 |
| 647 | 129 |
| 648 A | 281 |
| 649 A | 281 |
| 650 A | 281 |
| 651 A | 281 |
| 654 | 129 |
| 655 A | 281 |
| 656 A | 281 |
| 657 | 129 |
| 658 | 129 |
| 659 | 129 |
| 661 A | 281 |
| 662 A | 281 |
| 663 A | 281 |
| 664 A | 281 |
| 668 A | 281 |
| 669 A | 281 |
| 674 A | 281 |
| 675 A | 281 |
| 676 A | 281 |
| 677 A | 281 |
| 681 A | 281 |
| 682 A | 281 |

# Service ■ Index of part number


| Part no. | Page |
|---|---|
| 687 A | 281 |
| 688 A | 281 |
| 689 A | 281 |
| 690 A | 281 |
| 694 A | 281 |
| 695 A | 281 |
| 700 A | 281 |
| 701 A | 281 |
| 702 A | 281 |
| 703 A | 281 |
| 707 A | 281 |
| 708 A | 281 |
| 711 | 129 |
| 712 | 129 |
| 713 A | 281 |
| 714 A | 281 |
| 715 A | 281 |
| 716 A | 281 |
| 717 | 129 |
| 719 | 129 |
| 720 A | 281 |
| 721 A | 281 |
| 723 | 129 |
| 725 | 147 |
| 726 A | 281 |
| 727 A | 281 |
| 728 A | 281 |
| 729 A | 281 |
| 731 | 147 |
| 733 | 261 |
| 734 | 261 |
| 735 | 261 |
| 736 | 261 |
| 737 | 263 |
| 738 | 263 |
| 739 | 263 |
| 740 | 263 |
| 741 | 265 |
| 742 | 265 |
| 743 | 265 |
| 744 | 265 |
| 745 | 267 |
| 746 | 267 |
| 747 | 267 |
| 748 | 267 |
| 749 | 265 |
| 750 | 265 |
| 751 | 265 |
| 752 | 265 |
| 757 | 129 |
| 761 | 147 |
| 763 | 147 |
| 765 | 147 |
| 767 | 283 |
| 768 | 283 |
| 769 | 129 |
| 773 | 129 |
| 777 | 129 |
| 800 | 137 |
| 801 | 137 |
| 802 | 137 |
| 803 | 137 |
| 804 | 137 |
| 806 A | 285 |
| 807 A | 285 |
| 808 A | 285 |
| 809 A | 285 |
| 812 | 141 |
| 813 | 141 |
| 814 | 141 |
| 815 | 141 |
| 817 | 141 |
| 819 | 141 |
| 820 | 141 |
| 821 | 141 |
| 824 | 141 |
| 825 | 141 |
| 826 | 141 |
| 827 | 141 |
| 828 | 141 |
| 829 | 141 |
| 830 | 141 |
| 831 | 141 |
| 832 | 141 |
| 833 | 141 |
| 834 | 141 |
| 835 | 141 |

| Part no. | Page |
|---|---|
| 836 | 141 |
| 837 | 141 |
| 838 | 141 |
| 839 | 141 |
| 840 | 141 |
| 843 | 137 |
| 844 | 137, 319 |
| 846 | 137 |
| 847 | 137, 319 |
| 851 | 318 |
| 852 | 319 |
| 853 | 141 |
| 853 SW | 333 |
| 854 | 143 |
| 855 | 143 |
| 856 | 67 |
| 857 | 103 |
| 858 | 103 |
| 859 | 135 |
| 860 | 285 |
| 861 | 285 |
| 862 | 285 |
| 863 | 285 |
| 886 | 285 |
| 887 | 285 |
| 888 | 285 |
| 889 | 285 |
| 891 | 129 |
| 903 | 103 |
| 905 | 103 |
| 907 | 117 |
| 913 | 143 |
| 921 | 137 |
| 922 | 137 |
| 926 | 303 |
| 927 | 301 |
| 928 | 303 |
| 937 | 143 |
| 946 | 301 |
| 947 | 129 |
| 948 | 129 |
| 951 | 129 |
| 952 | 129 |
| 953 | 129 |
| 954 | 129 |
| 955 | 301 |
| 956 | 301 |
| 957 | 303 |
| 960 | 301 |
| 961 | 301 |
| 962 | 301 |
| 963 | 301 |
| 965 | 147 |
| 978 | 303 |
| 979 | 147 |
| 980 | 147 |
| 982 | 303 |
| 983 | 303 |
| 987 | 117 |
| 988 | 117 |
| 989 | 117 |
| 992 | 143 |
| 993 | 147 |
| 994 | 147 |
| 995 AB | 333 |
| 996 | 147 |
| 997 | 117 |
| 997 AB | 333 |
| 998 | 117 |
| 1003 | 285 |
| 1004 | 285 |
| 1005 | 285 |
| 1006 | 285 |
| 1029 | 285 |
| 1030 | 285 |
| 1031 | 285 |
| 1032 | 285 |
| 1035 | 261 |
| 1040 | 261 |
| 1045 | 263 |
| 1050 | 263 |
| 1055 | 265 |
| 1060 | 265 |
| 1065 | 267 |
| 1070 | 267 |
| 1075 | 265 |
| 1080 | 265 |

| Part no. | Page |
|---|---|
| 1081 | 103 |
| 1082 | 103 |
| 1095 | 263 |
| 1096 | 263 |
| 1103 | 103 |
| 1107 | 137 |
| 1122 A | 103 |
| 1123 A | 103 |
| 1124 A | 103 |
| 1125 A | 103 |
| 1127 A | 103 |
| 1128 A | 103 |
| 1131 | 115, 118, 119, 340 |
| 1132 | 117 |
| 1133 | 117 |
| 1134 | 117 |
| 1136 A | 67 |
| 1137 A | 67 |
| 1138 A | 67 |
| 1140 A | 67 |
| 1141 A | 67 |
| 1142 A | 67 |
| 1144 A | 67 |
| 1145 A | 67 |
| 1146 A | 101 |
| 1147 A | 101 |
| 1148 A | 101 |
| 1149 A | 101 |
| 1150 A | 101 |
| 1151 A | 101 |
| 1152 A | 101 |
| 1153 A | 101 |
| 1154 A | 101 |
| 1155 A | 101 |
| 1166 | 117 |
| 1168 | 115 |
| 1169 | 115 |
| 1171 | 115 |
| 1173 | 115 |
| 1177 | 67 |
| 1178 | 67 |
| 1216 | 137 |
| 1217 | 137 |
| 1247 A | 101 |
| 1248 A | 101 |
| 1249 A | 101 |
| 1250 A | 101 |
| 1251 A | 101 |
| 1252 A | 101 |
| 1252 AC | 333 |
| 1253 | 139 |
| 1254 | 139 |
| 1256 | 139 |
| 1257 | 139 |
| 1259 | 139 |
| 1260 A | 101 |
| 1261 A | 101 |
| 1261 AE | 333 |
| 1262 A | 101 |
| 1263 A | 103 |
| 1264 A | 103 |
| 1265 A | 103 |
| 1267 | 67 |
| 1268 | 67 |
| 1269 | 67 |
| 1270 | 279 |
| 1271 | 279 |
| 1272 | 279 |
| 1273 | 279 |
| 1337 | 117 |
| 1340 | 77 |
| 1341 | 77, 318 |
| 1342 | 77 |
| 1343 | 77 |
| 1344 | 77 |
| 1345 | 77 |
| 1346 | 77 |
| 1347 | 77 |
| 1348 | 77 |
| 1349 | 77 |
| 1350 | 117, 318 |
| 1351 | 117 |
| 1352 | 117 |
| 1353 | 117 |
| 1365 | 101 |
| 1366 | 101, 118, 119 |
| 1367 | 101, 118, 119 |

| Part no. | Page |
|---|---|
| 1368 | 67 |
| 1369 | 67 |
| 1372 | 67 |
| 1373 | 67 |
| 1374 | 67 |
| 1384 | 101 |
| 1385 ZI | 333 |
| 1385 | 101, 118, 119 |
| 1386 | 101, 118, 119 |
| 1387 ZA | 333 |
| 1388 | 101 |
| 1389 | 101, 118, 119 |
| 1390 | 101, 118, 119 |
| 1391 | 101 |
| 1392 | 101 |
| 1393 | 101 |
| 1394 | 101 |
| 1395 | 101 |
| 1395 ZD | 333 |
| 1396 | 101 |
| 1397 | 101 |
| 1398 | 101 |
| 1399 | 101 |
| 1400 | 101 |
| 1401 | 101 |
| 1402 | 101 |
| 1404 | 117 |
| 1405 | 117 |
| 1408 | 141 |
| 1409 | 141 |
| 1410 | 129 |
| 1411 | 129, 319 |
| 1414 | 145 |
| 1415 | 145 |
| 1418 | 67 |
| 1419 | 67 |
| 1420 | 67 |
| 1421 | 67 |
| 1422 | 67 |
| 1423 | 67 |
| 1424 | 67 |
| 1425 | 67 |
| 1426 | 67 |
| 1427 | 67 |
| 1428 | 67 |
| 1436 | 145 |
| 1437 | 145 |
| 1438 | 147, 320 |
| 1455 | 103 |
| 1456 | 103 |
| 1457 | 103 |
| 1458 | 103 |
| 1460 | 103 |
| 1461 | 103 |
| 1462 | 101 |
| 1463 | 101 |
| 1464 | 101 |
| 1465 | 101 |
| 1466 | 101 |
| 1467 | 101 |
| 1468 | 101 |
| 1469 | 101 |
| 1470 | 101 |
| 1471 | 101 |
| 1472 | 101 |
| 1473 | 101 |
| 1474 | 101 |
| 1475 | 101 |
| 1476 | 101 |
| 1477 | 101 |
| 1478 | 101 |
| 1479 | 101 |
| 1480 | 101 |
| 1481 | 101 |
| 1485 | 101 |
| 1486 | 101 |
| 1487 | 101 |
| 1490 | 101 |
| 1491 | 101 |
| 1492 | 101 |
| 1493 | 101 |
| 1494 | 101 |
| 1495 | 101 |
| 1496 | 101 |
| 1497 | 101 |
| 1498 | 101 |
| 1499 | 101 |

| Part no. | Page |
|---|---|
| 1500 | 101 |
| 1501 | 101 |
| 1502 | 101 |
| 1503 | 101 |
| 1504 | 101 |
| 1505 | 101 |
| 1506 | 101 |
| 1507 | 101 |
| 1551 | 101 |
| 1555 | 67 |
| 1556 | 67 |
| 1557 | 67 |
| 1579 | 279 |
| 1594 | 279 |
| 1595 | 279 |
| 1602 | 279 |
| 1603 | 279 |
| 1618 | 117 |
| 1619 | 117, 318 |
| 1629 ZC | 333 |
| 1631 | 115 |
| 1632 | 115, 318 |
| 1633 | 115 |
| 1635 | 115 |
| 1636 | 115 |
| 1637 | 115 |
| 1638 | 115 |
| 1639 | 115 |
| 1640 | 115 |
| 1641 | 115 |
| 1642 | 115 |
| 1643 | 115 |
| 1644 | 115 |
| 1646 | 115 |
| 1647 | 79 |
| 1648 | 79 |
| 1649 | 79 |
| 1650 | 79 |
| 1651 | 79 |
| 1657 | 279 |
| 1661 | 279 |
| 1667 | 115 |
| 1668 | 115, 118, 119, 318 |
| 1669 | 115, 118, 119 |
| 1671 | 115 |
| 1672 | 115 |
| 1673 | 115, 118, 119 |
| 1674 | 115, 118, 119 |
| 1675 | 115 |
| 1676 | 115 |
| 1677 | 115 |
| 1678 | 115 |
| 1679 | 115, 118, 119 |
| 1680 | 115 |
| 1682 | 115 |
| 1688 | 141 |
| 1693 | 279 |
| 1700 | 115 |
| 1701 | 115, 340 |
| 1702 | 115 |
| 1703 | 115 |
| 1704 | 115 |
| 1705 | 115 |
| 1706 | 115 |
| 1707 | 115 |
| 1708 | 115, 118, 119, 340 |
| 1709 | 115, 118, 119 |
| 1710 | 115 |
| 1711 | 115, 118, 119 |
| 1712 | 115, 118, 119 |
| 1713 | 115 |
| 1714 | 115 |
| 1716 | 115 |
| 1717 | 115, 118, 119 |
| 1719 | 77 |
| 1720 | 77 |
| 1721 | 77 |
| 1723 | 77 |
| 1724 | 77 |
| 1725 | 77 |
| 1726 | 77 |
| 1727 | 77 |
| 1730 | 77 |
| 1733 | 115 |
| 1734 | 115 |
| 1735 | 115 |
| 1737 | 115 |
| 1738 | 115 |
| 1739 | 115 |
| 1740 | 115 |
| 1741 | 115 |
| 1742 | 115 |
| 1743 | 115 |
| 1744 | 115 |
| 1745 | 115 |
| 1746 | 115 |
| 1747 | 115 |
| 1749 | 115 |
| 1750 | 77 |
| 1751 | 77 |
| 1752 | 77 |
| 1753 | 77 |
| 1754 | 77 |
| 1755 | 77 |
| 1756 | 77 |
| 1757 | 77 |
| 1759 | 77 |
| 1786 | 115 |
| 1787 | 115 |
| 1788 | 115 |
| 1790 | 115 |
| 1791 | 115 |
| 1792 | 115 |
| 1793 | 115 |
| 1795 | 115 |
| 1796 | 115 |
| 1797 | 115 |
| 1798 | 115 |
| 1800 | 115 |
| 1801 | 115 |
| 1802 | 115 |
| 1803 | 115 |
| 1804 | 115 |
| 1805 | 115 |
| 1806 | 115 |
| 1807 | 115 |
| 1808 | 115, 340 |
| 1809 | 115 |
| 1810 | 115 |
| 1812 | 115 |
| 1813 | 115 |
| 1814 | 115 |
| 1815 | 115 |
| 1816 | 115 |
| 1817 | 115 |
| 1818 | 115 |
| 1820 | 115 |
| 1823 | 279 |
| 1825 | 279 |
| 1829 | 279 |
| 1831 | 279 |
| 1832 | 279 |
| 1835 | 279 |
| 1837 | 279 |
| 1838 | 279 |
| 1842 | 279 |
| 1844 | 279 |
| 1845 | 279 |
| 1848 | 279 |
| 1850 | 279 |
| 1851 | 77 |
| 1852 | 77 |
| 1854 | 77 |
| 1855 | 77 |
| 1856 | 77 |
| 1857 | 77 |
| 1858 | 77 |
| 1859 | 77 |
| 1860 | 77 |
| 1861 | 77 |
| 1862 | 77 |
| 1864 | 77 |
| 1955 | 281 |
| 1959 | 281 |
| 1961 | 281 |
| 1962 | 281 |
| 1965 | 281 |
| 1967 | 281 |
| 1968 | 281 |
| 1972 | 281 |
| 1974 | 281 |
| 1975 | 281 |
| 1978 | 281 |
| 1980 | 281 |
| 1981 | 141 |
| 1982 | 141 |
| 1983 | 141 |
| 1984 | 141 |
| 2007 A | 67 |
| 2014 | 129 |
| 2015 | 129 |
| 2020 | 129 |
| 2021 | 129 |
| 2026 | 147 |
| 2027 | 147 |
| 2113 | 273 |
| 2114 | 273 |
| 2115 | 273 |
| 2117 | 291 |
| 2118 | 291 |
| 2123 A | 313 |
| 2139 | 69 |
| 2151 | 129 |
| 2152 | 287 |
| 2162 A | 69 |
| 2166 | 265 |
| 2167 | 265 |
| 2168 | 129 |
| 2175 B | 313 |
| 2177 A | 315 |
| 2178 | 129 |
| 2179 A | 101 |
| 2180 A | 101 |
| 2181 A | 101 |
| 2184 | 291 |
| 2185 | 291 |
| 2189 | 129 |
| 2193 | 147 |
| 2195 | 129 |
| 2196 | 147 |
| 2203 P | 271 |
| 2211 | 291 |
| 2212 | 263 |
| 2213 | 265 |
| 2221 | 291 |
| 2243 | 129 |
| 2244 | 129 |
| 2245 | 147 |
| 2255 | 267 |
| 2271 | 129 |
| 2289 A | 289 |
| 2296 | 263 |
| 2317 | 263 |
| 2324 | 265 |
| 2331 | 291 |
| 2341 | 129 |
| 2359 | 137 |
| 2386 | 137 |
| 2390 | 273 |
| 2400 | 137 |
| 2405 | 265 |
| 2406 | 267 |
| 2422 | 291 |
| 2441 | 147 |
| 2443 | 263 |
| 2459 | 263 |
| 2460 | 267 |
| 2478 | 143 |
| 2488 A | 279 |
| 2493 | 147 |
| 2495 | 147 |
| 2511 | 143 |
| 2517 | 147 |
| 2546 P | 271 |
| 2576 A | 269 |
| 2584 | 263 |
| 2605 | 291 |
| 2617 A | 279 |
| 2624 | 139 |
| 2660 | 147 |
| 2668 | 137 |
| 2674 | 147 |
| 2675 | 275 |
| 2676 A | 275 |
| 2677 | 277 |
| 2678 | 277 |
| 2684 | 275 |
| 2685 | 277 |
| 2692 | 315 |
| 2711 | 263 |
| 2761 P | 271 |
| 2764 A | 271 |
| 2765 A | 271 |
| 2766 A | 269 |
| 2767 A | 269 |
| 2768 | 273 |
| 2769 | 273 |
| 2798 | 273 |
| 2799 | 273 |
| 2801 | 277 |
| 2837 | 279 |
| 2840 A | 275 |
| 2841 | 279 |
| 2845 | 279 |
| 2852 | 279 |
| 2855 | 279 |
| 2860 | 279 |
| 2864 | 279 |
| 2869 | 279 |
| 2870 | 279 |
| 2883 | 263 |
| 2917 A | 275 |
| 2918 | 277 |
| 2930 | 291 |
| 2973 A | 275 |
| 2983 A | 275 |
| 2988 | 263 |
| 2997 A | 275 |
| 3004 | 115 |
| 3007 | 277 |
| 3008 | 115 |
| 3010 | 271 |
| 3011 | 271 |
| 3021 | 263 |
| 3022 | 263 |
| 3023 | 263 |
| 3028 | 67 |
| 3030 | 67 |
| 3032 | 67 |
| 3034 | 67 |
| 3035 | 67 |
| 3039 | 67 |
| 3041 | 67 |
| 3043 | 67 |
| 3045 | 67 |
| 3046 | 67 |
| 3048 | 115 |
| 3049 | 115 |
| 3052 | 283 |
| 3053 | 283 |
| 3054 | 101 |
| 3055 | 101 |
| 3057 | 101 |
| 3058 | 271 |
| 3059 | 101 |
| 3060 | 101 |
| 3066 | 271 |
| 3067 | 283 |
| 3070 | 115 |
| 3079 P | 271 |
| 3088 | 283 |
| 3115 P | 271 |
| 3120 | 263 |
| 3121 | 263 |
| 3123 | 263 |
| 3124 | 115 |
| 3126 | 115 |
| 3134 | 67 |
| 3139 | 67 |
| 3141 | 283 |
| 3147 | 283 |
| 3149 | 67 |
| 3152 | 67 |
| 3154 | 67 |
| 3155 | 115 |
| 3157 | 115 |
| 3171 | 115 |
| 3183 | 271 |
| 3186 | 101 |
| 3187 | 101 |
| 3188 | 101 |
| 3189 | 101 |
| 3190 | 101 |
| 3191 | 101 |
| 3192 | 101 |
| 3193 | 101 |
| 3197 | 103 |
| 3200 | 103 |

# Service ■ Index of part number


| Part no. | Page |
|---|---|
| 3201 | 101 |
| 3202 | 101 |
| 3214 | 289 |
| 3215 | 289 |
| 3216 | 289 |
| 3217 | 283 |
| 3218 | 283 |
| 3219 | 283 |
| 3220 | 283 |
| 3221 | 283 |
| 3222 | 283 |
| 3229 | 277 |
| 3230 | 277 |
| 3231 | 145 |
| 3232 | 145 |
| 3242 | 263 |
| 3243 | 263 |
| 3254 | 103 |
| 3256 | 103 |
| 3266 | 129 |
| 3283 | 103 |
| 3290 | 279 |
| 3306 | 129 |
| 3312 | 129 |
| 3319 A | 135 |
| 3322 | 135 |
| 3331 | 77 |
| 3333 | 105 |
| 3334 | 105 |
| 3338 | 135 |
| 3339 | 135 |
| 3340 | 135 |
| 3341 | 135 |
| 3342 | 143 |
| 3343 | 143 |
| 3345 | 143 |
| 3346 | 143 |
| 3347 | 143 |
| 3348 | 143 |
| 3350 | 143 |
| 3355 | 143 |
| 3356 | 143 |
| 3357 | 143 |
| 3367 | 143 |
| 3368 | 143 |
| 3380 | 103 |
| 3385 | 115, 118, 119 |
| 3413 | 141 |
| 3420 | 145 |
| 3424 | 129 |
| 3447 | 101 |
| 3449 | 101 |
| 3450 | 271 |
| 3451 | 101 |
| 3452 | 101 |
| 3454 | 101 |
| 3455 | 101 |
| 3458 | 145 |
| 3459 | 145 |
| 3460 | 145 |
| 3461 | 145 |
| 3473 | 115 |
| 3485 | 115, 340 |
| 3507 | 101 |
| 3517 | 143 |
| 3523 | 143 |
| 3524 | 103 |
| 3527 | 145 |
| 3528 | 145 |
| 3530 | 139 |
| 3531 | 139 |
| 3566 | 115 |
| 3573 | 115 |
| 3575 | 101 |
| 3581 | 115 |
| 3583 | 141 |
| 3587 | 115 |
| 3590 | 115 |
| 3600 | 141 |
| 3611 | 139 |
| 3641 | 103 |
| 3646 | 129 |
| 3656 | 141 |
| 3657 | 141 |
| 3658 | 141 |
| 3663 P | 271 |
| 3665 | 141 |

| Part no. | Page |
|---|---|
| 3704 | 141 |
| 3717 | 143 |
| 3718 | 313 |
| 3719 | 275 |
| 3773 | 75 |
| 3774 | 75 |
| 3776 | 265 |
| 3777 | 265 |
| 3778 | 149 |
| 3783 | 267 |
| 3784 | 267 |
| 3787 P | 271 |
| 3790 | 269 |
| 3794 | 131 |
| 3796 | 131, 340 |
| 3799 | 131 |
| 3807 | 131 |
| 3809 | 131 |
| 3810 | 131 |
| 3811 | 131 |
| 3819 | 131 |
| 3821 | 131, 340 |
| 3823 | 131 |
| 3829 | 131 |
| 3830 | 131 |
| 3832 | 131 |
| 3839 | 131 |
| 3841 | 131 |
| 3842 | 131 |
| 3844 | 131 |
| 3851 | 131 |
| 3853 | 131, 340 |
| 3855 | 131 |
| 3859 | 149 |
| 3860 | 149, 340 |
| 3871 | 149 |
| 3872 | 149 |
| 3873 | 149 |
| 3881 | 149, 340 |
| 3887 | 149 |
| 3888 | 149 |
| 3897 | 149 |
| 3898 | 149 |
| 3899 | 149 |
| 3907 | 149, 340 |
| 3913 | 265 |
| 3914 | 265 |
| 3915 | 265 |
| 3916 | 267 |
| 3917 | 145 |
| 3918 | 131 |
| 3919 | 131 |
| 3920 | 131 |
| 3925 | 131 |
| 3926 | 131 |
| 3927 | 131 |
| 3928 | 131 |
| 3934 | 131 |
| 3935 | 131 |
| 3936 | 131 |
| 3942 | 131 |
| 3943 | 131 |
| 3944 | 131 |
| 3945 | 131 |
| 3946 | 131 |
| 3947 | 131 |
| 3948 | 131 |
| 3951 | 131 |
| 3952 | 131 |
| 3953 | 149 |
| 3954 | 149 |
| 3956 | 149 |
| 3957 | 149 |
| 3958 | 149 |
| 3959 | 149 |
| 3962 | 149 |
| 3963 | 149 |
| 3964 | 149 |
| 3965 | 149 |
| 3966 | 149 |
| 3967 | 149 |
| 3969 | 149 |
| 3970 | 149 |
| 3971 | 149 |
| 3974 | 149 |
| 3975 | 149 |
| 3976 | 149 |

| Part no. | Page |
|---|---|
| 3977 | 131 |
| 3980 | 129 |
| 3981 | 129 |
| 3987 | 129 |
| 3999 | 149 |
| 4101 | 71 |
| 4102 | 71 |
| 4103 | 71 |
| 4104 | 71 |
| 4105 | 71 |
| 4106 | 71 |
| 4107 | 71 |
| 4108 | 71 |
| 4110 | 71 |
| 4111 | 107 |
| 4112 | 107, 118, 119 |
| 4113 | 107, 118, 119 |
| 4114 | 107 |
| 4115 | 107, 118 |
| 4116 | 107 |
| 4117 | 107 |
| 4118 | 107 |
| 4119 | 107 |
| 4120 | 107 |
| 4122 | 107 |
| 4125 | 107 |
| 4127 | 107 |
| 4130 | 107 |
| 4132 | 71 |
| 4133 | 71 |
| 4135 | 71 |
| 4137 | 71 |
| 4138 | 71 |
| 4140 | 71 |
| 4141 | 107 |
| 4142 | 107 |
| 4143 | 107 |
| 4145 | 107 |
| 4145 ME | 113 |
| 4146 | 107 |
| 4147 | 107 |
| 4148 | 107 |
| 4150 | 107 |
| 4162 | 71 |
| 4163 | 71 |
| 4165 | 71 |
| 4167 | 71 |
| 4168 | 71 |
| 4170 | 71 |
| 4172 | 107 |
| 4173 | 107 |
| 4175 | 107 |
| 4177 | 107 |
| 4178 | 107 |
| 4180 | 107 |
| 4191 | 121, 308 |
| 4192 | 121 |
| 4202 | 71 |
| 4203 | 71 |
| 4204 | 71 |
| 4210 | 111 |
| 4211 | 111 |
| 4212 | 111 |
| 4213 | 111 |
| 4214 | 111 |
| 4215 | 111 |
| 4217 | 111 |
| 4219 | 71 |
| 4220 | 71 |
| 4230 | 111 |
| 4233 | 107, 118, 119 |
| 4235 | 229 |
| 4237 | 109 |
| 4238 | 109 |
| 4239 | 121 |
| 4243 | 109 |
| 4244 | 109 |
| 4245 | 109 |
| 4246 | 109 |
| 4247 | 109 |
| 4254 | 71 |
| 4258 | 71 |
| 4262 | 109 |
| 4263 | 109 |
| 4273 | 109 |
| 4274 | 109 |
| 4275 | 109 |

| Part no. | Page |
|---|---|
| 4278 | 113 |
| 4279 | 113 |
| 4280 | 113 |
| 4300 | 309 |
| 4302 | 309 |
| 4304 | 309 |
| 4320 | 309 |
| 4322 | 309 |
| 4324 | 309 |
| 4326 | 309 |
| 4340 | 309 |
| 4342 | 309 |
| 4344 | 309 |
| 4345 | 309 |
| 4350 | 309 |
| 4352 | 309 |
| 4354 | 309 |
| 4360 | 309 |
| 4362 | 309 |
| 4364 | 309 |
| 4367 | 309 |
| 4370 | 309 |
| 4372 | 309 |
| 4374 | 309 |
| 4375 | 309 |
| 4377 | 309 |
| 4378 | 309 |
| 4970 | 229 |
| 4971 | 225 |
| 4972 | 225 |
| 4973 | 229 |
| 4974 | 225 |
| 4974 ME | 225 |
| 4976 | 229 |
| 4977 | 225 |
| 4979 | 225 |
| 4980 | 225 |
| 4981 | 225 |
| 4982 | 225 |
| 4984 | 225 |
| 5010 | 81 |
| 5012 | 81 |
| 5014 | 81 |
| 5016 | 81 |
| 5042 A | 85 |
| 5043 A | 85 |
| 5046 A | 85 |
| 5099 A | 87 |
| 5100 A | 87 |
| 5101 A | 87 |
| 5102 A | 87 |
| 5103 A | 87 |
| 5104 A | 87 |
| 5105 A | 87 |
| 5106 A | 87 |
| 5107 A | 87 |
| 5108 A | 87 |
| 5109 A | 89 |
| 5110 A | 89 |
| 5111 A | 89 |
| 5112 A | 89 |
| 5113 A | 89 |
| 5467 | 287 |
| 5474 | 287 |
| 5495 | 81 |
| 5496 | 81 |
| 5497 | 81 |
| 5498 | 81 |
| 5511 | 69 |
| 5512 | 69 |
| 5513 | 69 |
| 5514 | 69 |
| 5515 | 69 |
| 5516 | 69 |
| 5517 A | 69 |
| 5518 A | 69 |
| 5519 A | 69 |
| 5527 | 85 |
| 5528 | 85 |
| 5530 | 85 |
| 5532 A | 85 |
| 5535 A | 85 |
| 5536 | 261 |
| 5599 A | 89 |
| 5600 A | 89 |
| 5601 A | 89 |
| 5602 A | 89 |

| Part no. | Page |
|---|---|
| 5603 A | 89 |
| 5604 A | 89 |
| 5605 A | 89 |
| 5606 A | 89 |
| 5607 A | 89 |
| 5608 A | 89 |
| 5610 A | 91 |
| 5613 A | 91 |
| 5615 A | 91 |
| 5618 A | 91 |
| 5630 A | 93 |
| 5633 A | 93 |
| 5635 A | 93 |
| 5638 A | 93 |
| 5640 A | 93 |
| 5641 A | 93 |
| 5643 A | 93 |
| 5663 A | 269 |
| 5679 A | 93 |
| 5683 | 261 |
| 5690 A | 89 |
| 5691 A | 89 |
| 5692 A | 89 |
| 5693 A | 93 |
| 5695 A | 93 |
| 5696 A | 87 |
| 5703 A | 287 |
| 5743 A | 87 |
| 5755 | 69 |
| 5756 | 69 |
| 5757 | 69 |
| 5759 A | 89 |
| 5771 A | 269 |
| 5781 A | 269 |
| 5785 | 261 |
| 5787 A | 269 |
| 5792 A | 313 |
| 5793 A | 89 |
| 5806 A | 287 |
| 5887 A | 89 |
| 5888 A | 89 |
| 5911 A | 89 |
| 5924 A | 89 |
| 5925 A | 89 |
| 5946 A | 313 |
| 5955 A | 87 |
| 5956 A | 87 |
| 5957 A | 87 |
| 5959 A | 87 |
| 6015 A | 269 |
| 6059 A | 91 |
| 6062 A | 91 |
| 6077 | 269 |
| 6106 | 261 |
| 6262 A | 269 |
| 6571 | 87 |
| 6580 | 269 |
| 7000 | 89 |
| 7002 A | 87 |
| 7006 | 81 |
| 7007 | 81 |
| 7010 A | 87 |
| 7011 A | 89 |
| 7012 A | 89 |
| 7019 | 95 |
| 7021 | 97 |
| 7024 | 97 |
| 7026 | 95 |
| 7027 | 97 |
| 7028 | 97 |
| 7029 | 97 |
| 7031 | 97 |
| 7040 | 95 |
| 7042 | 97 |
| 7045 | 97 |
| 7050 | 93 |
| 7061 | 261 |
| 7102 | 81 |
| 7119 | 81 |
| 7125 | 81 |
| 7126 | 81 |
| 7127 | 81 |
| 7128 | 83 |
| 7129 | 83 |
| 7130 | 83 |
| 7131 | 83 |
| 7132 | 83 |

| Part no. | Page |
|---|---|
| 7143 | 83 |
| 7145 | 83 |
| 7147 | 83 |
| 7148 | 83 |
| 7150 | 83 |
| 7152 | 83 |
| 7153 | 81 |
| 7166 | 85 |
| 7167 | 85 |
| 7168 | 85 |
| 7169 | 85 |
| 7170 | 85 |
| 7213 | 91 |
| 7216 | 91 |
| 7217 | 91 |
| 7218 | 91 |
| 7219 | 91 |
| 7220 | 91 |
| 7221 | 91 |
| 7222 | 91 |
| 7223 | 91 |
| 7224 | 91 |
| 7226 | 91 |
| 7227 | 91 |
| 7228 | 91 |
| 7231 | 91 |
| 7232 | 91 |
| 7233 | 91 |
| 7234 | 91 |
| 7235 | 91 |
| 7238 | 93 |
| 7239 | 93 |
| 7240 | 93 |
| 7241 | 93 |
| 7242 | 93 |
| 7243 | 93 |
| 7244 | 93 |
| 7245 | 93 |
| 7246 | 93 |
| 7247 | 93 |
| 7248 | 93 |
| 7249 | 93 |
| 7250 | 93 |
| 7251 | 93 |
| 7283 | 99 |
| 7284 | 99 |
| 7285 | 99 |
| 7286 | 99 |
| 7287 | 99 |
| 7288 | 99 |
| 7289 | 99 |
| 7290 | 99 |
| 7292 | 99 |
| 7294 | 99 |
| 7295 | 99 |
| 7296 | 99 |
| 7304 | 261 |
| 7305 | 261 |
| 7306 | 261 |
| 7307 | 261 |
| 7311 | 85 |
| 7312 | 81 |
| 7313 | 81 |
| 7318 | 91 |
| 7320 | 261 |
| 7445 | 287 |
| 7446 | 287 |
| 7502 | 87 |
| 7503 | 87 |
| 7504 | 87 |
| 7505 | 87 |
| 7506 | 87 |
| 7507 | 87 |
| 7512 | 87 |
| 7516 | 87 |
| 7520 | 89 |
| 7521 | 89 |
| 7523 | 89 |
| 7524 | 89 |
| 7525 | 89 |
| 7526 | 89 |
| 7531 | 89 |
| 7534 | 89 |
| 7535 | 89 |
| 7536 | 89 |
| 7602 | 87 |
| 7603 | 87 |

| Part no. | Page |
|---|---|
| 7604 | 87 |
| 7605 | 87 |
| 7607 | 87 |
| 7612 | 87 |
| 7613 | 87 |
| 7614 | 87 |
| 7616 | 87 |
| 7620 | 89 |
| 7621 | 89 |
| 7623 | 89 |
| 7624 | 89 |
| 7625 | 89 |
| 7626 | 89, 173 |
| 7628 | 89 |
| 7629 | 89 |
| 7633 | 89 |
| 7634 | 89 |
| 7635 | 89 |
| 7636 | 89 |
| 7706 | 293 |
| 7716 | 293 |
| 7726 | 293 |
| 7736 | 293 |
| 7746 | 293 |
| 7756 | 293 |
| 7766 | 293 |
| 7776 | 293 |
| 7786 | 293 |
| 7806 | 293 |
| 7816 | 293 |
| 7826 | 293 |
| 7836 | 293 |
| 7846 | 293 |
| 7856 | 293 |
| 7866 | 293 |
| 7876 | 293 |
| 7886 | 293 |
| 8001 | 320 |
| 8004 | 321 |
| 8005 | 321 |
| 8008 | 320 |
| 9104 | 77 |
| 9105 | 77 |
| 9106 | 77 |
| 9120 | 77 |
| 9121 | 77 |
| 9122 | 77 |
| 9123 | 77 |
| 9124 | 77 |
| 9125 | 77 |
| 9140 | 77 |
| 9141 | 77 |
| 9142 | 77 |
| 9150 | 77 |
| 9151 | 77 |
| 9152 | 77 |
| 9170 | 77 |
| 9171 | 77 |
| 9172 | 77 |
| 9173 | 77 |
| 9174 | 77 |
| 9175 | 77 |
| 9180 | 77 |
| 9181 | 77 |
| 9182 | 77 |
| 9300 | 67 |
| 9301 | 67 |
| 9302 | 67 |
| 9303 | 287 |
| 9304 | 283 |
| 9320 | 67 |
| 9321 | 67 |
| 9322 | 67 |
| 9323 | 67 |
| 9324 | 67 |
| 9325 | 67 |
| 9327 | 283 |
| 9340 | 67 |
| 9341 | 67 |
| 9342 | 67 |
| 9350 | 67 |
| 9351 | 67 |
| 9352 | 67 |
| 9354 | 283 |
| 9370 | 67 |
| 9371 | 67 |
| 9372 | 67 |

| Part no. | Page |
|---|---|
| 9373 | 67 |
| 9374 | 67 |
| 9375 | 67 |
| 9377 | 283 |
| 9380 | 67 |
| 9381 | 67 |
| 9382 | 67 |
| 9500 | 73 |
| 9510 | 73 |
| 9511 | 73 |
| 9520 | 73 |
| 9530 | 261 |
| 9531 | 261 |
| 9532 | 261 |
| 9561 | 73 |
| 9562 | 313 |
| 9570 | 73 |
| 9590 | 261 |
| 9591 | 261 |
| 9592 | 261 |
| 10081 | 227 |
| 10082 | 227 |
| 10083 | 227 |
| 10085 | 237 |
| 10086 | 237 |
| 10087 | 239 |
| 10711 | 237 |
| 10712 | 237 |
| 10713 | 237 |
| 10714 | 235 |
| 10715 | 235 |
| 10716 | 235 |
| 10718 | 237 |
| 10749 | 231 |
| 10751 | 233 |
| 10752 | 233 |
| 10754 | 231 |
| 10755 | 233 |
| 10756 | 233 |
| 10803 | 329 |
| 10805 | 223, 338 |
| 10808 | 223, 338 |
| 10810 | 223, 338 |
| 10812 | 329 |
| 10818 | 231, 339 |
| 10828 | 231, 339 |
| 10829 | 329 |
| 10833 | 233, 339 |
| 10834 | 329 |
| 10837 | 231 |
| 10838 | 231 |
| 10839 | 231 |
| 10840 | 231 |
| 10841 | 231 |
| 10842 | 233 |
| 10843 | 233 |
| 10844 | 233 |
| 10845 | 233 |
| 10846 | 233 |
| 10852 | 231, 339 |
| 10853 | 329 |
| 10859 | 204, 341 |
| 10860 | 204, 341 |
| 10861 | 331 |
| 10863 | 227, 338 |
| 10864 | 231, 339 |
| 10895 | 349 |
| 10896 | 349 |
| 10906 | 349 |
| 10907 | 349 |
| 11010 | 221 |
| 11011 | 221 |
| 11012 | 221 |
| 11013 | 221 |
| 11030 | 221 |
| 11031 | 221 |
| 11032 | 221 |
| 11033 | 221 |
| 11060 | 221 |
| 11061 | 221 |
| 11081 | 221 |
| 11111 | 235 |
| 11160 | 235 |
| 11161 | 235 |
| 11162 | 235 |
| 11180 | 235 |
| 11181 | 235 |

# Service ■ Index of part number


| Part no. | Page |
|---|---|
| 11200 | 235 |
| 11250 | 235 |
| 11254 | 241 |
| 11310 | 221 |
| 11311 | 221 |
| 11311 F | 221 |
| 11312 | 221 |
| 11312 F | 221 |
| 11313 | 221 |
| 11330 | 221 |
| 11331 | 221 |
| 11331 F | 221 |
| 11332 | 221 |
| 11333 | 221 |
| 11510 K | 221 |
| 11511 | 221 |
| 11512 | 221 |
| 11513 K | 221 |
| 11515 K | 221 |
| 11531 | 221 |
| 11532 | 221 |
| 11561 | 221 |
| 11581 | 221 |
| 11611 | 235 |
| 11661 | 235 |
| 11665 K | 239 |
| 11681 | 235 |
| 11750 | 235 |
| 11750 K | 239 |
| 13101 | 133 |
| 13102 | 133 |
| 13105 | 133 |
| 13106 | 133 |
| 13107 | 133 |
| 13111 | 133 |
| 13112 | 133 |
| 13136 | 273 |
| 13137 | 273 |
| 13201 | 133 |
| 13202 | 133 |
| 13203 | 133 |
| 13204 | 133 |
| 13205 | 133 |
| 13206 | 133 |
| 13207 | 133 |
| 13208 | 133 |
| 13209 | 133 |
| 13210 | 133 |
| 13211 | 133 |
| 13212 | 133 |
| 13213 | 133 |
| 13214 | 133 |
| 13215 | 133 |
| 13216 | 133 |
| 13217 | 133 |
| 13218 | 133 |
| 13219 | 133 |
| 13220 | 133 |
| 13223 | 133 |
| 13224 | 133 |
| 13225 | 133 |
| 13226 | 133 |
| 13227 | 133 |
| 13238 | 273 |
| 13239 | 273 |
| 13240 | 291 |
| 13241 | 291 |
| 13248 | 277 |
| 13260 | 335 |
| 13261 | 335 |
| 14101 | 151 |
| 14102 | 151 |
| 14105 | 151 |
| 14106 | 151 |
| 14107 | 151 |
| 14111 | 151 |
| 14112 | 151 |
| 14128 | 151 |
| 14129 | 151 |
| 14130 | 151 |
| 14131 | 151 |
| 14201 | 151 |
| 14202 | 151 |
| 14203 | 151 |
| 14204 | 151 |
| 14205 | 151 |
| 14206 | 151 |

| Part no. | Page |
|---|---|
| 14207 | 151 |
| 14208 | 151 |
| 14209 | 151 |
| 14210 | 151 |
| 14211 | 151 |
| 14212 | 151 |
| 14213 | 151 |
| 14214 | 151 |
| 14215 | 151 |
| 14216 | 151 |
| 14217 | 151 |
| 14218 | 151 |
| 14219 | 151 |
| 14220 | 151 |
| 14223 | 151 |
| 14224 | 151 |
| 14225 | 151 |
| 14226 | 151 |
| 14227 | 151 |
| 14228 | 151 |
| 14229 | 151 |
| 14230 | 151 |
| 14231 | 151 |
| 14232 | 151 |
| 14233 | 151 |
| 14234 | 151 |
| 14235 | 151 |
| 14248 | 277 |
| 14260 | 335 |
| 14261 | 335 |
| 15530 | 195, 322 |
| 15542 | 194 |
| 15566 | 197 |
| 15575 | 187 |
| 15577 | 187 |
| 15586 | 185 |
| 15617 | 197 |
| 15678 | 193, 322 |
| 15679 | 193, 322 |
| 15680 | 193, 322 |
| 15681 | 193, 322 |
| 15682 | 195, 322 |
| 15683 | 195, 322 |
| 15690 | 194 |
| 15696 | 176 |
| 15738 | 193 |
| 15739 | 193 |
| 15740 | 193 |
| 15741 | 193 |
| 18416 | 185, 189 |
| 18422 | 185 |
| 18423 | 187 |
| 18424 | 185 |
| 18426 | 187 |
| 18427 | 189 |
| 18432 | 191 |
| 18433 | 188 |
| 18438 | 188, 343 |
| 18440 | 190 |
| 18442 | 188 |
| 18449 | 190 |
| 18500 RO | 196 |
| 18502 AZ | 197 |
| 18503 AG | 197 |
| 20146 A | 103 |
| 20147 A | 103 |
| 20148 A | 105 |
| 20162 A | 73 |
| 20235 A | 73 |
| 20458 | 325 |
| 20459 | 325 |
| 20460 | 325 |
| 20461 | 327 |
| 20462 | 327 |
| 20463 | 327 |
| 20485 A | 73 |
| 20709 | 131 |
| 20764 | 131 |
| 20781 | 131 |
| 20842 A | 73 |
| 20844 | 131 |
| 20970 | 143 |
| 21021 | 149 |
| 21021 ZB | 335 |
| 21039 | 149 |
| 21039 ZB | 335 |
| 21051 | 331 |

| Part no. | Page |
|---|---|
| 21075 | 73 |
| 21160 A | 103 |
| 21233 | 73 |
| 21241 | 143 |
| 21253 A | 73 |
| 21330 A | 73 |
| 21361 A | 73 |
| 21362 | 131 |
| 21363 | 131 |
| 21365 | 149 |
| 21366 | 149 |
| 21369 | 137 |
| 21375 | 331 |
| 21421 | 131 |
| 21421 ZA | 335 |
| 21422 | 149 |
| 21422 ZB | 335 |
| 21428 | 131 |
| 21428 ZA | 335 |
| 21468 | 73 |
| 21491 | 131 |
| 21492 | 131 |
| 21497 | 137 |
| 21516 | 131 |
| 21517 | 131 |
| 21519 | 131 |
| 21521 | 149 |
| 21523 | 149 |
| 21606 | 149 |
| 21877 | 149 |
| 21877 ZC | 335 |
| 22071 ZA | 333 |
| 22126 A | 73 |
| 22189 A | 325 |
| 22262 | 131 |
| 22263 | 131 |
| 22289 | 131 |
| 22289 ZC | 335 |
| 22302 | 131 |
| 22302 ZC | 335 |
| 22326 | 131 |
| 22737 | 131 |
| 22737 ZA | 335 |
| 22811 | 135 |
| 22812 | 135 |
| 22814 | 135 |
| 22815 | 135 |
| 22928 | 325 |
| 22932 | 73 |
| 22986 | 195 |
| 22987 | 195 |
| 22988 | 195 |
| 23151 | 325 |
| 23153 | 325 |
| 23163 | 325 |
| 23165 | 325 |
| 23175 | 325 |
| 23176 | 325 |
| 23177 | 325 |
| 23249 | 327 |
| 23293 A | 325 |
| 23432 | 325 |
| 23433 | 327 |
| 23443 A | 73 |
| 23964 | 73 |
| 24152 ZA | 333 |
| 24210 | 327 |
| 24315 | 73 |
| 24558 | 149 |
| 24559 | 149 |
| 24630 | 325 |
| 24640 | 325 |
| 24643 | 325 |
| 24660 | 325 |
| 24670 | 325 |
| 24671 | 325 |
| 24672 | 325 |
| 24674 | 327 |
| 24675 | 327 |
| 24685 | 327 |
| 24686 | 327 |
| 24687 | 327 |
| 24696 | 331 |
| 24697 | 331 |
| 24698 | 331 |
| 24730 | 325 |
| 24740 | 325 |

| Part no. | Page |
|---|---|
| 24760 | 325 |
| 24770 | 325 |
| 24772 | 325 |
| 24773 | 325 |
| 24774 | 327 |
| 24775 | 327 |
| 24785 | 327 |
| 24787 | 327 |
| 24788 | 327 |
| 24796 | 331 |
| 24797 | 331 |
| 24798 | 331 |
| 24840 | 325 |
| 24841 | 325 |
| 24842 | 325 |
| 24870 | 325 |
| 24873 | 325 |
| 24885 | 327 |
| 24888 | 327 |
| 24970 | 325 |
| 24985 | 327 |
| 25023 | 308 |
| 25024 | 308 |
| 25025 | 308 |
| 25037 | 307 |
| 25038 | 307 |
| 25042 | 307 |
| 25051 | 306 |
| 25056 | 306 |
| 25505 | 311 |
| 25505 GE | 311 |
| 25506 | 311 |
| 25506 GE | 311 |
| 25705 | 304 |
| 25715 | 304 |
| 40102 | 120 |
| 40113 | 120 |
| 40114 | 120 |
| 40115 | 120 |
| 40116 | 301 |
| 40243 | 353 |
| 40369 | 120 |
| 40444 | 353 |
| 40744 | 321 |
| 40778 | 153 |
| 40784 | 153, 340 |
| 40785 | 153, 340 |
| 40786 | 153, 340 |
| 40787 | 153 |
| 40788 | 153 |
| 40841 | 153, 315 |
| 40871 | 353 |
| 40926 | 327 |
| 40927 | 327 |
| 40928 | 327 |
| 40930 | 327 |
| 40931 | 327 |
| 40978 | 353 |
| 40978 ZA | 353 |
| 40979 | 353 |
| 40980 | 353 |
| 40980 ZC | 353 |
| 40981 | 353 |
| 40985 | 353 |
| 40985 ZB | 353 |
| 40986 | 353 |
| 41000 | 120 |
| 41340 | 120 |
| 41341 | 241 |
| 41342 | 315 |
| 41404 | 107, 109, 111, 113, 225, 308 |
| 41406 | 121 |
| 41407 | 121 |
| 41408 | 121 |
| 41409 | 121 |
| 41414 | 121 |
| 41416 | 153 |
| 41418 | 121, 241 |
| 41419 | 121, 241 |
| 41423 | 121 |
| 41424 | 121 |
| 41431 | 353 |
| 41432 | 353 |
| 41433 | 353 |
| 41440 | 205, 209 |
| 41441 | 205, 209 |

| Part no. | Page |
|---|---|
| 41442 | 201, 203, 207, 208 |
| 41445 | 183 |
| 41449 | 351 |
| 41450 | 351 |
| 41452 | 307 |
| 41453 | 308 |
| 41455 | 306 |
| 41456 | 306 |
| 41457 | 306 |
| 41482 | 153 |
| 41489 | 153 |
| 41492 | 306 |
| 41495 | 349 |
| 41588 | 293 |
| 41590 | 293 |
| 52241 | 351 |
| 52242 | 351 |
| 52243 | 351 |
| 52244 | 351 |
| 52245 | 351 |
| 52246 | 351 |
| 70004 | 182 |
| 70005 | 181 |
| 70007 NF | 181 |
| 70009 NF | 181 |
| 70009 | 182 |
| 70026 | 214 |
| 70027 | 215 |
| 70028 | 214 |
| 70029 | 214 |
| 70030 | 215 |
| 70031 | 214 |
| 70032 | 215 |
| 70033 | 215 |
| 70034 | 215 |
| 70106 | 215 |
| 70349 | 211 |
| 70350 | 211 |
| 70351 | 211 |
| 70352 | 211 |
| 70410 | 210 |
| 70412 | 210 |
| 70426 | 180 |
| 70434 | 211 |
| 70435 | 211 |
| 70436 | 210 |
| 70437 | 210 |
| 70442 | 212 |
| 70443 | 212 |
| 70444 | 212 |
| 70445 | 212 |
| 70448 | 212 |
| 70449 | 212 |
| 70531 | 211 |
| 70571 | 215 |
| 70734 | 211 |
| 71062 | 183 |
| 71063 | 182 |
| 71063 NF | 182 |
| 71064 | 181 |
| 75001 | 297 |
| 75006 | 297 |
| 75011 | 299 |
| 75016 | 299 |
| 75021 | 295 |
| 75026 | 295 |
| 75031 | 295 |
| 75036 | 295 |
| 75041 | 297 |
| 75046 | 297 |
| 75091 | 297 |
| 75096 | 297 |
| 75101 | 299 |
| 75106 | 299 |
| 75111 | 295 |
| 75116 | 295 |
| 75121 | 295 |
| 75126 | 295 |
| 75131 | 297 |
| 75136 | 297 |
| 75160 | 299 |
| 75172 | 297 |
| 75173 | 297 |
| 75174 | 295 |
| 75201 | 297 |
| 75206 | 297 |
| 75211 | 299 |

| Part no. | Page |
|---|---|
| 75216 | 299 |
| 75221 | 295 |
| 75226 | 295 |
| 75231 | 295 |
| 75236 | 295 |
| 75241 | 297 |
| 75246 | 297 |
| 75251 | 297 |
| 75256 | 297 |
| 75261 | 299 |
| 75266 | 299 |
| 75271 | 295 |
| 75280 | 299 |
| 75284 | 299 |
| 75287 | 299 |
| 75291 | 299 |
| 75295 | 299 |
| 75389 | 297 |
| 75398 | 297 |
| 75437 | 295 |
| 75441 | 295 |
| 75448 | 295 |
| 83685 | 197 |
| 83691 | 343 |
| 83692 | 343 |
| 83698 | 188 |
| 83699 | 205 |
| 83705 | 186 |
| 83706 | 186 |
| 83718 | 342 |
| 83722 | 197 |
| 83725 | 184 |
| 83744 | 184 |
| 83840 | 331 |
| 83968 A | 343 |
| 83969 | 342 |
| 84335 | 196 |
| 84373 | 189 |
| 84374 | 189 |
| 84708 | 331 |
| 88677 | 177 |
| 88678 | 177 |
| 92386 | 209, 341 |
| 92895 | 204 |
| 92898 | 204 |
| 92909 | 209, 341 |
| 92910 | 205 |
| 92912 | 205 |
| 92914 | 209 |
| 92915 | 205 |
| 92917 | 205 |
| 94350 SI | 202 |
| 94350 GE | 202 |
| 94350 RO | 202 |
| 94351 SI | 202 |
| 94351 GE | 202 |
| 94351 RO | 202 |
| 94351 FS | 203 |
| 94351 FG | 203 |
| 94351 FR | 203 |
| 94354 SI | 202 |
| 94354 GE | 202 |
| 94354 RO | 202 |
| 94355 SI | 202 |
| 94355 GE | 202 |
| 94355 RO | 202 |
| 94355 FS | 203 |
| 94355 FG | 203 |
| 94355 FR | 203 |
| 94356 FG | 208 |
| 94356 FR | 208 |
| 94356 FS | 208 |
| 94357 SI | 208 |
| 94357 GE | 208 |
| 94357 RO | 208 |
| 94550 SI | 200 |
| 94550 GE | 200 |
| 94550 RO | 200 |
| 94550 FS | 201 |
| 94550 FR | 201 |
| 94550 FG | 201 |
| 94551 SI | 200 |
| 94551 GE | 200 |
| 94551 RO | 200 |
| 94554 SI | 200 |
| 94554 GE | 200 |
| 94554 RO | 200 |

| Part no. | Page |
|---|---|
| 94555 SI | 200 |
| 94555 GE | 200 |
| 94555 RO | 200 |
| 94555 FS | 201 |
| 94555 FR | 201 |
| 94555 FG | 201 |
| 94559 GE | 207 |
| 94559 RO | 207 |
| 94559 SI | 207 |
| 96227 | 177 |
| 96438 | 177 |
| 96489 | 177 |
| 96705 | 177 |
| 106060 | 201, 207 |
| 106123 | 203, 208 |
| 208620 | 201, 203, 207, 208 |
| 208621 | 201, 203, 207, 208 |
| 900946 | 174 |
| 910001 | 168 |
| 910007 | 169 |
| 910015 | 169 |
| 910020 | 178 |
| 910205 | 168 |
| 910694 | 170 |
| 920003 | 168 |
| 920009 SW | 337 |
| 920011 | 171 |
| 920031 | 323 |
| 920043 | 168 |
| 920046 | 206 |
| 920295 | 171 |
| 920821 | 179 |
| 930003 | 170 |
| 930011 | 172 |
| 930022 | 173 |
| 930027 | 179 |
| 930028 | 179 |
| 930031 | 170 |
| 930278 SW | 337 |
| 930520 | 173 |
| 930734 | 171 |
| 931237 | 206 |
| 931451 | 206 |
| 934851 SW | 337 |
| 940005 | 171 |
| 940016 | 179 |
| 940018 | 304 |
| 940019 | 174, 317 |
| 940027 | 317 |
| 940028 | 174 |
| 940030 | 206 |
| 940280 SW | 337 |
| 941142 | 178 |
| 941265 | 323 |
| 950004 | 172 |
| 950022 | 172 |
| 950026 | 172 |
| 950031 | 175 |
| 950033 | 175 |
| 950034 | 174 |
| 950041 | 178 |
| 960004 | 170 |
| 960005 | 304 |
| 960019 | 169 |
| 960031 | 173 |
| 960042 | 178 |
| 960051 | 169 |
| 970001 GE | 199 |
| 970001 SI | 199 |
| 970001 | 199 |
| 970002 GE | 198 |
| 970002 SI | 198 |
| 970002 | 198 |
| 970003 GE | 199 |
| 970003 SI | 199 |
| 970003 | 199 |
| 970004 GE | 198 |
| 970004 SI | 198 |
| 970004 | 198 |
| 970005 GE | 199 |
| 970005 SI | 199 |
| 970005 | 199 |
| 990606 | 176 |
| 990607 | 176, 308 |
| 990608 | 176, 308 |
| 990609 | 176, 308 |
| 990610 | 176, 308 |

| Part no. | Page |
|---|---|
| 990611 | 176, 308 |
| 990612 | 176, 308 |
| 990620 | 176 |
| 990623 | 176 |
| 990625 | 176 |
| 990627 | 176 |
| 997000 | 199 |
| 997001 | 199 |
| 7101836 | 215 |
| 7106783 | 336 |
| 7106889 | 336 |
| 7200727 | 180 |
| 7402417 | 212 |
| 7403921 | 212 |
| 7408884 | 336 |
| 7408884 GB | 336 |
| 7513001 | 336 |
| 7513001 GB | 336 |
| 9200048 | 336 |
| 9203230 | 336 |
| 9400571 GE | 207 |
| 9400571 RO | 207 |
| 9400571 SI | 207 |
| 9401291 GE | 207 |
| 9401291 RO | 207 |
| 9401291 SI | 207 |
| 15452000 | 153 |
| 15453000 | 153 |
| 15561000 | 196 |
| 19266106 | 241 |
| 19267000 | 241 |
| 50780000 | 303 |
| 50781000 | 303 |

**I. Material Conditions, Scope**

**1.** All deliveries, services and offers of the seller shall be exclusively on the basis of these General Terms and Conditions. These shall form an integral part of all contracts concluded by the Seller with its contract partners (hereinafter also referred to as "Principal" and/or "Buyer") with respect to the deliveries and services offered by it. They shall apply for all future deliveries, services and offers made or rendered to the Principal, even where such is not separately so agreed.

**2.** Contrary business terms or purchasing conditions of the Principal or any third party shall not apply, even where the Seller does not expressly reject their application in the individual case. Even where the Seller refer to correspondence containing business terms of the Principal or a third party, this shall not indicate the Seller's acceptance of these terms.

**3.** The General Terms and Conditions shall only apply with respect to entrepreneurs in the sense of § 14(1) BGB (German Civil Code).

**II. Offer and Conclusion of Contract**

**1.** In the absence of any express indication to the contrary, all offers of the Seller shall remain subject to change and shall be non-binding. The Seller shall be able to accept orders within 14 days of their receipt.

**2.** The order shall be binding upon the Seller (conclusion of contract) once it has provided written confirmation of order or where it begins execution of order.

**3.** The legal relationship between Seller and Buyer shall be governed exclusively by the terms of the contract of sale they conclude, including these General Terms and Conditions. This contract shall render the agreement between the contract parties in full. Oral warranties given by the Seller before conclusion of this contract shall be legally non-binding and any oral agreements between the contracting parties shall be abrogated and replaced by the written contract, except in the case that such oral agreements expressly state that that they shall remain binding.

**4.** Supplements and amendments to agreements made, including these General Terms and Conditions, must be made in writing for their validity. Written form shall include fax and text telecommunication, in particular through e-mail, provided that such declarations are confirmed by the receiving contracting party in the same text form.

**5.** Indications made by the Seller on the object of the delivery or service (e.g. weight, dimensions, utility values, load capacity, tolerance, technical or other service data) as well as corresponding representations of the Seller with respect to these indications (e.g. sketches, illustrations) shall be approximations only unless expressly described in writing by the Seller as binding and/or where the actual purpose of contract require exact agreement with the specific indications. They are not warranted characteristics, but descriptions or features of the delivery or service. Customary deviations and deviations resulting from legal provisions or technical improvements, as well as the replacement of certain components by others of equal quality, shall be permissible insofar as they do not impair the intended contract purpose.

**6.** The Seller shall retain title and/or copyright in all offers and quotes it makes as well as in all sketches, illustrations, invoices, prospectuses, catalogues, models, tools and other documentation and auxiliary materials. The Buyer shall not make these or their contents available to third parties or make them known to third parties without express approval from the Seller, nor shall it use or reproduce them, either personally or with the help of a third party. At the request of the Seller, the Buyer shall return these objects and shall destroy any copies made where these are no longer required in the ordinary course of business or where negotiations have not resulted in the conclusion of contract. The same shall apply for documents provided by the Buyer to the Seller for implementation of contract. The Seller shall be entitled to make these documents available to third parties charged with making deliveries.

**7.** Should the Buyer rescind the contract before delivery of the ordered article, the Seller shall be entitled to invoice the Buyer for all costs incurred up to the point of rescission. These costs shall include, inter alia, project planning costs, processing costs for the compilation and supervision of order, manufacture planning costs, costs for goods fabricated etc..

Irrespective of this, the Seller shall also be entitled to demand specific performance.

**III. Prices, Right to Amend Prices, Conditions of Payment and Consequences of Default, Set Off and Right of Retention**

**1.** The prices shall apply with respect to the service and/or delivery set out in the confirmation of order issued by the Seller. Additional or special services like trainings, issuing certificates etc. shall be invoiced separately.

**2.** In the absence of any express agreement for a particular currency, prices shall be understood in EUR ex works plus shipping and handling cost ( freight incl. packaging) statutory value added tax and, in the case of export deliveries, all customs duties and fees as well as other public dues.

**3.** Insofar as agreed prices are based on the Seller's list prices and the delivery is to follow at least 3 months after conclusion of contract, the list price effective at the point of delivery shall apply (minus any agreed percentage or fixed discount).

**4.** Should, in the period between conclusion of contract and performance, a statutory change in sales tax enter into force, the Seller shall be entitled to invoice at the changed rate of sales tax, also with respect to permissible part deliveries.

**5.** With respect to all orders -- also orders on demand and successive delivery contracts -- for which, in accordance with contract or at the request of the orderer, delivery is made later than 3 months after placement of order, the Seller shall be entitled to pass on increases in material and wage costs occurring in this period to the Buyer. These increases shall be passed on to the extent that they are incurred.

**6.** The Seller shall not be bound to maintain the above prices in case of independent follow-on orders. Any price reductions introduced shall not apply with retrospective effect, but shall apply only prospectively as of the date of announcement of the respective reduction.

**7.** Invoice sums shall be payable within 10 days at a 2% discount or within 30 days without discount as of the date of invoice, at the very latest 30 days after maturity and receipt of service without deduction for postage and expenses. Decisive for date of payment shall be receipt by the Seller. Cheques shall be deemed payment upon redemption. Should the Buyer fail to make payment by the invoice maturity date, outstanding sums shall incur interest at a rate of 5% p.a. calculated as per maturity date. The right to assert a higher rate of interest and further damages in case of default, in accordance with statutory provisions, shall remain unaffected.

**8.** Fees and surcharges of any kind, as well as invoiced amounts for additional or special services ( see III.1) are not qualifying for discount.

**9.** Set-off against claims of the Buyer or a right of retention with respect to payments on account of these claims shall only be permissible where these claims are undisputed or whose existence has been affirmed in a declaratory judgement.

**10.** The Seller shall be entitled to make deliveries/render services only against prior payment or security where, after conclusion of contract, circumstances become known which are capable of considerably reducing the creditworthiness of the Principal/Buyer and which are likely to jeopardise the payment of sums payable to the Seller by the Principal under the respective contract relationship (including other individual contracts for which the same framework agreement applies).

**11.** Small orders, under a net invoice value of € 100.00, shall be subject to an administration free of € 25.00 per small order. Replacement orders shall be excluded from this rule.

**12.** The Seller shall be entitled to assign its existing claims against the Buyer for the deliveries made or services rendered to third parties for the purpose of finance.

**IV. Delivery and Delivery Time**

**1.** In the absence of any express agreement to the contrary, all deliveries shall be made ex works (D-57399 Kirchhundem [M6]).

**2.** Deadlines and dates for delivery and services stipulated by the Seller shall be approximate only unless a fixed deadline or date has been expressly promised or agreed. Where dispatch has been agreed, delivery deadlines and dates shall refer to the date of transfer to the logistics provider, freight carrier or other third party charged with transport. In case of subsequent amendment to order, the Seller shall be released from the originally agreed delivery dates.

**3.** Irrespective of rights arising from any default of the Buyer, the Seller shall be entitled to demand an extension of delivery/service deadlines or postponement of delivery/service dates by a period equal in length to the default by the Buyer.

**4.** The Seller shall not be liable in case of frustration of delivery or for delays in delivery where these are caused through force majeure or other events which were not foreseeable at the time of conclusion of contract and for which the Seller is not responsible (e.g. interruption of operations of any kind, difficulties in acquiring materials or energy, transport delays, strikes, lawful lock-outs, lack of labour, energy or raw materials, difficulties in the procurement of necessary official authorisations, official measures or failure or delay in delivery by suppliers). Insofar as such events make it considerably more difficult or even impossible for the Seller to make delivery or render services and where the impairment to performance of contract is not only temporary, the Seller shall be entitled to rescind the contract either in full or in part. A pre-requisite for rescission on these grounds is, however, that the Seller notify the Buyer of the relevant circumstances and that it reimburse any sums paid by the Buyer in relation to any outstanding services of the Seller. In case of temporary impairment to performance, the deadlines or dates for delivery or service shall be extended by a period equal in length to the duration of the impairment plus an appropriate run-up period. Should it be unreasonable to expect the Principal to take delivery or accept the service after such delays, it shall be entitled to rescind the contract by way of immediate issue of written declaration of rescission to the Seller.

**5.** The Seller shall only be entitled to make part deliveries where part deliveries are of value to the Principal within the scope of the contract purpose, the delivery of the remainder is assured and the Principal does not occur considerable additional expense as a result, except in the case that the Seller agree to assume these additional costs. Should the Seller be late with a delivery or service or should it become impossible to make the delivery/render the service, for whatever reason, the Seller's liability for damages shall be restricted in accordance with Point VIII. of these General Terms and Conditions.

**V. Place of Performance, Dispatch, Packaging, Transfer of Risk**

**1.** In the absence of any express agreement to the contrary, place of performance for all obligations arising under this contract relationship shall be the Seller's works in 57399 Kirchhundem/Germany.

**2.** The type of dispatch and packaging shall be chosen at the reasonable discretion of the Seller. Usual packaging shall be the smallest packaging unit indicated in the catalogue. On ordering different amounts, the nearest packaging unit shall be delivered.

**3.** Risk shall pass to the Buyer at the very latest upon the object for delivery being passed to the logistics provider, freight carrier or only third party charged with transport. The beginning of loading shall be decisive in determining when the object is passed. This shall also apply with respect to part deliveries or where the Seller has agreed to provide other services (e.g. dispatch). Where dispatch or transfer is delayed as a result of a circumstance whose cause rests with the Principal, risk shall pass to the Principal on the day the delivery object is made available for delivery and the Seller has notified this to the Buyer.

**4.** Storage costs after transfer of risk shall be borne by the Principal. In case of storage provided by the Seller, storage costs shall be 0.25% of the invoice value of the delivery objects to be stored per each full week. It shall remain open to the contracting parties to assert and prove higher or lower storage costs.

**5.** The consignment shall be insured by the Seller only on the express wish of the Buyer. Insurance shall be provided against theft, breakage, damage through transport, fire or water or other insurable risks. The cost of insurance shall be borne by the Buyer.

**6.** With respect to contracts with repeated successive deliveries, the structure of delivery shall be indicated to the Seller in good time. Where deliveries are not called on time, the Seller shall be entitled, after expiry of a suitable grace period indicated to the Buyer, to structure and make the deliveries itself or to withdraw from the relevant part of the contract subject to the further conditions in Point IV. 4. and to claim damages for loss of profits. The right of the Seller to assert further damages shall remain unaffected.

**7.** Returns not based on material defects or defects in title shall be processed in accordance with the Seller's conditions of return. These can be read at www.mennekes.de under General Terms and Conditions.

**VI. Warranty, Material Defects**

**1.** Irrespective of the duties of inspection and notification (§ 377 HGB (German Commercial Code)) which exist in respect of any bilateral trade, the Principal shall be bound to inspect the delivery for manifest defects and to issue notices with respect to such manifest defects -- this shall also apply for incomplete or incorrect deliveries. Notice of defect shall be issued within 5 working days after receipt of goods. With respect to latent defects, notice of defect shall be issued within 5 days of the defect becoming apparent. Notice of defect shall be made in writing. Failure to issue notice of defect within the stipulated period shall result in the goods being deemed to have been approved and the Principal losing any right of recourse with respect to the defect against the Seller. At the request of the Seller, the queried delivery object shall be returned to the Seller with carriage paid. In case of legitimate notice of defect, the Seller shall reimburse the cost of cheapest return transport; this shall not apply where costs are higher because the delivery object is being used at a location other than that stipulated for use.

**2.** In case of legitimate notice of defect, the Seller, at its own option, shall be bound and entitled, within a reasonable period, to repair the defect or make a replacement delivery (secondary performance). In case secondary performance fails, that is, it is impossible or unreasonable, the Seller refuses to make secondary performance or secondary performance is subject to unreasonable delays, the Buyer shall be entitled to rescind the contract or make an appropriate reduction to the purchase price.

**3.** Where the defect is the fault of the Seller, the Buyer shall be entitled to assert a claim for damages under the conditions set down in VIII.

**4.** In case of defects in components made by other manufacturers which the Seller cannot remove, either for licence or physical reasons, the Seller shall, at its option, either assert its warranty rights against the manufacturer and supplier on the Principal's account, or shall assign these rights to the Principal. Warranty claims against the Seller with respect to such defects shall exist in accordance with these General Terms and Conditions only where legal proceedings against the manufacturer and supplier were unsuccessful or where such legal proceedings have no prospect of success, for instance due to the defendant's insolvency. For the duration of the legal dispute, the limitation period of the respective warranty shall be stayed.

**5.** The warranty shall lapse where the Principal tampers with the delivery object without the Seller's consent, or where a third party tamper with the delivery object at the Principal's behest, and the removal of defect is made impossible or unreasonable to the Seller as a result. The Principal shall bear all additional costs of the removal of defect as may arise as a result of the



Overview Index

tampering.

**6.** Claims for defects shall not arise where the error occurs through the non-adherence to operating, storage, maintenance or installation instructions, unsuitable or improper use, wrong or negligent use by the Principal or naturally occurring wear and tear. The same shall apply where the Seller's products are improperly mounted, negligently handled or subjected to undue strain, or where disruption arises as a result of unsuitable operating means, substitute materials or mechanical, chemical, electro-chemical or electrical effects.

**7.** Any individual agreement with the Principal to supply used objects shall be to the exclusion of all warranty for material defects except in the case that such defects are maliciously suppressed by the Seller.

**8.** Legitimate defects on only part of the delivery shall not justify a complaint with respect to the entire delivery.

**VII. Protected Rights**

**1.** In accordance with Point VII., the Seller shall warrant that the object of delivery shall be free of third party industrial property rights or copyright in the country (state) or the agreed place of delivery. In the absence of any express written agreement to the contrary, the place of delivery shall be Kirchhundem/Germany. Each contracting partner shall notify the other immediately and in writing in case any claims for infringement of such rights are asserted. The rule in sentence 1 shall form no warranty, but shall represent an agreement as to quality pursuant to applicable warranty regulations.

**2.** In the case that the object of delivery infringe third party property rights or copyright, the Seller shall, at its own option, amend or exchange the object, such that it no longer infringe such rights yet still fulfil the contractually agreed functions, or shall furnish the Principal with the appropriate right of use by way of licence. Should the Seller not be able to resolve the problem within a reasonable period of time, the Principal shall be entitled to rescind the contract or reduce the purchase price accordingly. Any damage claims arising to the Principal against the Seller shall be subject to the restrictions of Point VIII of these General Terms and Conditions.

**3.** In case of legal infringements resulting from products delivered by the Seller but manufactured by other manufacturers, the Seller shall, at its own option, assert claims against the manufacturer or supplier on behalf of the Principal or shall assign these claims to the Principal. In these cases, claims against the Seller shall only exist where legal proceedings against the manufacturer or suppliers were unsuccessful or have no prospect of success, for instance because of the manufacturer's/supplier's insolvency.

**4.** Where deliveries are made in accordance with specific sketches or other indications made by the Principal and where these deliveries infringe third party rights, the Principal shall bear the responsibility for correctness and for ensuring that third party rights are not infringed. The Principal shall indemnify the Seller against all claims brought for breach of third party property rights. In the case of damage claims, the indemnity shall only be where the Buyer fail to prove that it is not responsible for the deficiency in its indications or the infringement of third party rights. If, in such a case, the Seller is prohibited from manufacturing or delivering the respective goods by a third party asserting its own property rights, the Seller shall be entitled to discontinue works and rescind the contract. Before doing so, the Seller must, however, issue notice to the Buyer setting a grace period during which the Buyer is required to have the prohibition removed by the third party. The assertion of a corresponding claim for damages by the Seller against the Buyer on the basis of other statutory provisions shall remain unaffected.

**VIII. Other Liability (Limitation and Exclusion)**

**1.** Liability of the Seller for damages, for whatever legal reason, in particular for frustration, delay, defective or wrong delivery, breach of contract, breach of duty of care in contractual negotiations and in tort, where fault is established, shall be limited by the following rules.

**2.** The Seller shall not be liable in case of negligence simpliciter of its corporate bodies, legal representatives, employees or other vicarious agents unless this involves a breach of essential contract duties (main duties under contract / cardinal duties). Essential contract duties are those duties which must be fulfilled in order that the contract be performed at all and which may regularly be relied upon by the contracting party.

**3.** Insofar as the Seller is liable for damages under the above sentence, liability shall be limited to damage which the Seller foresaw on conclusion of contract as a possible consequence of breach of contract or which it would have foreseen on exercise of due caution. Indirect or consequential damage resulting from defects in the object of delivery shall only be compensated where such damage can be typically expected on proper use of the object of delivery.

**4.** In case of liability for negligence simpliciter, the Seller's duty to pay compensation for property damage and pecuniary damage resulting therefrom shall be limited to damage which is usually and typically insurable by the Seller through liability / product liability insurance on reasonable terms, even where the matter relates to a breach of essential contract duties.

**5.** The above exclusions and limitations of liability shall apply to the same extent to the benefit of corporate bodies, legal representatives, employees and other vicarious agents of the Seller.

**6.** Insofar as the Seller provide technical information or acts in an advisory capacity and this information or advice does not form part of the services agreed and owed under contract, this information or advice shall be provided free of charge and the Seller shall not be liable for the information or advice.

**7.** The limitations on liability contained in this Point VIII shall not apply to liability of the Seller for deliberate acts, for warranted characteristics, for injury to life, body or health or to liability under the German Product Liability Act.

**IX. Limitation Periods**

**1.** Claims arising under Point VI shall be subject to a limitation period of one year beginning on delivery to the Buyer.

**2.** This shall not apply to the following claims which shall be subject to statutory limitation periods
- Claims involving deliberate, malicious or grossly negligent breach of duty by the Seller, its legal representatives or vicarious agents;
- Claims for damage resulting from injury to life, body or health due to a negligent breach of the Seller or from a deliberate or negligent breach of its legal representatives or vicarious agents;
- Claims under a warranty for a certain characteristic;
- Insofar as the supplier is so obliged, claims for reimbursement of costs which the Principal has to bear as against a subcontractor in the supply chain on account of a sale of new goods for the purpose of secondary performance (§ 478(2) BGB);
- In case goods delivered by the Seller have been used in accordance with their instructions for use in a construction project and they have caused a defect in that project and Part B of the German Construction Contract Procedures (Verdingungsordnung für Bauleistungen) do not apply to the contract relationship.

**3.** For all these cases, limitation periods shall be in accordance with statutory provisions. The statutory rules on staying of the limitation periods and new begin of deadlines shall remain unaffected. In case of damage claims under the Product Liability Act, statutory limitation periods shall apply, also in case of deliberate or grossly negligent breach.

**4.** Where the Seller is liable under VIII for damage for which liability insurance at reasonable conditions is usually and typically concluded, the limitation period shall also be one year.

**X. Retention of Title**

**1.** The Seller shall retain title to the object of delivery (conditional goods) until all claims against the Principal arising under the business relationship, including any future claims from concurrent or later contracts, are settled. In case of open invoice, the retention of title and all rights shall form security for the entire outstanding sum plus interest and costs.

In case of pledge or other third party acts, the Principal shall notify the Seller immediatelygen,

**2.** The Principal shall be entitled to process and sell on the object of delivery in the course of ordinary business. This authority shall end where the Principal fall into arrears, on suspension of payments or where insolvency proceedings are opened against its assets. It shall be bound to sell on the goods only under retention of title and to ensure that claims from the resale pass to the Seller in accordance with 5. and 6. The use of the conditional goods for the fulfilment of contracts for work and contracts for work and materials shall be deemed a resale for this purpose. Other dispositions with respect to the conditional goods, in particular pledge or transfer by way of security, shall be prohibited.
Assignment of claims from transfer of the conditional goods shall be prohibited unless the assignment is by way of a factoring, duly notified to the Seller, and for which the proceeds exceed the value of the secured claim. Upon crediting of the proceeds of the factoring arrangement, the Seller's claim shall immediately become due.

**3.** Processing of the conditional goods shall not result in the Buyer acquiring ownership of the resulting object pursuant to § 950 BGB. Processing or restructuring of the goods shall not obligate the Seller. The processed or restructured goods shall continue to be conditional goods.

**4.** On processing, incorporation or mixing of conditional goods with other goods, the Seller shall become joint owner of the resulting product. The Seller's share shall stand in proportion to the invoice value of the conditional goods to the invoice value of the other goods used. Where the Seller's ownership rights are extinguished by the incorporation, mixing or processing, the Principal shall assign it appropriate ownership rights or liens on the new product in the ratio of the invoice value of the conditional goods to other goods used. Storage of the product shall be free of charge for the Seller. Joint ownership rights in goods shall be sufficient for these goods to be conditional goods.

**5.** Claims of the Principal arising from the resale of conditional goods shall hereby be assigned to the Seller. They shall serve as security to the same extent as retention of title in the conditional goods.

**6.** Where the conditional goods are resold by the Principal together with other goods, the Seller shall be assigned a claim from the resale in the ratio of the invoice value of the conditional goods to the invoice value of the other goods. In case of resale of goods in which the Seller has joint ownership rights pursuant to 4., a corresponding share of the claims shall be assigned.

**7.** At the request of the Seller, the Principal shall be bound to provide it with an exact listing of its claims with names and address of buyers, to notify the buyers of the assignments and to supply the Seller with all information necessary for assertion of its assigned claims. As soon as it fall into arrears with payment or its financial situation deteriorate, the Principal shall authorise the Seller to notify the buyers of the assignment and to recover on its claims itself. The Seller shall be entitled to demand an assessment of its assigned claims carried out by an appointed party using the Principal's accounts. The Principal shall furnish the Seller with a listing of all goods for which the Seller still holds title (conditional goods).

**8.** Should existing securities exceed the value of secured claims by more than 10%, the Seller shall be bound, at the request of the Principal, to release securities at its option, taking into account the interests of the Principal. In case of retention of title, the value of the securities shall be determined with reference to the invoice value of the goods as bought by the Principal from the Seller. In case of extended retention of title, the invoice value for the resale of the goods shall be decisive.

**9.** Since the Seller retains title to the goods, the Seller can demand return of the goods in case of rescission of contract. The Seller shall be entitled to declare rescission of contract, irrespective of the further conditions set down in § 323 BGB and in particular without the requirement of imposition of a grace period for payment, immediately upon the Principal's default. The same shall apply where the Principal suspend its payment or where insolvency proceedings are opened against its assets. All costs arising as a result of repossession of the object of delivery shall be borne by the Principal. The Seller shall be entitled to dispose of the property it has repossessed as it sees fit.

**XI. Authority to Process Data**

The Seller shall be entitled to process all data in connection with the business relationship with the Buyer within the scope of applicable statutory provisions.

**XII. Concluding Provisions**

**1.** Place of jurisdiction for any and all dispute arising in connection with the business relationship between the Seller and the Principal shall be, at the option of the Seller, Kirchhundem or the place of business of the Buyer. For claims against the Seller, exclusive place of jurisdiction shall be 57399 Kirchhundem. Mandatory statutory provisions on exclusive places of jurisdiction shall remain unaffected by this rule.

**2.** The relationship between the Seller and the Buyer shall be governed by the laws of the Federal Republic of Germany. The UN Convention on Contracts for the International Sale of Goods from 11.04.1980 (CISG) shall be excluded.

**3.** Insofar as the contract or these General Terms and Conditions contain lacunae, the parties shall agree the legally effective provision which they would have agreed in light of the economic purpose of contract and the purpose of these General Terms and Conditions had they recognised the lacunae at the time of conclusion of contract or these General Terms and Conditions.

# Receptacles



## Wall mounted receptacles 16A - 125A, IP 44 and IP 67

### Screw terminals



**Standard**
16A - 125A,
IP 44 and IP 67

Pages 66 - 69



**Cepex Design**
16A - 32A,
IP 44

Pages 70 - 71

**Product information**
Page 62 - 63



**Highly heat resistant contact carrier, nickel plated contacts**
16A - 125A,
IP 44 and IP 67

Pages 72 - 73

**Product information**
Page 61



**Highly resistant to chemicals, made of AMELAN®**
16A - 63A, IP 67

Pages 74 - 75

**Product information**
Page 61

### Screwless connection technology TwinCONTACT with spring terminals



**Standard**
16A - 32A,
IP 44 and IP 67

Pages 76 - 77

**Product information**
Page 60



**Double Boxes**
CEE and SCHUKO®,
16A - 32A,
IP 44

Pages 78 - 79

### Fused, switched and interlocked



**Fused**
16A - 125A,
IP 44 and IP 67

Pages 80 - 85



**Switched and interlocked**
16A - 125A,
IP 44, IP 55 and IP 67

Pages 86 - 89

**Product information**
Page 64



**Fused, switched and interlocked**
16A - 125A,
IP 44 and IP 67

Pages 90 - 93

**Product information**
Page 64



**Fused, ectrically interlocked**
63A - 125A,
IP 67

Pages 94 - 97

**Product information**
Page 65



**Switched and interlocked, highly resistant to chemicals, made of AMELAN®**
16A - 63A, IP 67

Pages 98 - 99

**Product information**
Page 61

# Panel mounted receptacles 16A - 125A, IP 44 and IP 67

## Screw terminals



**Standard**
16A - 125A,
IP 44 and IP 67

Pages 100 - 105



**Cepex Design**
16A - 32A,
IP 44

Pages 106 - 113

**Product information**
Page 62 - 63

## Screwless connection technology TwinCONTACT with spring terminals



**Standard**
16A - 32A,
IP 44 and IP 67

Pages 114 - 117

**Product information**
Page 60

## For cable ducts and flush mounted installation boxes



**Standard**
16A - 32A,
IP 44 and IP 67

Pages 118 - 119



**Cepex Design**
16A - 32A,
IP 44

Pages 118 - 119

**Product information**
Page 62 - 63

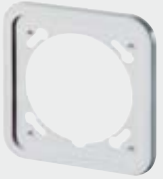
# Accessories

## For wall- and panel mounted receptacles



- **Auxiliary contacts**
- **Terminal strips**
- **Flanges for panel mounted receptacles and flush mounted installation boxes**

Page 120



- **Masking frames and protection plates for Cepex flush and panel mounted receptacles**
- **Spacer frames for Cepex surface mounted receptacles**

Page 121

## The swift connection. MENNEKES TwinCONTACT.

Looking for quick and easy connection? You can´t miss the MENNEKES TwinCONTACT – a spring terminal in a newly designed receptacle. Remove the insulation, insert the conductors, and you're done. The contact is safely in place and it is even approved as a connection terminal – undo the conductor, that's all it takes. Press the red button and remove the conductor – this is our concept of convenient and time-saving handling.

Video:
mounting instructions

Colour-coded terminals for unmistakable connections.



Suitable for solid conductors and flexible conductors (with end sleeve for strands, crimped so as to be gas-tight or ultrasonically welded).
Cond. cross section:
at 16A: 1.5 - 4.0 mm²,
at 32A: 2.5 - 10.0 mm².







**Through wiring.**
Safe and easy. With the new MENNEKES TwinCONTACT, the connection of CEE and/or SCHUKO® receptacles is easily established.

Video:
advantages

**Save time.**
Panel mounted receptacles with TwinCONTACT technology. For installation in ducts, distributors, control cubicles, ...





Overview Index

## Use in corrosive environments and under harsh conditions.

**Highly heat resistant contact carrier. Nickel plated contacts. 16A up to 125A.**
These appliances are guaranteed to be resistant to corrosive environments: High humidity, salt or acidic air, corrosive gases and vapours. Accordingly, they are mainly used in the food processing industry, in breweries, dairies, farms and market gardens, wineries.

**Receptacles with auxiliary switch.**
For additional functions such as control, monitoring, signalling, electrical interlocking etc., an optional auxiliary switch may be installed.

**Safety first.**
There's nothing tighter than that. Twisting-proof flange with integral positioned seal.







## Plugs and sockets of AMELAN® with high resistance to chemicals.

AMELAN® is the plastic used by MENNEKES for plugs and receptacles destined for use in environments where they are exposed to certain chemicals or other corrosive substances. AMELAN® has excellent resistance to fuels, oils and fats, dilute acids and alkalines, cleaning fluids, most aqueous salt solutions and a wide variety of chemicals including aliphatic hydrocarbons. AMELAN® is a plastic that combines high mechanical, thermal and electrical properties with excellent dimensional stability and resistance to chemicals. They are fit for action in chemical plants, in refineries, in the food processing industry, in washdown areas and so on.








**AMELAN® is resistant to:**

- sea water
- detergents
- trichlorethylene
- toluene
- edible fat
- aqueous soap solution
- caustic soda
- motor oils
- milk
- caustic potash
- washing up liquid
- fruit juices
- diesel oil
- gasoline
- aqueous ammonia solution

## Cepex receptacles. Perfect in every detail. One fits another.



Cepex receptacles may be used universally. **16A, 3 pole, 230V · 16A, 5 pole, 400V · 32A, 5 pole, 400V.** All complete with flush mounted installation box.





**A universal concept. Part no. 41404.**
**The modular Cepex system for flush mounted receptacles.**
Further versions you can create using Cepex panel mounted receptacles, shown above, in combination with the installation box 41404.

Example: Cepex panel mounted receptacle 16A, 5 pole, 400V
with labelling field **Part no. 4145**
\+ Flush mounted installation box **Part no. 41404**
**= Flush mounted receptacle**

**Receptacles SCHUKO® in the Cepex Design.**
See chapter grounding-type plugs and sockets.



**Anything goes.**
Covers, current rating and colours may be optionally combined: neutral cover, with labelling field, with labelling field and lock, 3 pole, 5 pole and SCHUKO®.



**Resistant to ball rebound.**
All Cepex receptacles with neutral covers meet DIN 18032 standards for ball rebound and are suitable for use in sports facilities and comparable environments.



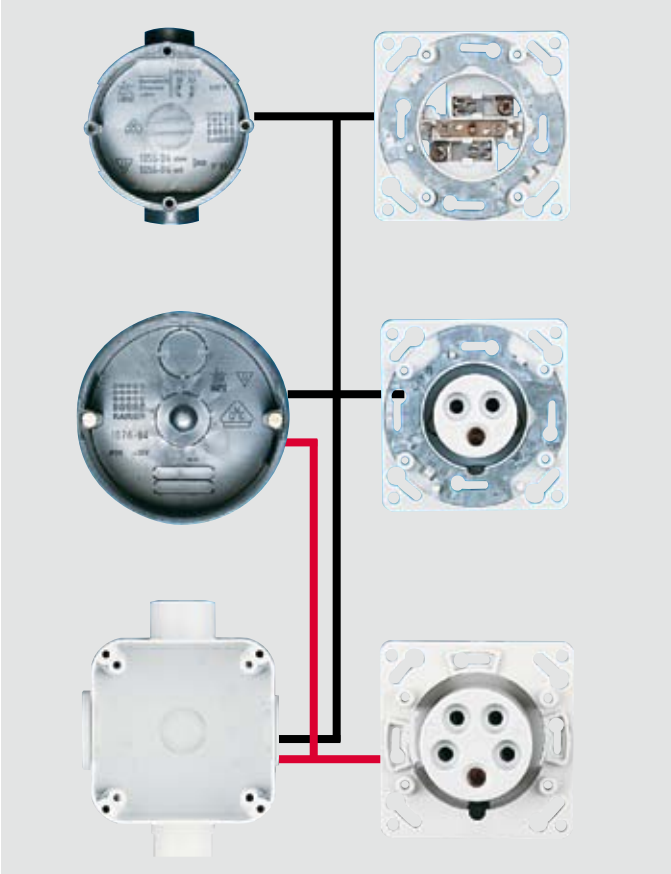
An ideal combination: Cepex receptacles 16A, 3 to 5 pole, can be installed in cavity wall or concrete installation boxes (made by Kaiser) with a fixing dimension of 67 mm.



In silver, alpine white, pearl white and grey, the Cepex range matches common colours of various ducts and installation devices.



Overview Index



**Fitting the new on the old is no problem.**
Cepex is flexible. Existing installations can be easily retrofitted. For example to replace Perilex in 70 mm flush mounted installation boxes. CEE receptacles, 3 pole, 230V can be used instead of receptacles SCHUKO® in 60 mm flush mounted installation boxes.



**Cepex wall mounted receptacles.**
Generous wiring space for supply cable up to 6 mm². Back box can be rotated by 180°, thus cable insertion is possible from bottom without additional work. Protection type IP 44 (solid body larger and splash waterproof) for versatile conception.



A frequently chosen receptacle combination: 16A CEE and 16A SCHUKO®. When used with only one supply cable, a 3 pole MCB is essential.



**Cepex data port receptacles and fibre optics technology in Cepex receptacles.**
See chapter special plugs and sockets.

## Receptacles – fused, switched and interlocked, electrically interlocked.

### DUO mechanical.






After insertion and switching on, the plug is locked in the ON position. After switching off and withdrawing the plug, the switch is locked.




The proven DUO interlocked receptacles are available in horizontal version too with external fixing and designed for the use with AMAXX® combinations as well.

All DUO receptacles up to 63A can be padlocked in the OFF position. DUO receptacles of 125A can be supplied with a padlock fitting as an extra. Also available with a triple padlock fitting.



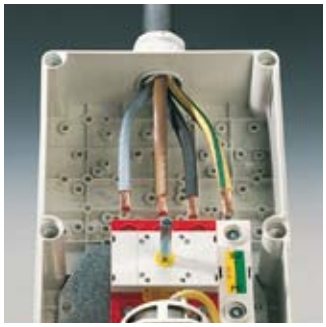

Latching nose aligns the bayonet ring on opening and ensures largely automatic closing.



Safe enclosures with foamed seal: free of silicone, CFCs and halogens.



All terminal screws on the switch face front. Switched receptacles with mechanical DUO interlock, on request available with auxiliary contacts. Please contact us for more information.

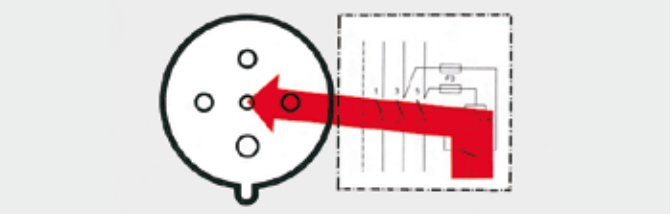




Overview Index

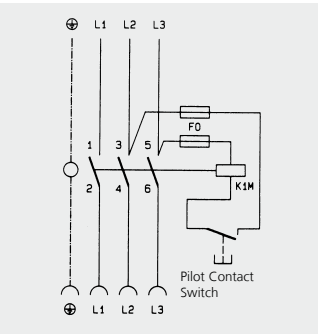
## Electric and PCS electric.
(**P**ilot **C**ontact **S**witch)



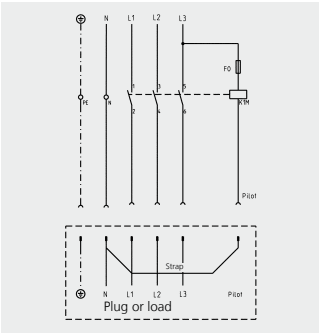



No residual voltage, even on the pilot contact. The controls for the contactor are inside the receptacle.

**PCS electric.**
Circuit diagram for electrical PCS interlock.

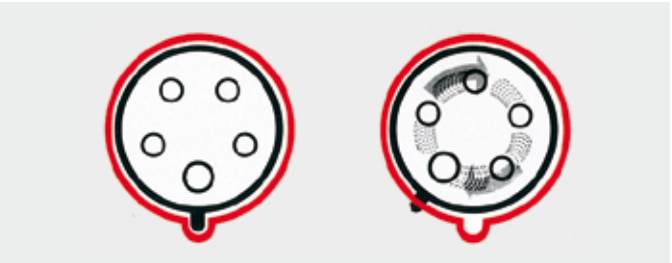



**Electric.**
Circuit diagram for electrical interlock.




## DODSCH mechanical.
(Plug in and twist switch)



Without switch handle. One grip is enough: Insert the plug and turn clockwise (= switch ON). Turn counter-clockwise (= switch OFF) and withdraw the plug.





**Receptacles with mechanical DODSCH interlock**
are available with IP 44 protection in 16A and 32A and with IP 55 protection in 16A, 32A and 63A.

# Receptacles ■ Wall mounted receptacles, screw terminals, 16A - 125A,

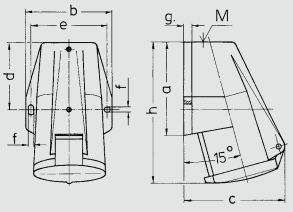
to DIN VDE 0623, EN 60309-2. Colour: electric grey and/or colour code. Enclosure and insert made of AMAPLAST.

| Image | Title | Description |
|---|---|---|
|  | **Wall mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1037.<br>Image 1. | ■ screw terminals<br>■ external fixing<br>■ cable entry at top |
|  | **Wall mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1041.<br>Image 1419. | ■ screw terminals<br>■ internal fixing<br>■ one cable entry at top and two blind cable entries (can be cut out) at bottom<br>■ enclosure base can be turned 180°<br>■ receptacles are designed for adding an auxiliary contact switch |
|  | **Wall mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 5<br><br>Product group 1041.<br>Image 1145A. | ■ screw terminals<br>■ SoftCONTACT<br>■ suitable for through wiring<br>■ internal fixing<br>■ one cable entry at top and two blind cable entries (can be cut out) at bottom<br>■ enclosure base can be turned 180°<br>■ with 6 fixing points to accommodate special terminals<br>■ products with pilot contact: part no. + index P |
|  | **Wall mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10<br><br>Product group 1049.<br>Image 9301. | ■ screw terminals<br>■ two external fixing holes<br>■ one cable entry at top and two blind cable entries (can be cut out) at bottom<br>■ receptacles are designed for adding an auxiliary contact switch<br>■ enclosure base can be turned 180° |
|  | **Wall mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 5<br><br>Product group 1049.<br>Image 136A. | ■ screw terminals<br>■ SoftCONTACT<br>■ internal fixing<br>■ one cable entry at top and two blind cable entries (can be cut out) at bottom<br>■ enclosure base can be turned 180°<br>■ with 6 fixing points to accommodate special terminals<br>■ products with pilot contact: part no. + index P |

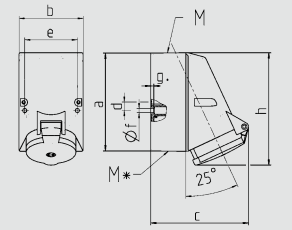
# IP 44 and IP 67

Other voltages and frequencies available on request.

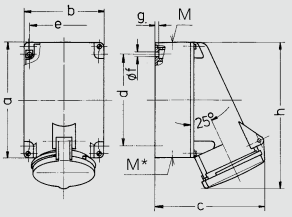
| Ampere | Poles | 110V 50 a. 60 Hz 3p 4h | 110V 50 a. 60 Hz 4p 4h | 110V 50 a. 60 Hz 5p 4h | 230V 50 a. 60 Hz 3p 6h | 230V 50 a. 60 Hz 4p 9h | 230V 50 a. 60 Hz 5p 9h | 400V 50 a. 60 Hz 3p 9h | 400V 50 a. 60 Hz 4p 6h | 400V 50 a. 60 Hz 5p 6h | 500V 50 a. 60 Hz 3p 7h | 500V 50 a. 60 Hz 4p 7h | 500V 50 a. 60 Hz 5p 7h | >50 - 500V 100-300 Hz 3p 10h | >50 - 500V 100-300 Hz 4p 10h | >50 - 500V 100-300 Hz 5p 10h | >50 - 500V 300-500 Hz 3p 2h | >50 - 500V 300-500 Hz 4p 2h | >50 - 500V 300-500 Hz 5p 2h | Drawing |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Part number | | | | | | | | | | | | | | | | | | |
| 16 | 3 | 1177 | | | 1178 | | | | | | | | | | | | | | | |
| 16 | 4 | | | | 1267 | | | 1268 | | | 1269 | | | | | | | | | |
| 16 | 5 | | | | | | | 1 | | | | | | | | | | | | |
| 32 | 3 | 1368 | | | 1369 | | | | | | | | | | | | | | | |
| 32 | 4 | | | | 1372 | | | 1373 | | | 1374 | | | | | | | | | |
| 32 | 5 | | | | | | | 2 | | | | | | | | | | | | |
| 16 | 4 | 3030 | | | 3034 | | | 1418 | | | 3032 | | | 3035 | | | 3028 | | | |
| 16 | 5 | 3041 | | | 3045 | | | 1419 | | | 3043 | | | 3046 | | | 3039 | | | |
| 32 | 3 | 1420 | | | 1421 | | | 1422 | | | | | | 3139 | | | 3134 | | | |
| 32 | 4 | 1423 | | | 1424 | | | 1425 | | | 1426 | | | 1427 | | | 1428 | | | |
| 32 | 5 | 1555 | | | 1556 | | | 1557 | | | 3152 | | | 3154 | | | 3149 | | | |
| 63 | 3 | 1136A | | | 1137A | | | 1138A | | | | | | | | | | | | |
| 63 | 4 | | | | 1140A | | | 1141A | | | 1142A | | | | | | | | | |
| 63 | 5 | | | | 1144A | | | 1145A | | | | | | | | | | | | |
| 16 | 3 | 9300 | | | 9301 | | | 9302 | | | | | | | | | | | | |
| 16 | 4 | 9320 | | | 9321 | | | 9322 | | | 9323 | | | 9324 | | | 9325 | | | |
| 16 | 5 | 9340 | | | 9341 | | | 9342 | | | | | | | | | | | | |
| 32 | 3 | 9350 | | | 9351 | | | 9352 | | | | | | | | | | | | |
| 32 | 4 | 9370 | | | 9371 | | | 9372 | | | 9373 | | | 9374 | | | 9375 | | | |
| 32 | 5 | 9380 | | | 9381 | | | 9382 | | | | | | | | | | | | |
| 63 | 3 | 856 | | | 128A | | | 129A | | | | | | | | | | | | |
| 63 | 4 | 130A | | | 131A | | | 132A | | | 133A | | | | | | | | | |
| 63 | 5 | 134A | | | 135A | | | 136A | | | 2007A | | | | | | | | | |



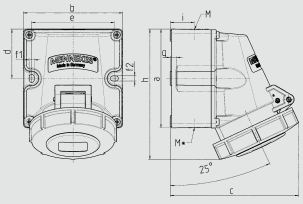

| Drawing 1 MB 205 | Amp. Poles | 16 3 | 16 4 | 16 5 | 32 3 | 32 4 | 32 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 91 | 91 | 91 | 102 | 102 | 102 |
| | b | 73 | 79 | 87 | 89 | 89 | 94 |
| | c | 86 | 93 | 99 | 108 | 108 | 114 |
| | d | 55 | 55 | 56,4 | 62 | 62 | 62 |
| | e | 62 | 68 | 76 | 77,5 | 77,5 | 84 |
| | f | 5,3 | 5,3 | 5,3 | 5,3 | 5,3 | 5,3 |
| | g. | 8 | 8 | 9 | 10 | 10 | 10 |
| | h | 132 | 132 | 132 | 153 | 153 | 153 |
| | M | 20 | 25 | 25 | 25 | 25 | 32 |
| Max. cable diam. (mm) | | 13 | 18 | 18 | 18 | 18 | 25 |
| Terminal for cond. cross section (mm²) min.-max. | | —4 | —4 | —4 | —10 | —10 | —10 |



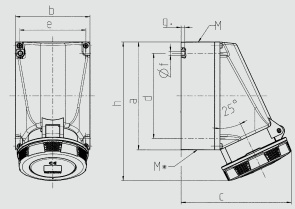

| Drawing 1 MB 43 | Amp. Poles | 16 4 | 16 5 | 32 3 | 32 4 | 32 5 |
|---|---|---|---|---|---|---|
| Dim. in mm | a | 128 | 128 | 128 | 128 | 128 |
| | b | 84 | 84 | 84 | 84 | 84 |
| | c | 122 | 124 | 136 | 136 | 138 |
| | d | 11 | 11 | 11 | 11 | 11 |
| | e | 68 | 68 | 68 | 68 | 68 |
| | f | 5,3 | 5,3 | 5,3 | 5,3 | 5,3 |
| | g. | 4 | 4 | 4 | 4 | 4 |
| | h | 144 | 145 | 158 | 158 | 160 |
| | M | 25 | 25 | 32 | 32 | 32 |
| | M* | 2x25 (blind) to be cut out | | 2x25 (blind) to be cut out | | |
| Max. cable diam. (mm) | | 18 | 18 | 18/25 | 18/25 | 18/25 |
| Terminal for cond. cross section (mm²) min.-max. | | —4 | —4 | —10 | —10 | —10 |




| Drawing 1 MB 213 | Amp. Poles | 63 3 | 63 4 | 63 5 |
|---|---|---|---|---|
| Dim. in mm | a | 170 | 170 | 170 |
| | b | 118 | 118 | 118 |
| | c | 164 | 164 | 164 |
| | d | 134,5 | 134,5 | 134,5 |
| | e | 103 | 103 | 103 |
| | f | 6,1 | 6,1 | 6,1 |
| | g. | 6 | 6 | 6 |
| | h | 216 | 216 | 216 |
| | M | 40 | 40 | 40 |
| | M* | 2xM40 (blind) to be cut out | | |
| Max. cable diam. (mm) | | 32 | 32 | 32 |
| Terminal for cond. cross section (mm²) min.-max. | | —25 | —25 | —25 |




| Drawing 1 MB 622 | Amp. Poles | 16 3 | 16 4 | 16 5 | 32 3 | 32 4 | 32 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 100 | 100 | 100 | 100 | 100 | 100 |
| | b | 101 | 101 | 101 | 109 | 109 | 109 |
| | c | 117 | 125 | 131 | 157 | 157 | 160 |
| | d | 50 | 50 | 50 | 50 | 50 | 50 |
| | e | 84 | 84 | 84 | 92 | 92 | 92 |
| | f1 | 5,3 | 5,3 | 5,3 | 5,3 | 5,3 | 5,3 |
| | f2 | 5,3 | 5,3 | 5,3 | 5,3 | 5,3 | 5,3 |
| | g | 6,5 | 6,5 | 6,5 | 6,5 | 6,5 | 6,5 |
| | h | 131 | 131 | 132 | 148 | 148 | 148 |
| | i | 24,7 | 24,7 | 24,7 | 27,5 | 27,5 | 27,5 |
| | M | 25 (optional M20) | | | 32 (optional M25) | | |
| | M* | 2x25 (blind) to be cut out | | | 2x25 (blind) to be cut out | | |
| Max. cable diam. (mm) | | 18 (M25) and 15 (M20) | | | 25 (M32) and 18 (M25) | | |
| Terminal for cond. cross section (mm²) min.-max. | | —4 | —4 | —4 | —6 | —6 | —6 |



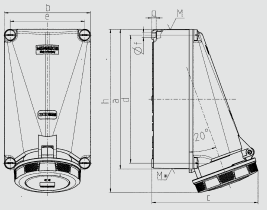
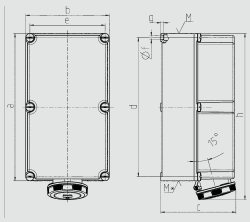
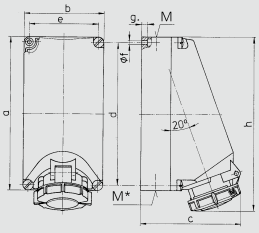
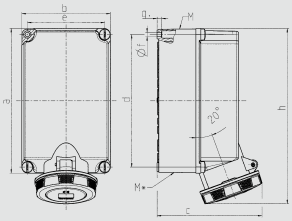

| Drawing 1 MB 112 | Amp. Poles | 63 3 | 63 4 | 63 5 |
|---|---|---|---|---|
| Dim. in mm | a | 170 | 170 | 170 |
| | b | 118 | 118 | 118 |
| | c | 175 | 175 | 175 |
| | d | 134,5 | 134,5 | 134,5 |
| | e | 103 | 103 | 103 |
| | f | 6,1 | 6,1 | 6,1 |
| | g. | 6 | 6 | 6 |
| | h | 219 | 219 | 219 |
| | M | 40 | 40 | 40 |
| | M* | 2x40 (blind) to be cut out | | |
| Max. cable diam. (mm) | | 27 | 27 | 27 |
| Terminal for cond. cross section (mm²) min.-max. | | —25 | —25 | —25 |

# Receptacles ■ Wall mounted receptacles, screw terminals, 16A - 125A,

to DIN VDE 0623, EN 60309-2. Colour: electric grey and/or colour code. Enclosure and insert made of AMAPLAST.

| Image | Title | Description |
|---|---|---|
|  | **Wall mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 3<br><br>Product group 1050.<br>Image 143. | ■ screw terminals<br>■ products with pilot contact: part no. + index P |
|  | **Wall mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 1<br><br>Product group 1051.<br>Image 2162A. | ■ screw terminals<br>■ TorsionSpringCONTACT<br>■ with large space for accommodating wiring<br>■ products with pilot contact: part no. + index P |
|  | **Wall mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 4<br><br>Product group 1052.<br>Image 5516. | ■ screw terminals<br>■ for through wiring<br>■ with fixing points for terminal strip part no. 40113 |
|  | **Wall mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 3<br><br>Product group 1052.<br>Image 5519A. | ■ screw terminals<br>■ SoftCONTACT<br>■ for through wiring<br>■ with fixing points for terminal strip part no. 40114 or 40115<br>■ products with pilot contact: part no. + index P |

Other voltages and frequencies available on request.

| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | >50 - 500V 100-300 Hz | >50 - 500V 300-500 Hz | Drawing |
|---|---|---|---|---|---|---|---|---|
| | | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | |
| | | 4h 4h 4h | 6h 9h 9h | 9h 6h 6h | 7h 7h 7h | 10h 10h 10h | 2h 2h 2h | |
| | | Part number | | | | | | |
| 125 | 4 | 137 | 138 | 139 | 140 | | |  |
| 125 | 5 | 141 | 142 | 143 | 2139 | | | |
| 125 | 5 | | | 2162A | | | |  |
| 16 | 3 | | 5757 | | | | |  |
| 16 | 4 | | 5755 | 5511 | 5512 | | | |
| 16 | 5 | | | 5515 | | | | |
| 32 | 4 | | 5756 | 5513 | 5514 | | | |
| 32 | 5 | | | 5516 | | | | |
| 63 | 4 | | | 5517A | 5518A | | |  |
| 63 | 5 | | | 5519A | | | | |

| Drawing 1 MB 162 | Amp. / Poles | 125 4 | 125 5 |
|---|---|---|---|
| Dim. in mm | a | 264 | 264 |
| | b | 163 | 163 |
| | c | 200 | 200 |
| | d | 240 | 240 |
| | e | 140 | 140 |
| | f | 8,1 | 8,1 |
| | g. | 8 | 8 |
| | h | 306 | 306 |
| | M | 50 | 50 |
| | M* | 2x50 | 2x50 |
| Max. cable diam. (mm) | | 38 | 38 |
| Terminal for cond. cross section (mm²) min.-max. | | 25 —35 | 25 —35 |

| Drawing 1 MB 163 | Amp. / Poles | 125 4 | 125 5 |
|---|---|---|---|
| Dim. in mm | a | 460 | 460 |
| | b | 260 | 260 |
| | c | 234 | 234 |
| | d | 434 | 434 |
| | e | 234 | 234 |
| | f | 11 | 11 |
| | g. | 9 | 9 |
| | h | 519 | 519 |
| | M | 63 | 63 |
| | M* | 2x63 | 2x63 |
| Max. cable diam. (mm) | | 44 | 44 |
| Terminal for cond. cross section (mm²) min.-max. | | 25 —70 | 25 —70 |

| Drawing 1 MB 206 | Amp. / Poles | 16 3 | 16 4 | 16 5 | 32 3 | 32 4 | 32 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 225 | 225 | 225 | 225 | 225 | 225 |
| | b | 118 | 118 | 118 | 118 | 118 | 118 |
| | c | 144 | 150 | 152 | 155 | 155 | 159 |
| | d | 208 | 208 | 208 | 208 | 208 | 208 |
| | e | 101 | 101 | 101 | 101 | 101 | 101 |
| | f | 6,3 | 6,3 | 6,3 | 6,3 | 6,3 | 6,3 |
| | g. | 8 | 8 | 8 | 8 | 8 | 8 |
| | h | 249 | 251 | 253 | 255 | 253 | 259 |
| | M | 1x25 and 1x32 | | | 1x25 and 1x32 | | |
| | M* | 2x25 | 2x25 | 2x25 | 2x25 | 2x25 | 2x25 |
| Max. cable diam. (mm) | | 25 | 25 | 25 | 25 | 25 | 25 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —10 | 2,5 —10 | 2,5 —10 |

| Drawing 1 MB 178 | Amp. / Poles | 63 4 | 63 5 |
|---|---|---|---|
| Dim. in mm | a | 264 | 264 |
| | b | 163 | 163 |
| | c | 191 | 191 |
| | d | 240 | 240 |
| | e | 140 | 140 |
| | f | 8,1 | 8,1 |
| | g. | 8 | 8 |
| | h | 319 | 319 |
| | M | 2x40 | 2x40 |
| | M* | 2x40 | 2x40 |
| Max. cable diam. (mm) | | 27 | 27 |
| Terminal for cond. cross section (mm²) min.-max. | | 6 —25 | 6 —25 |

# Receptacles ■ Cepex wall mounted receptacles, screw terminals,

to DIN VDE 0623, EN 60309-2. Colour: grey (RAL 7035). Enclosure and insert made of AMAPLAST.

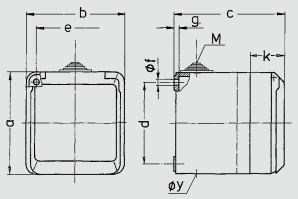
| Image | Title | Description |
|---|---|---|
|  | **Cepex wall mounted receptacle, grey**<br><br>**IP 44**<br><br>Std. Pack. Qty: 5<br><br>Product group 1025.<br>Image 4105. | ■ screw terminals<br>■ cable entry: 1 x M 25 with cable gland at top, 1 x M 25 to be cut out at the bottom, 1 x M 20 to be cut out at the back side, for cables 7 up to 13 mm Ø<br>■ ⚽ meeting DIN 18032 standards for ball rebound |
|  | **Cepex wall mounted receptacle, grey**<br><br>**IP 44**<br><br>Std. Pack. Qty: 5<br><br>Product group 1025.<br>Image 4135. | ■ screw terminals<br>■ with labelling field<br>■ cable entry: 1 x M 25 with cable gland at top, 1 x M 25 to be cut out at the bottom, 1 x M 20 to be cut out at the back side, for cables 7 up to 13 mm Ø |
|  | **Cepex wall mounted receptacle, grey**<br><br>**IP 44**<br><br>Std. Pack. Qty: 5<br><br>Product group 1025.<br>Image 4165. | ■ screw terminals<br>■ with labelling field<br>■ with safety lock, two keys<br>■ cannot be dismantled when locked<br>■ on request with identical locks<br>■ cable entry: 1 x M 25 with cable gland at top, 1 x M 25 to be cut out at the bottom, 1 x M 20 to be cut out at the back side, for cables 7 up to 13 mm Ø<br>■ with identical lock: part no. + index G |
|  | **Cepex double receptacle, grey**<br><br>**IP 44**<br><br>Std. Pack. Qty: 5<br><br>Product group 1027.<br>Image 4202. | ■ screw terminals<br>■ cable entry: 1 x M 20 plugged at top, 2 x M 25 to be cut out at the bottom, 2 x M 20 to be cut out at the back side, for cables 7 up to 13 mm Ø |

# 16A - 32A, IP 44

Other voltages and frequencies available on request.

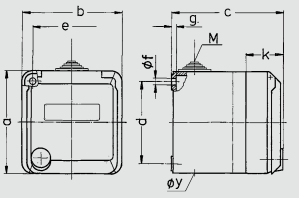
| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | >50 - 500V 100-300 Hz | >50 - 500V 300-500 Hz |
|---|---|---|---|---|---|---|---|
| | | 3p 4p 5p<br>4h 4h 4h | 3p 4p 5p<br>6h 9h 9h | 3p 4p 5p<br>9h 6h 6h | 3p 4p 5p<br>7h 7h 7h | 3p 4p 5p<br>10h 10h 10h | 3p 4p 5p<br>2h 2h 2h |
| | | Part number | | | | | |
| 16 | 3 | 4101 | 4102 | | | | |
| 16 | 4 | | 4254 | 4103 | 4104 | | |
| 16 | 5 | | | 4105 | | | |
| 32 | 3 | 4106 | 4107 | | | | |
| 32 | 4 | | | 4108 | | | |
| 32 | 5 | | | 4110 | | | |

Drawing



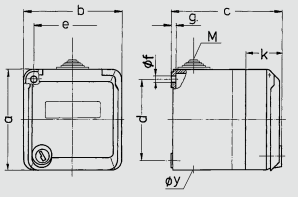

| Drawing 1 MB 312 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 93 | 93 | 93 | 93 | 93 | 93 |
| | b | 90 | 90 | 90 | 90 | 90 | 90 |
| | c | 87 | 87 | 87 | 99 | 99 | 99 |
| | d | 75 | 75 | 75 | 75 | 75 | 75 |
| | e | 73 | 73 | 73 | 73 | 73 | 73 |
| | f | 5,5 | 5,5 | 5,5 | 5,5 | 5,5 | 5,5 |
| | g. | 4,2 | 4,2 | 4,2 | 4,2 | 4,2 | 4,2 |
| | k | 33 | 33 | 33 | 33 | 33 | 33 |
| | y | 25,5 | 25,5 | 25,5 | 25,5 | 25,5 | 25,5 |
| | M | 25x1,5 | 25x1,5 | 25x1,5 | 25x1,5 | 25x1,5 | 25x1,5 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —6 | 2,5 —6 | 2,5 —6 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 16 | 3 | | 4132 | | | | |
| 16 | 4 | | | 4133 | | | |
| 16 | 5 | | | 4135 | | | |
| 32 | 3 | | 4137 | | | | |
| 32 | 4 | | | 4138 | | | |
| 32 | 5 | | | 4140 | | | |



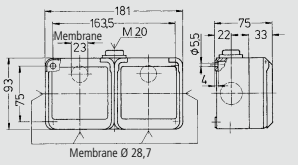

| Drawing 1 MB 317 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 93 | 93 | 93 | 93 | 93 | 93 |
| | b | 90 | 90 | 90 | 90 | 90 | 90 |
| | c | 88 | 88 | 88 | 100 | 100 | 100 |
| | d | 75 | 75 | 75 | 75 | 75 | 75 |
| | e | 73 | 73 | 73 | 73 | 73 | 73 |
| | f | 5,5 | 5,5 | 5,5 | 5,5 | 5,5 | 5,5 |
| | g. | 4,2 | 4,2 | 4,2 | 4,2 | 4,2 | 4,2 |
| | k | 34 | 34 | 34 | 34 | 34 | 34 |
| | y | 25,5 | 25,5 | 25,5 | 25,5 | 25,5 | 25,5 |
| | M | 25x1,5 | 25x1,5 | 25x1,5 | 25x1,5 | 25x1,5 | 25x1,5 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —6 | 2,5 —6 | 2,5 —6 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 16 | 3 | | 4162 | | | | |
| 16 | 4 | | | 4163 | | | |
| 16 | 5 | | | 4165 | | | |
| 32 | 3 | | 4167 | | | | |
| 32 | 4 | | | 4168 | | | |
| 32 | 5 | | | 4170 | | | |




| Drawing 1 MB 313 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 93 | 93 | 93 | 93 | 93 | 93 |
| | b | 90 | 90 | 90 | 90 | 90 | 90 |
| | c | 90 | 90 | 90 | 102 | 102 | 102 |
| | d | 75 | 75 | 75 | 75 | 75 | 75 |
| | e | 73 | 73 | 73 | 73 | 73 | 73 |
| | f | 5,5 | 5,5 | 5,5 | 5,5 | 5,5 | 5,5 |
| | g. | 4,2 | 4,2 | 4,2 | 4,2 | 4,2 | 4,2 |
| | k | 36 | 36 | 36 | 36 | 36 | 36 |
| | y | 25,5 | 25,5 | 25,5 | 25,5 | 25,5 | 25,5 |
| | M | 25x1,5 | 25x1,5 | 25x1,5 | 25x1,5 | 25x1,5 | 25x1,5 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —6 | 2,5 —6 | 2,5 —6 |

| Fitted with: | Part number |
|---|---|
| 1 CEE receptacle 16A, 5p, 6h, 400V<br>1 receptacle SCHUKO® 16A, 2p+E, 230V | 4202 |
| 1 CEE receptacle 16A, 3p, 6h, 230V<br>1 receptacle SCHUKO® 16A, 2p+E, 230V | 4203 |
| 2 CEE receptacles 16A, 5p, 6h, 400V | 4204 |
| 2 CEE receptacles 16A, 4p, 9h, 230V | 4258 |
| 2 CEE receptacles 16A, 4p, 6h, 400V | 4220 |
| 2 CEE receptacles 16A, 3p, 6h, 230V | 4219 |
| Other installation types on request. | |




| Drawing 1 MB 350 | Amp. | 16 | | |
|---|---|---|---|---|
| | Poles | 3 | 4 | 5 |
| Dim. in mm | | | | |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 |

# Receptacles ■ Wall mounted receptacles, screw terminals, highly heat

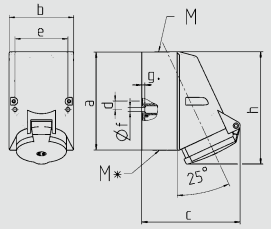
to DIN VDE 0623, EN 60309-2. Colour: electric grey and/or colour code. Enclosure and insert made of AMAPLAST.

| Image | Title | Description |
|---|---|---|
|  | **Wall mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1040/1041.<br>Image 20235A. | ■ screw terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ internal fixing<br>■ one cable entry at top and two blind cable entries (can be cut out) at bottom<br>■ enclosure base can be turned 180° |
|  | **Wall mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 5<br><br>Product group 1041.<br>Image 21253A. | ■ screw terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ internal fixing<br>■ one cable entry at top and two blind cable entries (can be cut out) at bottom<br>■ enclosure base can be turned 180°<br>■ products with pilot contact: part no. + index P |
|  | **Wall mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10<br><br>Product group 1049.<br>Image 9520. | ■ screw terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ two external fixing points<br>■ one cable entry at top and two blind cable entries (can be cut out) at bottom<br>■ enclosure base can be turned 180° |
|  | **Wall mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 5/3<br><br>Product group 1049/1050.<br>Image 21361A. | ■ screw terminals<br>■ 63A: SoftCONTACT<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ products with pilot contact: part no. + index P |

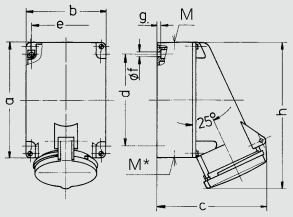
# resistant contact carrier, nickel plated contacts, 16A - 125A, IP 44 and IP 67

Other voltages and frequencies available on request.

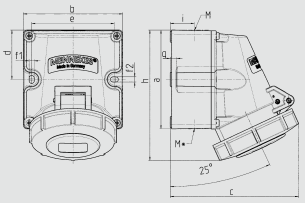
| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | >50 - 500V 100-300 Hz | >50 - 500V 300-500 Hz | Drawing |
|---|---|---|---|---|---|---|---|---|
| | | 3p 4p 5p<br>4h 4h 4h | 3p 4p 5p<br>6h 9h 9h | 3p 4p 5p<br>9h 6h 6h | 3p 4p 5p<br>7h 7h 7h | 3p 4p 5p<br>10h 10h 10h | 3p 4p 5p<br>2h 2h 2h | |
| | | Part number | | | | | | |
| 16 | 3 | | 21075 | | | | | |
| 16 | 4 | | 23443A | 20485A | 22932 | | | |
| 16 | 5 | | | 20235A | | | | |
| 32 | 4 | | 21330A | 22126A | 20842A | | | |
| 32 | 5 | | | 20162A | | | | |
| 63 | 4 | | | 23964 | | | | |
| 63 | 5 | | | 21253A | | | | |
| 16 | 3 | | 9500 | | | | | |
| 16 | 4 | | | 9510 | 9511 | | | |
| 16 | 5 | | | 9520 | | | | |
| 32 | 4 | | | | 9561 | | | |
| 32 | 5 | | | 9570 | | | | |
| 63 | 4 | | | 24315 | | | | |
| 63 | 5 | | | 21361A | | | | |
| 125 | 4 | | | 21233 | | | | |
| 125 | 5 | | | 21468 | | | | |



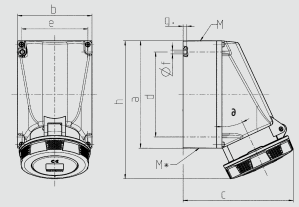

| 1 MB 209 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| 1 MB 43 | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 87 | 128 | 128 | 128 | 128 | 128 |
| | b | 64 | 84 | 84 | 84 | 84 | 84 |
| | c | 99 | 122 | 124 | 136 | 136 | 138 |
| | d | 40 | 11 | 11 | 11 | 11 | 11 |
| | e | 50 | 68 | 68 | 68 | 68 | 68 |
| | f | 4,5 | 5,3 | 5,3 | 5,3 | 5,3 | 5,3 |
| | g. | 4 | 4 | 4 | 4 | 4 | 4 |
| | h | 115 | 144 | 145 | 158 | 158 | 160 |
| | M | 20 | 25 | 25 | 32 | 32 | 32 |
| | M* | M 20 | 2xM25 (blind) to be cut out | | 2xM25 (blind) to be cut out | | |
| Max. cable diam. (mm) | | 15 | 18 | 18 | 18/25 | 18/25 | 18/25 |
| Terminal for cond. cross | | 1,5 | 1,5 | 1,5 | 2,5 | 2,5 | 2,5 |
| section (mm²) min.-max. | | —4 | —4 | —4 | —10 | —10 | —10 |




| Drawing | Amp. | 63 | | |
|---|---|---|---|---|
| 1 MB 213 | Poles | 3 | 4 | 5 |
| Dim. in mm | a | 170 | 170 | 170 |
| | b | 118 | 118 | 118 |
| | c | 164 | 164 | 164 |
| | d | 134,5 | 134,5 | 134,5 |
| | e | 103 | 103 | 103 |
| | f | 6,1 | 6,1 | 6,1 |
| | g. | 6 | 6 | 6 |
| | h | 216 | 216 | 216 |
| | M | 40 | 40 | 40 |
| | M* | 2xM40 (blind) to be cut out | | |
| Max. cable diam. (mm) | | 32 | 32 | 32 |
| Terminal for cond. cross | | 6 | 6 | 6 |
| section (mm²) min.-max. | | —25 | —25 | —25 |




| Drawing | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| 1 MB 622 | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 100 | 100 | 100 | 100 | 100 | 100 |
| | b | 101 | 101 | 101 | 109 | 109 | 109 |
| | c | 117 | 125 | 131 | 157 | 157 | 160 |
| | d | 50 | 50 | 50 | 50 | 50 | 50 |
| | e | 84 | 84 | 84 | 92 | 92 | 92 |
| | f1 | 5,3 | 5,3 | 5,3 | 5,3 | 5,3 | 5,3 |
| | f2 | 5,3 | 5,3 | 5,3 | 5,3 | 5,3 | 5,3 |
| | g | 6,5 | 6,5 | 6,5 | 6,5 | 6,5 | 6,5 |
| | h | 131 | 131 | 132 | 148 | 148 | 148 |
| | i | 24,7 | 24,7 | 24,7 | 27,5 | 27,5 | 27,5 |
| | M | 25 (optional M20) | | | 32 (optional M25) | | |
| | M* | 2x25 (blind) to be cut out | | | 2x25 (blind) to be cut out | | |
| Max. cable diam. (mm) | | 18 (M25) and 15 (M20) | | | 25 (M32) and 18 (M25) | | |
| Terminal for cond. cross | | 1,5 | 1,5 | 1,5 | 2,5 | 2,5 | 2,5 |
| section (mm²) min.-max. | | —4 | —4 | —4 | —6 | —6 | —6 |




| Drawing | Amp. | 63 | | | 125 | |
|---|---|---|---|---|---|---|
| 1 MB 112/162 | Poles | 3 | 4 | 5 | 4 | 5 |
| Dim. in mm | a | 170 | 170 | 170 | 264 | 264 |
| | b | 118 | 118 | 118 | 163 | 163 |
| | c | 175 | 175 | 175 | 200 | 200 |
| | d | 134.5 | 134.5 | 134.5 | 240 | 240 |
| | e | 103 | 103 | 103 | 140 | 140 |
| | f | 6.1 | 6.1 | 6.1 | 8.1 | 8.1 |
| | g. | 6 | 6 | 6 | 8 | 8 |
| | h | 219 | 219 | 219 | 306 | 306 |
| | M | 40 | 40 | 40 | 50 | 50 |
| | M* | 2x40 (blind) to be cut out | | | 2x50 | 2x50 |
| | ə | 25 | 25 | 25 | 20 | 20 |
| Max. cable diam. (mm) | | 27 | 27 | 27 | 38 | 38 |
| Terminal for cond. cross | | 6 | 6 | 6 | 25 | 25 |
| section (mm²) min.-max. | | —25 | —25 | —25 | —35 | —35 |

# Receptacles ■ Wall mounted receptacles, screw terminals, highly

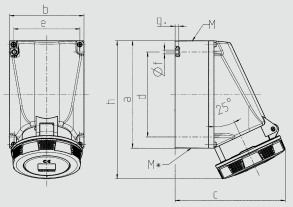
to DIN VDE 0623, EN 60309-2. Colour: grey (RAL 7000) and colour code. Enclosure made of AMELAN®.

| Image | Title | Description |
|---|---|---|
|  | **Wall mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 5<br><br>Product group 1049.<br>Image 3773. | ■ screw terminals<br>■ SoftCONTACT<br>■ highly resistant to chemicals<br>■ highly heat resistant contact carrier, nickel plated contacts<br>■ internal fixing<br>■ one cable entry at top and two blind cable entries (can be cut out) at bottom<br>■ enclosure base can be turned 180°<br>■ 6 fixing points to accommodate special terminals |

# resistant to chemicals, made of AMELAN®, 16A - 63A, IP 67

Other voltages and frequencies available on request.

| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | >50 - 500V 100-300 Hz | >50 - 500V 300-500 Hz | Drawing |
|---|---|---|---|---|---|---|---|---|
| | | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | |
| | | 4h 4h 4h | 6h 9h 9h | 9h 6h 6h | 7h 7h 7h | 10h 10h 10h | 2h 2h 2h | |
| | | Part number | | | | | | |
| 63 | 4 | | | 3773 | | | | |
| 63 | 5 | | | 3774 | | | | |



| Drawing | Amp. | 63 | | |
|---|---|---|---|---|
| 1 MB 112 | Poles | 3 | 4 | 5 |
| Dim. in mm | a | 170 | 170 | 170 |
| | b | 118 | 118 | 118 |
| | c | 175 | 175 | 175 |
| | d | 134,5 | 134,5 | 134,5 |
| | e | 103 | 103 | 103 |
| | f | 6,1 | 6,1 | 6,1 |
| | g. | 6 | 6 | 6 |
| | h | 219 | 219 | 219 |
| | M | 40 | 40 | 40 |
| | M* | 2x40 (blind) to be cut out | | |
| Max. cable diam. (mm) | | 27 | 27 | 27 |
| Terminal for cond. cross section (mm²) min.-max. | | 6 —25 | 6 —25 | 6 —25 |

# Receptacles ■ Wall mounted receptacles, screwless, TwinCONTACT,

to DIN VDE 0623, EN 60309-2. Colour: electric grey and/or colour code. Enclosure and insert made of AMAPLAST.

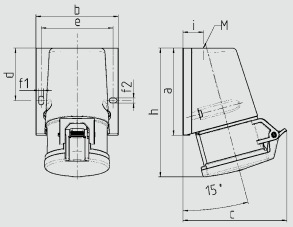
| Image | Title | Description |
|---|---|---|
|  | **Wall mounted receptacle with Twin CONTACT**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1038.<br>Image 31. | ■ screwless spring terminals<br>■ external fixing<br>■ cable entry from top<br>■ blind entry (can be cut out) on the backside |
|  | **Wall mounted receptacle with TwinCONTACT**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1140.<br>Image 1730. | ■ screwless spring terminals<br>■ suitable for through wiring<br>■ internal fixing<br>■ one cable entry at top and one blind cable entry (can be cut out) at bottom<br>■ 4p and 5p receptacles: enclosure base can be turned 180° |
|  | **Wall mounted receptacle with TwinCONTACT**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1141.<br>Image 419. | ■ screwless spring terminals<br>■ suitable for through wiring<br>■ internal fixing<br>■ one cable entry at top and two blind cable entries (can be cut out) at bottom<br>■ enclosure base can be turned 180°<br>■ receptacles are designed for adding an auxiliary contact switch |
|  | **Wall mounted receptacle with TwinCONTACT**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10<br><br>Product group 1332.<br>Image 9121. | ■ screwless spring terminals<br>■ suitable for through wiring<br>■ two external fixing points<br>■ one cable entry at top and two blind cable entries (can be cut out) at bottom<br>■ receptacles are designed for adding an auxiliary contact switch<br>■ enclosure base can be turned 180° |

# 16A - 32A, IP 44 and IP 67

Other voltages and frequencies available on request.

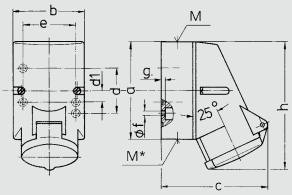
| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | >50 - 500V 100-300 Hz | >50 - 500V 300-500 Hz |
|---|---|---|---|---|---|---|---|
| | | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p |
| | | 4h 4h 4h | 6h 9h 9h | 9h 6h 6h | 7h 7h 7h | 10h 10h 10h | 2h 2h 2h |
| | | Part number | | | | | |
| 16 | 3 | 1340 | 1341 | | | | |
| 16 | 4 | | 1342 | 1343 | 1344 | | |
| 16 | 5 | | | 31 | | | |
| 32 | 3 | 1345 | 1346 | | | | |
| 32 | 4 | | 1347 | 1348 | 1349 | | |
| 32 | 5 | | | 32 | | | |

Drawing



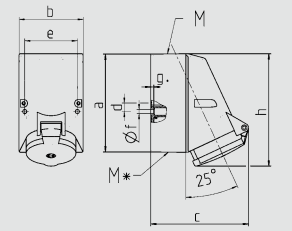

| Drawing | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| 1 MB 463 | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 95 | 93 | 92,5 | 102 | 102 | 102 |
| | b | 73,5 | 87,5 | 87,5 | 94 | 94 | 94 |
| | c | 93 | 107,5 | 110 | 115,5 | 115,5 | 119,5 |
| | d | 55,5 | 55,5 | 55,5 | 62 | 62 | 62 |
| | e | 61 | 76 | 76 | 84 | 84 | 84 |
| | f1 | 5,3 | 5,3 | 5,3 | 5,1 | 5,1 | 5,1 |
| | f2 | 5,3 | 5,3 | 5,3 | 5,1 | 5,1 | 5,1 |
| | h | 139 | 139 | 136,5 | 160 | 160 | 156,5 |
| | i | 19,8 | 21,5 | 21,5 | 26,5 | 26,5 | 26,5 |
| | M | M20x | M25x | M25x | M25x | M32x | M32x |
| | | 1,5 | 1,5 | 1,5 | 1,5 | 1,5 | 1,5 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —6 | 2,5 —6 | 2,5 —6 |

| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | >50 - 500V 100-300 Hz | >50 - 500V 300-500 Hz |
|---|---|---|---|---|---|---|---|
| | | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p |
| | | 4h 4h 4h | 6h 9h 9h | 9h 6h 6h | 7h 7h 7h | 10h 10h 10h | 2h 2h 2h |
| | | Part number | | | | | |
| 16 | 3 | 1719 | 1720 | 1721 | | | |
| 16 | 4 | | 1723 | 1724 | 1725 | 1726 | 1727 |
| 16 | 5 | | 1730 | 3331 | | | |



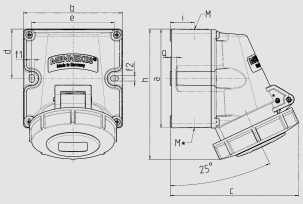

| Drawing | Amp. | 16 | | |
|---|---|---|---|---|
| 1 MB 209 | Poles | 3 | 4 | 5 |
| Dim. in mm | a | 87 | 100 | 100 |
| | b | 64 | 75 | 75 |
| | c | 99 | 110 | 113 |
| | d | 40 | – | – |
| | d1 | – | 11 | 11 |
| | e | 50 | 59 | 59 |
| | f | 4,5 | 5 | 5 |
| | g. | 4 | 4 | 4 |
| | h | 115 | 125 | 128 |
| | M | 20 | 20 | 20 |
| | M* | M20 (blind) to be cut out | | |
| Max. cable diam. (mm) | | 15 | 15 | 15 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 |

| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | >50 - 500V 100-300 Hz | >50 - 500V 300-500 Hz |
|---|---|---|---|---|---|---|---|
| | | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p |
| | | 4h 4h 4h | 6h 9h 9h | 9h 6h 6h | 7h 7h 7h | 10h 10h 10h | 2h 2h 2h |
| | | Part number | | | | | |
| 16 | 4 | 1750 | 1751 | 418 | 1752 | 1753 | 1754 |
| 16 | 5 | 1755 | 1756 | 419 | 1757 | | 1759 |
| 32 | 3 | 1851 | 420 | 1852 | | | 1854 |
| 32 | 4 | 1855 | 1856 | 421 | 1857 | 1858 | 1859 |
| 32 | 5 | 1860 | 1861 | 422 | 1862 | | 1864 |




| Drawing | Amp. | 16 | | 32 | | |
|---|---|---|---|---|---|---|
| 1 MB 43 | Poles | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 128 | 128 | 128 | 128 | 128 |
| | b | 84 | 84 | 84 | 84 | 84 |
| | c | 122 | 124 | 136 | 136 | 138 |
| | d | 11 | 11 | 11 | 11 | 11 |
| | e | 68 | 68 | 68 | 68 | 68 |
| | f | 5,3 | 5,3 | 5,3 | 5,3 | 5,3 |
| | g. | 4 | 4 | 4 | 4 | 4 |
| | h | 144 | 145 | 158 | 158 | 160 |
| | M | 25 | 25 | 32 | 32 | 32 |
| | M* | 2x25 (blind) to be cut out | | 2x25 (blind) to be cut out | | |
| Max. cable diam. (mm) | | 18 | 18 | 18/25 | 18/25 | 18/25 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 2,5 —10 | 2,5 —10 | 2,5 —10 |

| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | >50 - 500V 100-300 Hz | >50 - 500V 300-500 Hz |
|---|---|---|---|---|---|---|---|
| | | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p |
| | | 4h 4h 4h | 6h 9h 9h | 9h 6h 6h | 7h 7h 7h | 10h 10h 10h | 2h 2h 2h |
| | | Part number | | | | | |
| 16 | 3 | 9104 | 9105 | 9106 | | | |
| 16 | 4 | 9120 | 9121 | 9122 | 9123 | 9124 | 9125 |
| 16 | 5 | 9140 | 9141 | 9142 | | | |
| 32 | 3 | 9150 | 9151 | 9152 | | | |
| 32 | 4 | 9170 | 9171 | 9172 | 9173 | 9174 | 9175 |
| 32 | 5 | 9180 | 9181 | 9182 | | | |




| Drawing | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| 1 MB 622 | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 100 | 100 | 100 | 100 | 100 | 100 |
| | b | 101 | 101 | 101 | 109 | 109 | 109 |
| | c | 117 | 125 | 131 | 157 | 157 | 160 |
| | d | 50 | 50 | 50 | 50 | 50 | 50 |
| | e | 84 | 84 | 84 | 92 | 92 | 92 |
| | f1 | 5,3 | 5,3 | 5,3 | 5,3 | 5,3 | 5,3 |
| | f2 | 5,3 | 5,3 | 5,3 | 5,3 | 5,3 | 5,3 |
| | g | 6,5 | 6,5 | 6,5 | 6,5 | 6,5 | 6,5 |
| | h | 131 | 131 | 132 | 148 | 148 | 148 |
| | i | 24,7 | 24,7 | 24,7 | 27,5 | 27,5 | 27,5 |
| | M | 25 (optional M20) | | | 32 (optional M25) | | |
| | M* | 2x25 (blind) to be cut out | | | 2x25 (blind) to be cut out | | |
| Max. cable diam. (mm) | | 18 (M25) and 15 (M20) | | | 25 (M32) and 18 (M25) | | |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —6 | 2,5 —6 | 2,5 —6 |

# Receptacles ■ Double Boxes, CEE and SCHUKO®, screwless,

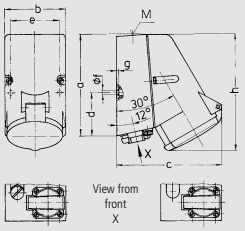
Colour: electric grey and/or colour code. Enclosure and insert made of AMAPLAST.

| Image | Title | Description |
|---|---|---|
|  | **Double Box with TwinCONTACT**<br><br>**IP 44**<br><br>Std. Pack. Qty: 5<br><br>Product group 1143.<br>Image 1647. | ■ screwless spring terminals<br>■ CEE and receptacle SCHUKO® in one enclosure |
|  | **Double Box with TwinCONTACT**<br><br>**IP 44**<br><br>Std. Pack. Qty: 5<br><br>Product group 1143.<br>Image 1650. | ■ screwless spring terminals<br>■ CEE and receptacle SCHUKO® in one enclosure<br>■ with fuse holder, max. 10 A H |

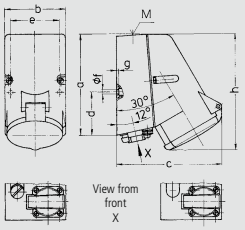
# TwinCONTACT, 16A - 32A, IP 44

Other voltages and frequencies available on request.

| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | >50 - 500V 100-300 Hz | >50 - 500V 300-500 Hz | Drawing |
|---|---|---|---|---|---|---|---|---|
| | | 3p 4p 5p<br>4h 4h 4h | 3p 4p 5p<br>6h 9h 9h | 3p 4p 5p<br>9h 6h 6h | 3p 4p 5p<br>7h 7h 7h | 3p 4p 5p<br>10h 10h 10h | 3p 4p 5p<br>2h 2h 2h | |
| | | Part number | | | | | | |
| 16 | 4 | | 1647 | 1648 | | | | |
| 16 | 5 | | | 1649 | | | | |
| | | Also available with shock-proof receptacles to comply with French/Belgian, Danish and Swiss standards | | | | | | |
| 16 | 5 | | | 1650 | | | | |
| 32 | 5 | | | 1651 | | | | |




| Drawing 1 MB 354 | Amp. / Poles | 16 4 | 16 5 | 32 5 |
|---|---|---|---|---|
| Dim. in mm | a | 141 | 141 | 141 |
| | b | 85 | 85 | 85 |
| | c | 139 | 139 | 153 |
| | d | 61 | 61 | 61 |
| | e | 68 | 68 | 68 |
| | f | 5,3 | 5,3 | 5,3 |
| | g. | 4 | 4 | 4 |
| | h | 145 | 145 | 162 |
| | M | 25 | 25 | 32 |
| Max. cable diam. (mm) | | 18 | 18 | 25 |
| Terminal for cond. cross section (mm²) min.-max. | | 1.5 —4 | 1.5 —4 | 2.5 —10 |




| Drawing 1 MB 354 | Amp. / Poles | 16 4 | 16 5 | 32 5 |
|---|---|---|---|---|
| Dim. in mm | a | 141 | 141 | 141 |
| | b | 85 | 85 | 85 |
| | c | 139 | 139 | 153 |
| | d | 61 | 61 | 61 |
| | e | 68 | 68 | 68 |
| | f | 5,3 | 5,3 | 5,3 |
| | g. | 4 | 4 | 4 |
| | h | 145 | 145 | 162 |
| | M | 25 | 25 | 32 |
| Max. cable diam. (mm) | | 18 | 18 | 25 |
| Terminal for cond. cross section (mm²) min.-max. | | 1.5 —4 | 1.5 —4 | 2.5 —10 |

# Receptacles ■ Wall mounted receptacles, screw terminals, fused,

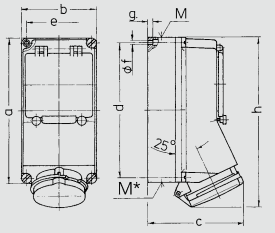
to DIN VDE 0623, EN 60309-2. Colour: electric grey and/or colour code. Enclosure and insert made of AMAPLAST.

| Image | Title | Description |
|---|---|---|
|  | **Wall mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 6<br><br>Product group 1063.<br>Image 5495. | ■ screw terminals<br>■ with DIN rail, optional fitting of Neozed, Diazed, circuit breakers and RCD`s |
|  | **Wall mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 3<br><br>Product group 1110.<br>Image 7102. | ■ screw terminals<br>■ SoftCONTACT<br>■ with DIN rail, optional fitting of Neozed, Diazed, circuit breakers and RCD`s |
|  | **Wall mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 1<br><br>Product group 1061.<br>Image 5012. | ■ screw terminals<br>■ fused with circuit breaker, K-characteristics |
|  | **Wall mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 1<br><br>Product group 1065.<br>Image 7312. | ■ screw terminals<br>■ fused with RCD (0.03A)<br>■ other leakage current ratings on request |

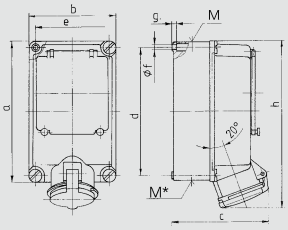
# 16A - 63A, IP 44

Other voltages and frequencies available on request.

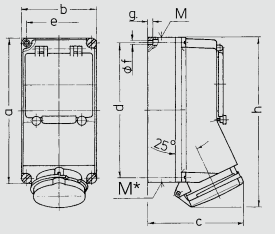
| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | >50 - 500V 100-300 Hz | >50 - 500V 300-500 Hz | Drawing |
|---|---|---|---|---|---|---|---|---|
| | | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | |
| | | 4h 4h 4h | 6h 9h 9h | 9h 6h 6h | 7h 7h 7h | 10h 10h 10h | 2h 2h 2h | |
| | | Part number | | | | | | |
| 16 | 3 | 7006 | 7007 | | | | | |
| 16 | 4 | | | 5496 | | | | |
| 16 | 5 | | | 5495 | | | | |
| 32 | 4 | | | 5498 | | | | |
| 32 | 5 | | | 5497 | | | | |
| 63 | 4 | | | 7153 | | | | |
| 63 | 5 | | | 7102 | | | | |
| 16 | 3 | | 7119 | | | | | |
| 16 | 4 | | | 5010 | | | | |
| 16 | 5 | | | 5012 | | | | |
| 32 | 4 | | | 5014 | | | | |
| 32 | 5 | | | 5016 | | | | |
| 16 | 3 | | 7125 | | | | | |
| 16 | 4 | | | 7126 | | | | |
| 16 | 5 | | | 7312 | | | | |
| 32 | 4 | | | 7127 | | | | |
| 32 | 5 | | | 7313 | | | | |



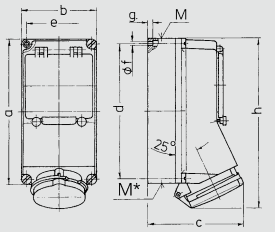

| Drawing | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| 1 MB 168 | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 225 | 225 | 225 | 225 | 225 | 225 |
| | b | 118 | 118 | 118 | 118 | 118 | 118 |
| | c | 141 | 141 | 141 | 146 | 146 | 146 |
| | d | 208 | 208 | 208 | 208 | 208 | 208 |
| | e | 101 | 101 | 101 | 101 | 101 | 101 |
| | f | 6,3 | 6,3 | 6,3 | 6,3 | 6,3 | 6,3 |
| | g. | 8 | 8 | 8 | 8 | 8 | 8 |
| | h | 250 | 252 | 254 | 264 | 264 | 264 |
| | M | 1x25 and 1x32 | | | 1x25 and 1x32 | | |
| | M* | 2x25 | 2x25 | 2x25 | 2x25 | 2x25 | 2x25 |
| Max. cable diam. (mm) | | 25 | 25 | 25 | 25 | 25 | 25 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —10 | 2,5 —10 | 2,5 —10 |




| Drawing | Amp. | 63 | |
|---|---|---|---|
| 1 MB 379 | Poles | 4 | 5 |
| Dim. in mm | a | 264 | 264 |
| | b | 163 | 163 |
| | c | 187 | 187 |
| | d | 240 | 240 |
| | e | 140 | 140 |
| | f | 8,1 | 8,1 |
| | g. | 8 | 8 |
| | h | 315 | 315 |
| | M | 1x40 | 1x40 |
| | M* | 2x40 | 2x40 |
| Max. cable diam. (mm) | | 27 | 27 |




| Drawing | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| 1 MB 168 | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 225 | 225 | 225 | 225 | 225 | 225 |
| | b | 118 | 118 | 118 | 118 | 118 | 118 |
| | c | 141 | 141 | 141 | 146 | 146 | 146 |
| | d | 208 | 208 | 208 | 208 | 208 | 208 |
| | e | 101 | 101 | 101 | 101 | 101 | 101 |
| | f | 6,3 | 6,3 | 6,3 | 6,3 | 6,3 | 6,3 |
| | g. | 8 | 8 | 8 | 8 | 8 | 8 |
| | h | 250 | 252 | 254 | 264 | 264 | 264 |
| | M | 1x25 and 1x32 | | | 1x25 and 1x32 | | |
| | M* | 2x25 | 2x25 | 2x25 | 2x25 | 2x25 | 2x25 |
| Max. cable diam. (mm) | | 25 | 25 | 25 | 25 | 25 | 25 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —10 | 2,5 —10 | 2,5 —10 |




| Drawing | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| 1 MB 168 | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 225 | 225 | 225 | 225 | 225 | 225 |
| | b | 118 | 118 | 118 | 118 | 118 | 118 |
| | c | 141 | 141 | 141 | 146 | 146 | 146 |
| | d | 208 | 208 | 208 | 208 | 208 | 208 |
| | e | 101 | 101 | 101 | 101 | 101 | 101 |
| | f | 6,3 | 6,3 | 6,3 | 6,3 | 6,3 | 6,3 |
| | g. | 8 | 8 | 8 | 8 | 8 | 8 |
| | h | 250 | 252 | 254 | 264 | 264 | 264 |
| | M | 1x25 and 1x32 | | | 1x25 and 1x32 | | |
| | M* | 2x25 | 2x25 | 2x25 | 2x25 | 2x25 | 2x25 |
| Max. cable diam. (mm) | | 25 | 25 | 25 | 25 | 25 | 25 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —10 | 2,5 —10 | 2,5 —10 |

# Receptacles ■ Wall mounted receptacles, screw terminals, fused,

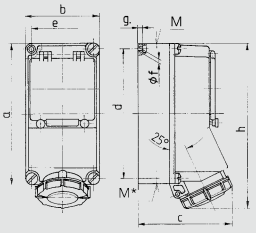
to DIN VDE 0623, EN 60309-2. Colour: electric grey and/or colour code. Enclosure and insert made of AMAPLAST.

| Image | Title | Description |
|---|---|---|
|  | **Wall mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 1<br><br>Product group 1163.<br>Image 7130. | ■ screw terminals<br>■ with DIN rail, optional fitting of Neozed, Diazed, circuit breakers and RCD`s |
|  | **Wall mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 1<br><br>Product group 1161.<br>Image 7145. | ■ screw terminals<br>■ fused with circuit breaker, K-characteristics |
|  | **Wall mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 1<br><br>Product group 1165.<br>Image 7152. | ■ screw terminals<br>■ fused with RCD (0.03A)<br>■ other leakage current ratings on request |

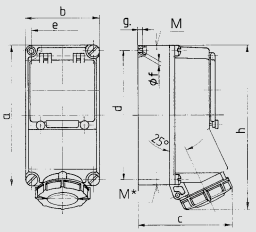
# 16A - 32A, IP 67

Other voltages and frequencies available on request.

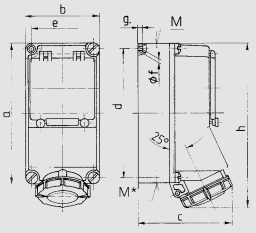
| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | >50 - 500V 100-300 Hz | >50 - 500V 300-500 Hz | Drawing |
|---|---|---|---|---|---|---|---|---|
| | | 3p 4p 5p<br>4h 4h 4h | 3p 4p 5p<br>6h 9h 9h | 3p 4p 5p<br>9h 6h 6h | 3p 4p 5p<br>7h 7h 7h | 3p 4p 5p<br>10h 10h 10h | 3p 4p 5p<br>2h 2h 2h | |
| | | Part number | | | | | | |
| 16 | 3 | | 7128 | | | | | |
| 16 | 4 | | | 7129 | | | | |
| 16 | 5 | | | 7130 | | | | |
| 32 | 4 | | | 7131 | | | | |
| 32 | 5 | | | 7132 | | | | |
| 16 | 3 | | 7143 | | | | | |
| 16 | 5 | | | 7145 | | | | |
| 32 | 5 | | | 7147 | | | | |
| 16 | 3 | | 7148 | | | | | |
| 16 | 5 | | | 7150 | | | | |
| 32 | 5 | | | 7152 | | | | |




| Drawing | Amp. | 16 | | | 32 | |
|---|---|---|---|---|---|---|
| 1 MB 378 | Poles | 3 | 4 | 5 | 4 | 5 |
| Dim. in mm | a | 225 | 225 | 225 | 225 | 225 |
| | b | 118 | 118 | 118 | 118 | 118 |
| | c | 144 | 146 | 147 | 152 | 153 |
| | d | 208 | 208 | 208 | 208 | 208 |
| | e | 101 | 101 | 101 | 101 | 101 |
| | f | 6,3 | 6,3 | 6,3 | 6,3 | 6,3 |
| | g | 8 | 8 | 8 | 8 | 8 |
| | h | 252 | 255 | 259 | 268 | 274 |
| | M | 1x25 and 1x32 | | | 1x25 and 1x32 | |
| | M* | 2x25 | 2x25 | 2x25 | 2x25 | 2x25 |
| Max. cable diam. (mm) | | 25 | 25 | 25 | 25 | 25 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —10 | 2,5 —10 |




| Drawing | Amp. | 16 | | | 32 | |
|---|---|---|---|---|---|---|
| 1 MB 378 | Poles | 3 | 4 | 5 | 4 | 5 |
| Dim. in mm | a | 225 | 225 | 225 | 225 | 225 |
| | b | 118 | 118 | 118 | 118 | 118 |
| | c | 144 | 146 | 147 | 152 | 153 |
| | d | 208 | 208 | 208 | 208 | 208 |
| | e | 101 | 101 | 101 | 101 | 101 |
| | f | 6,3 | 6,3 | 6,3 | 6,3 | 6,3 |
| | g | 8 | 8 | 8 | 8 | 8 |
| | h | 252 | 255 | 259 | 268 | 274 |
| | M | 1x25 and 1x32 | | | 1x25 and 1x32 | |
| | M* | 2x25 | 2x25 | 2x25 | 2x25 | 2x25 |
| Max. cable diam. (mm) | | 25 | 25 | 25 | 25 | 25 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —10 | 2,5 —10 |




| Drawing | Amp. | 16 | | | 32 | |
|---|---|---|---|---|---|---|
| 1 MB 378 | Poles | 3 | 4 | 5 | 4 | 5 |
| Dim. in mm | a | 225 | 225 | 225 | 225 | 225 |
| | b | 118 | 118 | 118 | 118 | 118 |
| | c | 144 | 146 | 147 | 152 | 153 |
| | d | 208 | 208 | 208 | 208 | 208 |
| | e | 101 | 101 | 101 | 101 | 101 |
| | f | 6,3 | 6,3 | 6,3 | 6,3 | 6,3 |
| | g | 8 | 8 | 8 | 8 | 8 |
| | h | 252 | 255 | 259 | 268 | 274 |
| | M | 1x25 and 1x32 | | | 1x25 and 1x32 | |
| | M* | 2x25 | 2x25 | 2x25 | 2x25 | 2x25 |
| Max. cable diam. (mm) | | 25 | 25 | 25 | 25 | 25 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —10 | 2,5 —10 |

# Receptacles ■ Wall mounted receptacles, screw terminals, fused,

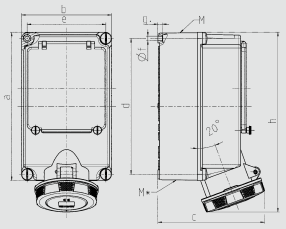
to DIN VDE 0623, EN 60309-2. Colour: electric grey and/or colour code. Enclosure and insert made of AMAPLAST.

| Image | Title | Description |
|---|---|---|
|  | **Wall mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 6/3<br><br>Product group 1064.<br>Image 5535A. | ■ screw terminals<br>■ 63A: SoftCONTACT<br>■ with DIN rail |
|  | **Wall mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 3<br><br>Product group 1115.<br>Image 7311. | ■ screw terminals<br>■ SoftCONTACT<br>■ fused with 3 pole fuse socket D 02 |
|  | **Wall mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 3<br><br>Product group 1116.<br>Image 7168. | ■ screw terminals<br>■ SoftCONTACT<br>■ fused with 3 pole circuit breaker, K-characteristics |
|  | **Wall mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 3<br><br>Product group 1117.<br>Image 7170. | ■ screw terminals<br>■ SoftCONTACT<br>■ fused with RCD (0.03A)<br>■ other leakage current ratings on request |
|  | **Wall mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 1<br><br>Product group 1069.<br>Image 5046A. | ■ screw terminals<br>■ TorsionSpringCONTACT<br>■ fused with 3 pole fuse socket NH 00<br>■ also available with fuse disconnector |

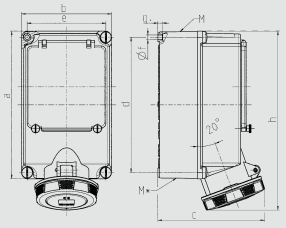
# 32A - 125A, IP 67

Other voltages and frequencies available on request.

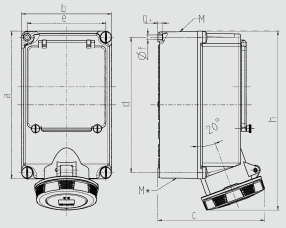
| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | >50 - 500V 100-300 Hz | >50 - 500V 300-500 Hz | Drawing |
|---|---|---|---|---|---|---|---|---|
| | | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | |
| | | 4h 4h 4h | 6h 9h 9h | 9h 6h 6h | 7h 7h 7h | 10h 10h 10h | 2h 2h 2h | |
| | | Part number | | | | | | |
| 32 | 4 | | | 5527 | 5528 | | | |
| 32 | 5 | | | 5530 | | | | |
| 63 | 4 | | | 5532A | | | | |
| 63 | 5 | | | 5535A | | | | |
| 63 | 5 | | | 7311 | | | | |
| 63 | 4 | | | 7167 | | | | |
| 63 | 5 | | | 7168 | | | | |
| 63 | 4 | | | 7169 | | | | |
| 63 | 5 | | | 7170 | | | | |
| 125 | 4 | | 5042A | 5043A | | | | |
| 125 | 5 | | | 5046A | | | | |



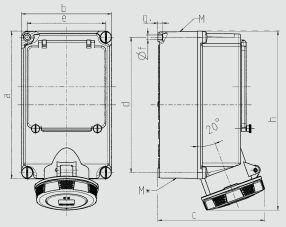
| Drawing | Amp. | 32 | | 63 | |
|---|---|---|---|---|---|
| 1 MB 164/619 | Poles | 4 | 5 | 4 | 5 |
| Dim. in mm | a | 264 | 264 | 264 | 264 |
| | b | 163 | 163 | 163 | 163 |
| | c | 177 | 184 | 191 | 191 |
| | d | 240 | 240 | 240 | 240 |
| | e | 140 | 140 | 140 | 140 |
| | f | 8,1 | 8,1 | 8,1 | 8,1 |
| | g. | 8 | 8 | 8 | 8 |
| | h | 301 | 301 | 319 | 319 |
| | M | 32 | 32 | 40 | 40 |
| | M* | 2x32 | 2x32 | 2x40 | 2x40 |
| Max. cable diam. (mm) | | 25 | 25 | 27 | 27 |
| Terminal for cond. cross section (mm²) min.-max. | | 2,5 —10 | 2,5 —10 | 6 —25 | 6 —25 |



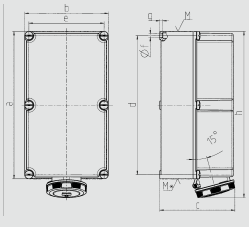
| Drawing | Amp. | 63 | |
|---|---|---|---|
| 1 MB 619 | Poles | 4 | 5 |
| Dim. in mm | a | 264 | 264 |
| | b | 163 | 163 |
| | c | 191 | 191 |
| | d | 240 | 240 |
| | e | 140 | 140 |
| | f | 8,1 | 8,1 |
| | g. | 8 | 8 |
| | h | 319 | 319 |
| | M | 40 | 40 |
| | M* | 2x40 | 2x40 |
| Max. cable diam. (mm) | | 27 | 27 |
| Terminal for cond. cross section (mm²) min.-max. | | 6 —25 | 6 —25 |



| Drawing | Amp. | 63 | |
|---|---|---|---|
| 1 MB 619 | Poles | 4 | 5 |
| Dim. in mm | a | 264 | 264 |
| | b | 163 | 163 |
| | c | 191 | 191 |
| | d | 240 | 240 |
| | e | 140 | 140 |
| | f | 8,1 | 8,1 |
| | g. | 8 | 8 |
| | h | 319 | 319 |
| | M | 40 | 40 |
| | M* | 2x40 | 2x40 |
| Max. cable diam. (mm) | | 27 | 27 |
| Terminal for cond. cross section (mm²) min.-max. | | 6 —25 | 6 —25 |



| Drawing | Amp. | 63 | |
|---|---|---|---|
| 1 MB 619 | Poles | 4 | 5 |
| Dim. in mm | a | 264 | 264 |
| | b | 163 | 163 |
| | c | 191 | 191 |
| | d | 240 | 240 |
| | e | 140 | 140 |
| | f | 8,1 | 8,1 |
| | g. | 8 | 8 |
| | h | 319 | 319 |
| | M | 40 | 40 |
| | M* | 2x40 | 2x40 |
| Max. cable diam. (mm) | | 27 | 27 |
| Terminal for cond. cross section (mm²) min.-max. | | 6 —25 | 6 —25 |



| Drawing | Amp. | 125 | |
|---|---|---|---|
| 1 MB 163 | Poles | 4 | 5 |
| Dim. in mm | a | 460 | 460 |
| | b | 260 | 260 |
| | c | 234 | 234 |
| | d | 434 | 434 |
| | e | 234 | 234 |
| | f | 11 | 11 |
| | g. | 9 | 9 |
| | h | 519 | 519 |
| | M | 63 | 63 |
| | M* | 2x63 | 2x63 |
| Max. cable diam. (mm) | | 44 | 44 |
| Terminal for cond. cross section (mm²) min.-max. | | 25 —70 | 25 —70 |

# Receptacles ■ Wall and panel mounted receptacles, screw terminals,

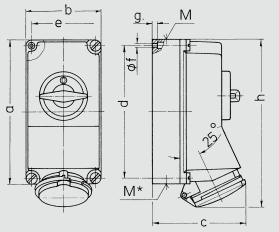
to DIN VDE 0623, EN 60309-2. Colour: electric grey and/or colour code. Enclosure and insert made of AMAPLAST.

| Image | Title | Description |
|---|---|---|
|  | **Wall mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 1<br><br>Product group 1075.<br>Image 5103A. | ■ screw terminals<br>■ switched<br>■ mechanical DUO-interlock<br>■ receptacles can be padlocked |
|  | **Wall mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 3<br><br>Product group 1075.<br>Image 5959A. | ■ screw terminals<br>■ SoftCONTACT<br>■ switched<br>■ mechanical DUO-interlock<br>■ receptacles can be padlocked |
|  | **Wall mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 1<br><br>Product group 1100.<br>Image 7605. | ■ screw terminals<br>■ for horizontal installation<br>■ switched<br>■ mechanical DUO-interlock<br>■ receptacles can be padlocked |
|  | **Panel mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 1<br><br>Product group 1138.<br>Image 7505. | ■ screw terminals<br>■ for horizontal installation<br>■ switched<br>■ mechanical DUO-interlock<br>■ receptacles can be padlocked |

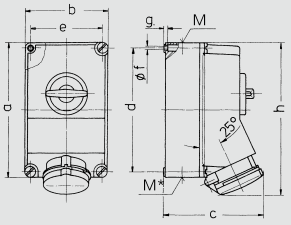
# switched and interlocked, 16A - 63A, IP 44

Other voltages and frequencies available on request.

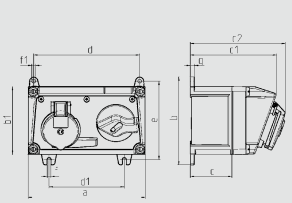
| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | >50 - 500V 100-300 Hz | >50 - 500V 300-500 Hz | Drawing |
|---|---|---|---|---|---|---|---|---|
| | | 3p 4p 5p<br>4h 4h 4h | 3p 4p 5p<br>6h 9h 9h | 3p 4p 5p<br>9h 6h 6h | 3p 4p 5p<br>7h 7h 7h | 3p 4p 5p<br>10h 10h 10h | 3p 4p 5p<br>2h 2h 2h | |
| | | Part number | | | | | | |
| 16 | 3 | 7010A | 7002A | | | | | |
| 16 | 4 | | 5099A | 5100A | 5101A | | | |
| 16 | 5 | | 5102A | 5103A | | | | |
| 32 | 3 | 5743A | 5696A | | | | | |
| 32 | 4 | | 5104A | 5105A | 5106A | | | |
| 32 | 5 | | 5107A | 5108A | | | | |
| 63 | 3 | | 6571 | | | | | |
| 63 | 4 | | 5955A | 5956A | 5957A | | | |
| 63 | 5 | | | 5959A | | | | |
| 16 | 3 | 7602 | 7603 | | | | | |
| 16 | 4 | | 7604 | 7605 | | | | |
| 16 | 5 | | | 7607 | | | | |
| 32 | 3 | | 7612 | | | | | |
| 32 | 4 | | 7613 | 7614 | | | | |
| 32 | 5 | | | 7616 | | | | |
| 16 | 3 | 7502 | 7503 | | | | | |
| 16 | 4 | | 7504 | 7505 | 7506 | | | |
| 16 | 5 | | | 7507 | | | | |
| 32 | 3 | | 7512 | | | | | |
| 32 | 5 | | | 7516 | | | | |



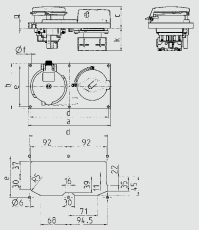

| Drawing | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| 1 MB 174 | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 225 | 225 | 225 | 225 | 225 | 225 |
| | b | 118 | 118 | 118 | 118 | 118 | 118 |
| | c | 141 | 141 | 141 | 146 | 146 | 146 |
| | d | 208 | 208 | 208 | 208 | 208 | 208 |
| | e | 101 | 101 | 101 | 101 | 101 | 101 |
| | f | 6,3 | 6,3 | 6,3 | 6,3 | 6,3 | 6,3 |
| | g. | 8 | 8 | 8 | 8 | 8 | 8 |
| | h | 250 | 252 | 254 | 264 | 264 | 264 |
| | M | 1x25 and 1x32 | | | 1x25 and 1x32 | | |
| | M* | 2x25 | 2x25 | 2x25 | 2x25 | 2x25 | 2x25 |
| Max. cable diam. (mm) | | 25 | 25 | 25 | 25 | 25 | 25 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —10 | 2,5 —10 | 2,5 —10 |




| Drawing | Amp. | 63 | | |
|---|---|---|---|---|
| 1 MB 234 | Poles | 3 | 4 | 5 |
| Dim. in mm | a | 264 | 264 | 264 |
| | b | 163 | 163 | 163 |
| | c | 192 | 192 | 192 |
| | d | 240 | 240 | 240 |
| | e | 140 | 140 | 140 |
| | f | 8,1 | 8,1 | 8,1 |
| | g. | 8 | 8 | 8 |
| | h | 300 | 300 | 300 |
| | M | 40 | 40 | 40 |
| | M* | 2x40 | 2x40 | 2x40 |
| Max. cable diam. (mm) | | 27 | 27 | 27 |
| Terminal for cond. cross section (mm²) min.-max. | | 6 —25 | 6 —25 | 6 —25 |




| Drawing | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| 1 MB 550 | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 225 | 225 | 225 | 225 | 225 | 225 |
| | b | 168 | 168 | 168 | 168 | 168 | 168 |
| | b1 | 130 | 130 | 130 | 130 | 130 | 130 |
| | c | 80 | 80 | 80 | 80 | 80 | 80 |
| | c1 | 166 | 166 | 166 | 166 | 166 | 166 |
| | c2 | 182 | 183 | 183 | 193 | 193 | 193 |
| | d | 204 | 204 | 204 | 204 | 204 | 204 |
| | d1 | 145 | 145 | 145 | 145 | 145 | 145 |
| | e | 150 | 150 | 150 | 150 | 150 | 150 |
| | f | 7 | 7 | 7 | 7 | 7 | 7 |
| | f1 | Ø7 | Ø7 | Ø7 | Ø7 | Ø7 | Ø7 |
| | g | 8 | 8 | 8 | 8 | 8 | 8 |



| Drawing | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| 5 MB 59 | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 200 | 200 | 200 | 200 | 200 | 200 |
| | b | 110 | 110 | 110 | 110 | 110 | 110 |
| | c | 46 | 49 | 46 | 56 | 56 | 53 |
| | d | 190 | 190 | 190 | 190 | 190 | 190 |
| | e | 100 | 100 | 100 | 100 | 100 | 100 |
| | f | 5 | 5 | 5 | 5 | 5 | 5 |
| | g | 13 | 13 | 13 | 13 | 13 | 13 |
| | k max. | 56 | 56 | 56 | 56 | 56 | 56 |

# Receptacles ■ Wall and panel mounted receptacles, screw terminals,

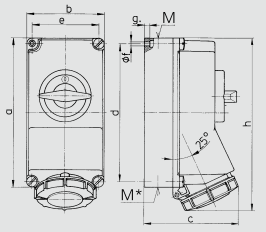
to DIN VDE 0623, EN 60309-2. Colour: electric grey and/or colour code. Enclosure and insert made of AMAPLAST.

| Image | Title | Description |
|---|---|---|
|  | **Wall mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 1<br><br>Product group 1074.<br>Image 5603A. | ■ screw terminals<br>■ switched<br>■ mechanical DUO-interlock<br>■ receptacles can be padlocked |
|  | **Wall mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 3<br><br>Product group 1074.<br>Image 5113A. | ■ screw terminals<br>■ SoftCONTACT<br>■ switched<br>■ mechanical DUO-interlock<br>■ receptacles can be padlocked |
|  | **Wall mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 1<br><br>Product group 1074.<br>Image 5692A. | ■ screw terminals<br>■ TorsionSpringCONTACT<br>■ switched<br>■ mechanical DUO-interlock<br>■ upon request with provision for an additional padlock |
|  | **Wall mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 1<br><br>Product group 1101.<br>Image 7624. | ■ screw terminals<br>■ for horizontal installation<br>■ switched<br>■ mechanical DUO-interlock<br>■ receptacles can be padlocked |
|  | **Panel mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 1<br><br>Product group 1139.<br>Image 7521. | ■ screw terminals<br>■ for horizontal installation<br>■ switched<br>■ mechanical DUO-interlock<br>■ receptacles can be padlocked |

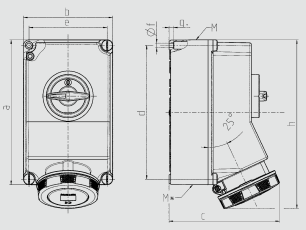
# switched and interlocked, 16A - 125A, IP 67

Other voltages and frequencies available on request.

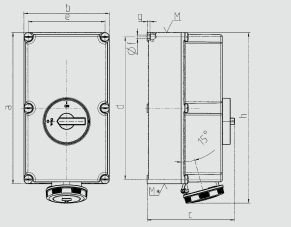
| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | >50 - 500V 100-300 Hz | >50 - 500V 300-500 Hz | Drawing |
|---|---|---|---|---|---|---|---|---|
| | | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | |
| | | 4h 4h 4h | 6h 9h 9h | 9h 6h 6h | 7h 7h 7h | 10h 10h 10h | 2h 2h 2h | |
| | | Part number | | | | | | |
| 16 | 3 | 7011A | 7012A | | | | | |
| 16 | 4 | | 5599A | 5600A | 5601A | | | |
| 16 | 5 | | 5602A | 5603A | | | | |
| 32 | 3 | 5924A | 5793A | | | | | |
| 32 | 4 | | 5604A | 5605A | 5606A | | | |
| 32 | 5 | | 5607A | 5608A | | | | |
| 63 | 3 | 5925A | 5911A | | | | | |
| 63 | 4 | | 5109A | 5110A | 5111A | | | |
| 63 | 5 | | 5112A | 5113A | 5759A | | | |
| 125 | 3 | | 7000 | | | | | |
| 125 | 4 | | 5887A | 5691A | 5690A | | | |
| 125 | 5 | | 5888A | 5692A | | | | |
| 16 | 3 | 7620 | 7621 | | | | | |
| 16 | 4 | | 7623 | 7624 | 7625 | | | |
| 16 | 5 | | | 7626 | | | | |
| 32 | 3 | 7628 | 7629 | | | | | |
| 32 | 4 | | 7633 | 7634 | 7635 | | | |
| 32 | 5 | | | 7636 | | | | |
| 16 | 3 | 7520 | 7521 | | | | | |
| 16 | 4 | | 7523 | 7524 | 7525 | | | |
| 16 | 5 | | | 7526 | | | | |
| 32 | 3 | | 7531 | | | | | |
| 32 | 4 | | | 7534 | 7535 | | | |
| 32 | 5 | | | 7536 | | | | |



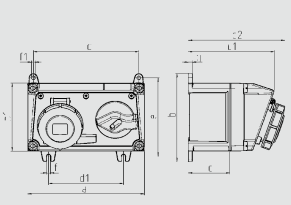
| Drawing 1 MB 207 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 225 | 225 | 225 | 225 | 225 | 225 |
| | b | 118 | 118 | 118 | 118 | 118 | 118 |
| | c | 144 | 146 | 147 | 152 | 152 | 153 |
| | d | 208 | 208 | 208 | 208 | 208 | 208 |
| | e | 101 | 101 | 101 | 101 | 101 | 101 |
| | f | 6,3 | 6,3 | 6,3 | 6,3 | 6,3 | 6,3 |
| | g. | 8 | 8 | 8 | 8 | 8 | 8 |
| | h | 252 | 255 | 259 | 268 | 268 | 274 |
| | M | 1xM25 and 1xM32 | | | 1xM25 and 1xM32 | | |
| | M* | 2x25 | 2x25 | 2x25 | 2x25 | 2x25 | 2x25 |
| Max. cable diam. (mm) | | 25 | 25 | 25 | 25 | 25 | 25 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —10 | 2,5 —10 | 2,5 —10 |



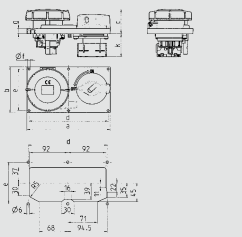
| Drawing 1 MB 180 | Amp. | 63 | | |
|---|---|---|---|---|
| | Poles | 3 | 4 | 5 |
| Dim. in mm | a | 264 | 264 | 264 |
| | b | 163 | 163 | 163 |
| | c | 198 | 198 | 198 |
| | d | 240 | 240 | 240 |
| | e | 140 | 140 | 140 |
| | f | 8,1 | 8,1 | 8,1 |
| | g. | 8 | 8 | 8 |
| | h | 303 | 303 | 303 |
| | M | 40 | 40 | 40 |
| | M* | 40 | 40 | 40 |
| Max. cable diam. (mm) | | 32 | 32 | 32 |
| Terminal for cond. cross section (mm²) min.-max. | | 6 —25 | 6 —25 | 6 —25 |



| Drawing 1 MB 177 | Amp. | 125 | | |
|---|---|---|---|---|
| | Poles | 3 | 4 | 5 |
| Dim. in mm | a | 460 | 460 | 460 |
| | b | 260 | 260 | 260 |
| | c | 283 | 283 | 283 |
| | d | 434 | 434 | 434 |
| | e | 234 | 234 | 234 |
| | f | 11 | 11 | 11 |
| | g. | 9 | 9 | 9 |
| | h | 519 | 519 | 519 |
| | M | 63 | 63 | 63 |
| | M* | 2x63 | 2x63 | 2x63 |
| Max. cable diam. (mm) | | 44 | 44 | 44 |
| Terminal for cond. cross section (mm²) min.-max. | | 25 —70 | 25 —70 | 25 —70 |



| Drawing 1 MB 551 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 225 | 225 | 225 | 225 | 225 | 225 |
| | b | 168 | 168 | 168 | 168 | 168 | 168 |
| | b1 | 130 | 130 | 130 | 130 | 130 | 130 |
| | c | 80 | 80 | 80 | 80 | 80 | 80 |
| | c1 | 166 | 166 | 166 | 166 | 166 | 166 |
| | c2 | 182 | 185 | 186 | 197 | 197 | 198 |
| | d | 204 | 204 | 204 | 204 | 204 | 204 |
| | d1 | 145 | 145 | 145 | 145 | 145 | 145 |
| | e | 150 | 150 | 150 | 150 | 150 | 150 |
| | f | 7 | 7 | 7 | 7 | 7 | 7 |
| | f1 | Ø7 | Ø7 | Ø7 | Ø7 | Ø7 | Ø7 |
| | g | 8 | 8 | 8 | 8 | 8 | 8 |



| Drawing 5 MB 57 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 200 | 200 | 200 | 200 | 200 | 200 |
| | b | 110 | 110 | 110 | 110 | 110 | 110 |
| | c | 47 | 50 | 51 | 59 | 59 | 60 |
| | d | 190 | 190 | 190 | 190 | 190 | 190 |
| | e | 100 | 100 | 100 | 100 | 100 | 100 |
| | f | 5 | 5 | 5 | 5 | 5 | 5 |
| | g | 13 | 13 | 13 | 13 | 13 | 13 |
| | k max. | 56 | 56 | 56 | 56 | 56 | 56 |

# Receptacles ■ Wall mounted receptacles, screw terminals, fused,

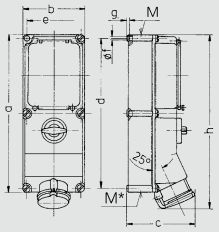
to DIN VDE 0623, EN 60309-2. Colour: electric grey and/or colour code. Enclosure and insert made of AMAPLAST.

| Image | Title | Description |
|---|---|---|
|  | **Wall mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 2/1<br><br>Product group 1091.<br>Image 6062A. | ■ screw terminals<br>■ 63A: SoftCONTACT<br>■ switched<br>■ mechanical DUO-interlock<br>■ DIN rail<br>■ receptacles can be padlocked |
|  | **Wall mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 2/1<br><br>Product group 1124.<br>Image 7222. | ■ screw terminals<br>■ 63A: SoftCONTACT<br>■ switched<br>■ mechanical DUO-interlock<br>■ circuit breaker, K-characteristics<br>■ receptacles can be padlocked |
|  | **Wall mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 2/1<br><br>Product group 1125.<br>Image 7228. | ■ screw terminals<br>■ 63A: SoftCONTACT<br>■ switched<br>■ mechanical DUO-interlock<br>■ RCD (0.03A)<br>■ other leakage current ratings on request<br>■ receptacles can be padlocked |
|  | **Wall mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 2/1<br><br>Product group 1126.<br>Image 7235. | ■ screw terminals<br>■ 63A: SoftCONTACT<br>■ switched<br>■ mechanical DUO-interlock<br>■ circuit breaker, K-characteristics and RCD (0.03A)<br>■ other leakage current ratings on request<br>■ receptacles can be padlocked |

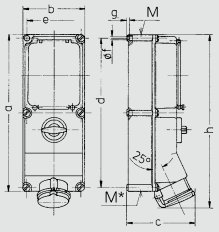
# switched and interlocked, 16A - 63A, IP 44

Other voltages and frequencies available on request.

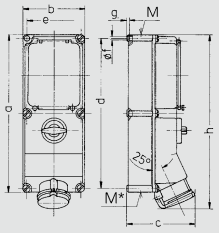
| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | >50 - 500V 100-300 Hz | >50 - 500V 300-500 Hz | Drawing |
|---|---|---|---|---|---|---|---|---|
| | | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | |
| | | 4h 4h 4h | 6h 9h 9h | 9h 6h 6h | 7h 7h 7h | 10h 10h 10h | 2h 2h 2h | |
| | | Part number | | | | | | |
| 16 | 3 | | 7213 | | | | | |
| 16 | 4 | | | 5610A | | | | |
| 16 | 5 | | | 5613A | | | | |
| 32 | 4 | | | 5615A | | | | |
| 32 | 5 | | | 5618A | | | | |
| 63 | 4 | | | 6059A | | | | |
| 63 | 5 | | | 6062A | | | | |
| 16 | 3 | | 7216 | | | | | |
| 16 | 4 | | | 7217 | | | | |
| 16 | 5 | | | 7218 | | | | |
| 32 | 4 | | | 7219 | | | | |
| 32 | 5 | | | 7220 | | | | |
| 63 | 4 | | | 7221 | | | | |
| 63 | 5 | | | 7222 | | | | |
| 16 | 3 | | 7223 | | | | | |
| 16 | 4 | | | 7224 | | | | |
| 16 | 5 | | | 7318 | | | | |
| 32 | 5 | | | 7226 | | | | |
| 63 | 4 | | | 7227 | | | | |
| 63 | 5 | | | 7228 | | | | |
| 16 | 5 | | | 7231 | | | | |
| 32 | 4 | | | 7232 | | | | |
| 32 | 5 | | | 7233 | | | | |
| 63 | 4 | | | 7234 | | | | |
| 63 | 5 | | | 7235 | | | | |



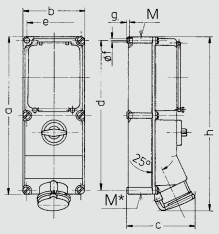

| Drawing 1 MB 208 | Amp. / Poles | 16 3 | 16 4 | 16 5 | 32 4 | 32 5 | 63 4 | 63 5 |
|---|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 364 | 364 | 364 | 364 | 364 | 460 | 460 |
| | b | 134 | 134 | 134 | 134 | 134 | 180 | 180 |
| | c | 160 | 162 | 163 | 168 | 168 | 195 | 195 |
| | d | 347 | 347 | 347 | 347 | 347 | 440 | 440 |
| | e | 117 | 117 | 117 | 117 | 117 | 160 | 160 |
| | f | 6,3 | 6,3 | 6,3 | 6,3 | 6,3 | 8,1 | 8,1 |
| | g. | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | h | 391 | 395 | 398 | 408 | 411 | 502 | 502 |
| | M | 32/40 | 32/40 | 32/40 | 32/40 | 32/40 | 40 | 40 |
| | M* | 2x32 | 2x32 | 2x32 | 2x32 | 2x32 | 2x40 | 2x40 |
| Max. cable diam. (mm) | | 27 | 27 | 27 | 27 | 27 | 27 | 27 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —10 | 2,5 —10 | 6 —25 | 6 —25 |




| Drawing 1 MB 208 | Amp. / Poles | 16 3 | 16 4 | 16 5 | 32 4 | 32 5 | 63 4 | 63 5 |
|---|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 364 | 364 | 364 | 364 | 364 | 460 | 460 |
| | b | 134 | 134 | 134 | 134 | 134 | 180 | 180 |
| | c | 160 | 162 | 163 | 168 | 168 | 195 | 195 |
| | d | 347 | 347 | 347 | 347 | 347 | 440 | 440 |
| | e | 117 | 117 | 117 | 117 | 117 | 160 | 160 |
| | f | 6,3 | 6,3 | 6,3 | 6,3 | 6,3 | 8,1 | 8,1 |
| | g. | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | h | 391 | 395 | 398 | 408 | 411 | 502 | 502 |
| | M | 32/40 | 32/40 | 32/40 | 32/40 | 32/40 | 40 | 40 |
| | M* | 2x32 | 2x32 | 2x32 | 2x32 | 2x32 | 2x40 | 2x40 |
| Max. cable diam. (mm) | | 27 | 27 | 27 | 27 | 27 | 27 | 27 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —10 | 2,5 —10 | 6 —25 | 6 —25 |




| Drawing 1 MB 208 | Amp. / Poles | 16 3 | 16 4 | 16 5 | 32 4 | 32 5 | 63 4 | 63 5 |
|---|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 364 | 364 | 364 | 364 | 364 | 460 | 460 |
| | b | 134 | 134 | 134 | 134 | 134 | 180 | 180 |
| | c | 160 | 162 | 163 | 168 | 168 | 195 | 195 |
| | d | 347 | 347 | 347 | 347 | 347 | 440 | 440 |
| | e | 117 | 117 | 117 | 117 | 117 | 160 | 160 |
| | f | 6,3 | 6,3 | 6,3 | 6,3 | 6,3 | 8,1 | 8,1 |
| | g. | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | h | 391 | 395 | 398 | 408 | 411 | 502 | 502 |
| | M | 32/40 | 32/40 | 32/40 | 32/40 | 32/40 | 40 | 40 |
| | M* | 2x32 | 2x32 | 2x32 | 2x32 | 2x32 | 2x40 | 2x40 |
| Max. cable diam. (mm) | | 27 | 27 | 27 | 27 | 27 | 27 | 27 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —10 | 2,5 —10 | 6 —25 | 6 —25 |




| Drawing 1 MB 208 | Amp. / Poles | 16 3 | 16 4 | 16 5 | 32 4 | 32 5 | 63 4 | 63 5 |
|---|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 364 | 364 | 364 | 364 | 364 | 460 | 460 |
| | b | 134 | 134 | 134 | 134 | 134 | 180 | 180 |
| | c | 160 | 162 | 163 | 168 | 168 | 195 | 195 |
| | d | 347 | 347 | 347 | 347 | 347 | 440 | 440 |
| | e | 117 | 117 | 117 | 117 | 117 | 160 | 160 |
| | f | 6,3 | 6,3 | 6,3 | 6,3 | 6,3 | 8,1 | 8,1 |
| | g. | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | h | 391 | 395 | 398 | 408 | 411 | 502 | 502 |
| | M | 32/40 | 32/40 | 32/40 | 32/40 | 32/40 | 40 | 40 |
| | M* | 2x32 | 2x32 | 2x32 | 2x32 | 2x32 | 2x40 | 2x40 |
| Max. cable diam. (mm) | | 27 | 27 | 27 | 27 | 27 | 27 | 27 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —10 | 2,5 —10 | 6 —25 | 6 —25 |

# Receptacles ■ Wall mounted receptacles, screw terminals, fused,

to DIN VDE 0623, EN 60309-2. Colour: electric grey and/or colour code. Enclosure and insert made of AMAPLAST.

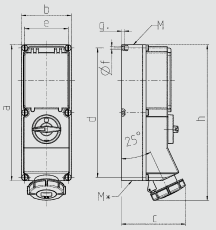
| Image | Title | Description |
|---|---|---|
|  | **Wall mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 1/2<br><br>Product group 1089.<br>Image 5643A. | ■ screw terminals<br>■ 63A: SoftCONTACT<br>■ switched<br>■ mechanical DUO-interlock<br>■ DIN rail<br>■ receptacles can be padlocked |
|  | **Wall mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 1/2<br><br>Product group 1127.<br>Image 7242. | ■ screw terminals<br>■ 63A: SoftCONTACT<br>■ switched<br>■ mechanical DUO-interlock<br>■ circuit breaker, K-characteristics<br>■ receptacles can be padlocked |
|  | **Wall mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 1/2<br><br>Product group 1128.<br>Image 7249. | ■ screw terminals<br>■ 63A: SoftCONTACT<br>■ switched<br>■ mechanical DUO-interlock<br>■ RCD (0.03A)<br>■ other leakage current ratings on request<br>■ receptacles can be padlocked |
|  | **Wall mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 1<br><br>Product group 1083.<br>Image 5695A. | ■ screw terminals<br>■ TorsionSpringCONTACT<br>■ switched<br>■ mechanical DUO-interlock<br>■ 3 pole fuse socket NH 00<br>■ upon request with provision for an additional padlock |

# switched and interlocked, 16A - 125A, IP 67

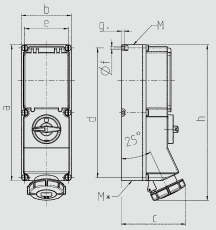
Other voltages and frequencies available on request.

| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | >50 - 500V 100-300 Hz | >50 - 500V 300-500 Hz |
|---|---|---|---|---|---|---|---|
| | | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p |
| | | 4h 4h 4h | 6h 9h 9h | 9h 6h 6h | 7h 7h 7h | 10h 10h 10h | 2h 2h 2h |
| | | Part number | | | | | |
| 16 | 3 | | 7050 | | | | |
| 16 | 4 | | | 5630A | | | |
| 16 | 5 | | | 5633A | | | |
| 32 | 4 | | | 5635A | | | |
| 32 | 5 | | | 5638A | | | |
| 63 | 4 | | | 5640A | 5641A | | |
| 63 | 5 | | | 5643A | | | |
| 16 | 3 | | 7238 | | | | |
| 16 | 4 | | | 7239 | | | |
| 16 | 5 | | | 7240 | | | |
| 32 | 4 | | | 7241 | | | |
| 32 | 5 | | | 7242 | | | |
| 63 | 4 | | | 7243 | | | |
| 63 | 5 | | | 7244 | | | |
| 16 | 3 | | 7245 | | | | |
| 16 | 4 | | | 7246 | | | |
| 16 | 5 | | | 7247 | | | |
| 32 | 4 | | | 7248 | | | |
| 32 | 5 | | | 7249 | | | |
| 63 | 4 | | | 7250 | | | |
| 63 | 5 | | | 7251 | | | |
| 125 | 4 | | | 5679A | 5693A | | |
| 125 | 5 | | | 5695A | | | |

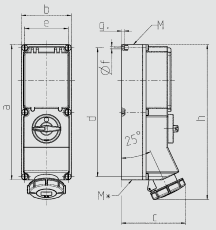
Drawing



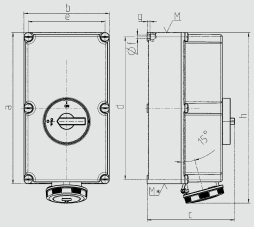
| Drawing 1 MB 181/620 | Amp. Poles | 16 3 | 16 4 | 16 5 | 32 4 | 32 5 | 63 4 | 63 5 |
|---|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 364 | 364 | 364 | 364 | 364 | 460 | 460 |
| | b | 134 | 134 | 134 | 134 | 134 | 180 | 180 |
| | c | 160 | 162 | 163 | 168 | 168 | 200 | 200 |
| | d | 347 | 347 | 347 | 347 | 347 | 440 | 440 |
| | e | 117 | 117 | 117 | 117 | 117 | 160 | 160 |
| | f | 6,3 | 6,3 | 6,3 | 6,3 | 6,3 | 8,1 | 8,1 |
| | g. | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | h | 391 | 395 | 398 | 408 | 411 | 200 | 200 |
| | M | 32/40 | 32/40 | 32/40 | 32/40 | 32/40 | 40 | 40 |
| | M* | 2x32 | 2x32 | 2x32 | 2x32 | 2x32 | 2x40 | 2x40 |
| Max. cable diam. (mm) | | 27 | 27 | 27 | 27 | 27 | 27 | 27 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —10 | 2,5 —10 | 6 —25 | 6 —25 |



| Drawing 1 MB 181/620 | Amp. Poles | 16 3 | 16 4 | 16 5 | 32 4 | 32 5 | 63 4 | 63 5 |
|---|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 364 | 364 | 364 | 364 | 364 | 460 | 460 |
| | b | 134 | 134 | 134 | 134 | 134 | 180 | 180 |
| | c | 160 | 162 | 163 | 168 | 168 | 200 | 200 |
| | d | 347 | 347 | 347 | 347 | 347 | 440 | 440 |
| | e | 117 | 117 | 117 | 117 | 117 | 160 | 160 |
| | f | 6,3 | 6,3 | 6,3 | 6,3 | 6,3 | 8,1 | 8,1 |
| | g. | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | h | 391 | 395 | 398 | 408 | 411 | 200 | 200 |
| | M | 32/40 | 32/40 | 32/40 | 32/40 | 32/40 | 40 | 40 |
| | M* | 2x32 | 2x32 | 2x32 | 2x32 | 2x32 | 2x40 | 2x40 |
| Max. cable diam. (mm) | | 27 | 27 | 27 | 27 | 27 | 27 | 27 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —10 | 2,5 —10 | 6 —25 | 6 —25 |



| Drawing 1 MB 181/620 | Amp. Poles | 16 3 | 16 4 | 16 5 | 32 4 | 32 5 | 63 4 | 63 5 |
|---|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 364 | 364 | 364 | 364 | 364 | 460 | 460 |
| | b | 134 | 134 | 134 | 134 | 134 | 180 | 180 |
| | c | 160 | 162 | 163 | 168 | 168 | 200 | 200 |
| | d | 347 | 347 | 347 | 347 | 347 | 440 | 440 |
| | e | 117 | 117 | 117 | 117 | 117 | 160 | 160 |
| | f | 6,3 | 6,3 | 6,3 | 6,3 | 6,3 | 8,1 | 8,1 |
| | g. | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | h | 391 | 395 | 398 | 408 | 411 | 200 | 200 |
| | M | 32/40 | 32/40 | 32/40 | 32/40 | 32/40 | 40 | 40 |
| | M* | 2x32 | 2x32 | 2x32 | 2x32 | 2x32 | 2x40 | 2x40 |
| Max. cable diam. (mm) | | 27 | 27 | 27 | 27 | 27 | 27 | 27 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —10 | 2,5 —10 | 6 —25 | 6 —25 |



| Drawing 1 MB 177 | Amp. Poles | 125 3 | 125 4 | 125 5 |
|---|---|---|---|---|
| Dim. in mm | a | 460 | 460 | 460 |
| | b | 260 | 260 | 260 |
| | c | 283 | 283 | 283 |
| | d | 434 | 434 | 434 |
| | e | 234 | 234 | 234 |
| | f | 11 | 11 | 11 |
| | g. | 9 | 9 | 9 |
| | h | 519 | 519 | 519 |
| | M | 63 | 63 | 63 |
| | M* | 2x63 | 2x63 | 2x63 |
| Max. cable diam. (mm) | | 44 | 44 | 44 |
| Terminal for cond. cross section (mm²) min.-max. | | 25 —70 | 25 —70 | 25 —70 |

# Receptacles ■ Wall mounted receptacles, screw terminals, fused,

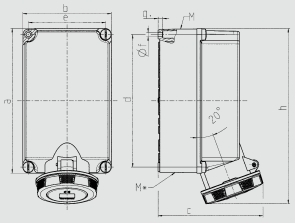
to DIN VDE 0623, EN 60309-2. Colour: electric grey and/or colour code. Enclosure and insert made of AMAPLAST.

| Image | Title | Description |
|---|---|---|
|  | **Wall mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 3<br><br>Product group 1078.<br>Image 7019. | ■ screw terminals<br>■ SoftCONTACT<br>■ contactor and electrical interlock |
|  | **Wall mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 1<br><br>Product group 1078.<br>Image 7026. | ■ screw terminals<br>■ TorsionSpringCONTACT<br>■ contactor and electrical interlock |
|  | **Wall mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 1<br><br>Product group 1088.<br>Image 7040. | ■ screw terminals<br>■ TorsionSpringCONTACT<br>■ contactor and electrical interlock<br>■ 3 pole fuse socket NH 00 |

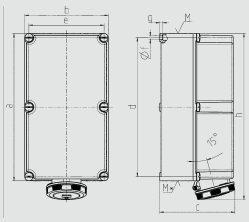
# electrically interlocked, 63A - 125A, IP 67

Other voltages and frequencies available on request.

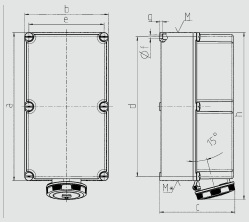
| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | >50 - 500V 100-300 Hz | >50 - 500V 300-500 Hz | Drawing |
|---|---|---|---|---|---|---|---|---|
| | | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | |
| | | 4h 4h 4h | 6h 9h 9h | 9h 6h 6h | 7h 7h 7h | 10h 10h 10h | 2h 2h 2h | |
| | | Part number | | | | | | |
| 63 | 5 | | | 7019 | | | | |
| 125 | 5 | | | 7026 | | | | |
| 125 | 5 | | | 7040 | | | | |



| Drawing 1 MB 178 | Amp. Poles | 63 4 | 63 5 |
|---|---|---|---|
| Dim. in mm | a | 264 | 264 |
| | b | 163 | 163 |
| | c | 191 | 191 |
| | d | 240 | 240 |
| | e | 140 | 140 |
| | f | 8,1 | 8,1 |
| | g. | 8 | 8 |
| | h | 319 | 319 |
| | M | 2x40 | 2x40 |
| | M* | 2x40 | 2x40 |
| Max. cable diam. (mm) | | 27 | 27 |
| Terminal for cond. cross section (mm²) min.-max. | | —25 | —25 |



| Drawing 1 MB 163 | Amp. Poles | 125 4 | 125 5 |
|---|---|---|---|
| Dim. in mm | a | 460 | 460 |
| | b | 260 | 260 |
| | c | 234 | 234 |
| | d | 434 | 434 |
| | e | 234 | 234 |
| | f | 11 | 11 |
| | g. | 9 | 9 |
| | h | 519 | 519 |
| | M | 63 | 63 |
| | M* | 2x63 | 2x63 |
| Max. cable diam. (mm) | | 44 | 44 |
| Terminal for cond. cross section (mm²) min.-max. | | 25 —70 | 25 —70 |



| Drawing 1 MB 163 | Amp. Poles | 125 4 | 125 5 |
|---|---|---|---|
| Dim. in mm | a | 460 | 460 |
| | b | 260 | 260 |
| | c | 234 | 234 |
| | d | 434 | 434 |
| | e | 234 | 234 |
| | f | 11 | 11 |
| | g. | 9 | 9 |
| | h | 519 | 519 |
| | M | 63 | 63 |
| | M* | 2x63 | 2x63 |
| Max. cable diam. (mm) | | 44 | 44 |
| Terminal for cond. cross section (mm²) min.-max. | | 25 —70 | 25 —70 |

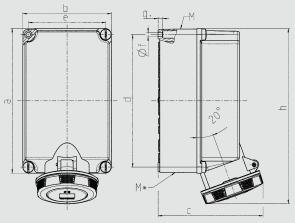
# Receptacles ■ Wall mounted receptacles, screw terminals, fused,

to DIN VDE 0623, EN 60309-2. Colour: electric grey and/or colour code. Enclosure and insert made of AMAPLAST.

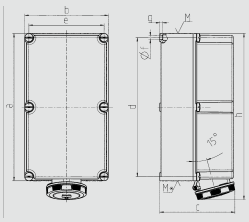
| Image | Title | Description |
|---|---|---|
|  | **Wall mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 3<br><br>Product group 1078.<br>Image 7024. | ■ screw terminals<br>■ SoftCONTACT<br>■ contactor and electrical PCS interlock |
|  | **Wall mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 1<br><br>Product group 1078.<br>Image 7031. | ■ screw terminals<br>■ TorsionSpringCONTACT<br>■ contactor and electrical PCS interlock |
|  | **Wall mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 1<br><br>Product group 1088.<br>Image 7045. | ■ screw terminals<br>■ TorsionSpringCONTACT<br>■ contactor and electrical PCS interlock<br>■ 3 pole fuse socket NH 00 |

# electrically interlocked, 63A - 125A, IP 67

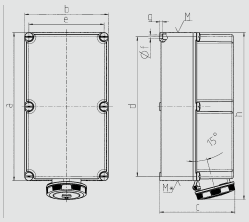
Other voltages and frequencies available on request.

| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | >50 - 500V 100-300 Hz | >50 - 500V 300-500 Hz | Drawing |
|---|---|---|---|---|---|---|---|---|
| | | 3p 4p 5p<br>4h 4h 4h | 3p 4p 5p<br>6h 9h 9h | 3p 4p 5p<br>9h 6h 6h | 3p 4p 5p<br>7h 7h 7h | 3p 4p 5p<br>10h 10h 10h | 3p 4p 5p<br>2h 2h 2h | |
| | | Part number | | | | | | |
| 63 | 4 | | | 7021 | | | |  |
| 63 | 5 | | | 7024 | | | | |

| Drawing 1 MB 178 | Amp. Poles | 63 4 | 63 5 |
|---|---|---|---|
| Dim. in mm | a | 264 | 264 |
| | b | 163 | 163 |
| | c | 191 | 191 |
| | d | 240 | 240 |
| | e | 140 | 140 |
| | f | 8,1 | 8,1 |
| | g. | 8 | 8 |
| | h | 319 | 319 |
| | M | 2x40 | 2x40 |
| | M* | 2x40 | 2x40 |
| Max. cable diam. (mm) | | 27 | 27 |
| Terminal for cond. cross section (mm²) min.-max. | | —25 | —25 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 125 | 4 | | 7027 | 7028 | 7029 | | |  |
| 125 | 5 | | | 7031 | | | | |

| Drawing 1 MB 163 | Amp. Poles | 125 4 | 125 5 |
|---|---|---|---|
| Dim. in mm | a | 460 | 460 |
| | b | 260 | 260 |
| | c | 234 | 234 |
| | d | 434 | 434 |
| | e | 234 | 234 |
| | f | 11 | 11 |
| | g. | 9 | 9 |
| | h | 519 | 519 |
| | M | 63 | 63 |
| | M* | 2x63 | 2x63 |
| Max. cable diam. (mm) | | 44 | 44 |
| Terminal for cond. cross section (mm²) min.-max. | | 25 —70 | 25 —70 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 125 | 4 | | | 7042 | | | |  |
| 125 | 5 | | | 7045 | | | | |

| Drawing 1 MB 163 | Amp. Poles | 125 4 | 125 5 |
|---|---|---|---|
| Dim. in mm | a | 460 | 460 |
| | b | 260 | 260 |
| | c | 234 | 234 |
| | d | 434 | 434 |
| | e | 234 | 234 |
| | f | 11 | 11 |
| | g. | 9 | 9 |
| | h | 519 | 519 |
| | M | 63 | 63 |
| | M* | 2x63 | 2x63 |
| Max. cable diam. (mm) | | 44 | 44 |
| Terminal for cond. cross section (mm²) min.-max. | | 25 —70 | 25 —70 |

# Receptacles ■ Wall mounted receptacles, screw terminals, switched and

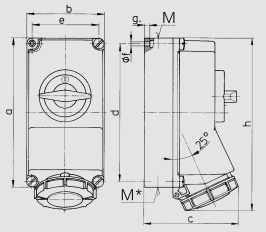
to DIN VDE 0623, EN 60309-2. Colour: grey (RAL 7000) and colour code. Enclosure made of AMELAN®.

| Image | Title | Description |
|---|---|---|
|  | **Wall mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 1<br><br>Product group 1074.<br>Image 7285. | ■ screw terminals<br>■ highly resistant to chemicals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ switched<br>■ mechanical DUO-interlock<br>■ receptacles can be padlocked |
|  | **Wall mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 1<br><br>Product group 1074.<br>Image 7290. | ■ screw terminals<br>■ SoftCONTACT<br>■ highly resistant to chemicals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ switched<br>■ mechanical DUO-interlock<br>■ receptacles can be padlocked |
|  | **Wall mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 1<br><br>Product group 1089.<br>Image 7292. | ■ screw terminals<br>■ 63A: SoftCONTACT<br>■ highly resistant to chemicals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ switched<br>■ mechanical DUO-interlock<br>■ DIN-rail<br>■ receptacles can be padlocked |

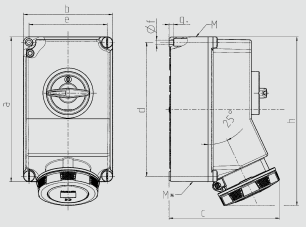
# interlocked, highly resistant to chemicals, 16A - 63A, IP 67

Other voltages and frequencies available on request.

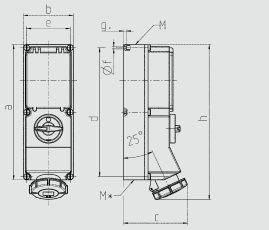
| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | >50 - 500V 100-300 Hz | >50 - 500V 300-500 Hz | Drawing |
|---|---|---|---|---|---|---|---|---|
| | | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | |
| | | 4h 4h 4h | 6h 9h 9h | 9h 6h 6h | 7h 7h 7h | 10h 10h 10h | 2h 2h 2h | |
| | | Part number | | | | | | |
| 16 | 3 | | 7283 | | | | | |
| 16 | 4 | | | 7284 | | | | |
| 16 | 5 | | | 7285 | | | | |
| 32 | 3 | | 7286 | | | | | |
| 32 | 4 | | | 7287 | | | | |
| 32 | 5 | | | 7288 | | | | |
| 63 | 4 | | | 7289 | | | | |
| 63 | 5 | | | 7290 | | | | |
| 16 | 5 | | | 7292 | | | | |
| 32 | 5 | | | 7294 | | | | |
| 63 | 4 | | | 7295 | | | | |
| 63 | 5 | | | 7296 | | | | |




| Drawing | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| 1 MB 207 | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 225 | 225 | 225 | 225 | 225 | 225 |
| | b | 118 | 118 | 118 | 118 | 118 | 118 |
| | c | 144 | 146 | 147 | 152 | 152 | 153 |
| | d | 208 | 208 | 208 | 208 | 208 | 208 |
| | e | 101 | 101 | 101 | 101 | 101 | 101 |
| | f | 6,3 | 6,3 | 6,3 | 6,3 | 6,3 | 6,3 |
| | g. | 8 | 8 | 8 | 8 | 8 | 8 |
| | h | 252 | 255 | 259 | 268 | 268 | 274 |
| | M | 1xM25 and 1xM32 | | | 1xM25 and 1xM32 | | |
| | M* | 2x25 | 2x25 | 2x25 | 2x25 | 2x25 | 2x25 |
| Max. cable diam. (mm) | | 25 | 25 | 25 | 25 | 25 | 25 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —10 | 2,5 —10 | 2,5 —10 |




| Drawing | Amp. | 63 | | |
|---|---|---|---|---|
| 1 MB 180 | Poles | 3 | 4 | 5 |
| Dim. in mm | a | 264 | 264 | 264 |
| | b | 163 | 163 | 163 |
| | c | 198 | 198 | 198 |
| | d | 240 | 240 | 240 |
| | e | 140 | 140 | 140 |
| | f | 8,1 | 8,1 | 8,1 |
| | g. | 8 | 8 | 8 |
| | h | 303 | 303 | 303 |
| | M | 40 | 40 | 40 |
| | M* | 40 | 40 | 40 |
| Max. cable diam. (mm) | | 32 | 32 | 32 |
| Terminal for cond. cross section (mm²) min.-max. | | 6 —25 | 6 —25 | 6 —25 |




| Drawing | Amp. | 16 | | | 32 | | 63 | |
|---|---|---|---|---|---|---|---|---|
| 1 MB 181/620 | Poles | 3 | 4 | 5 | 4 | 5 | 4 | 5 |
| Dim. in mm | a | 364 | 364 | 364 | 364 | 364 | 460 | 460 |
| | b | 134 | 134 | 134 | 134 | 134 | 180 | 180 |
| | c | 160 | 162 | 163 | 168 | 168 | 200 | 200 |
| | d | 347 | 347 | 347 | 347 | 347 | 440 | 440 |
| | e | 117 | 117 | 117 | 117 | 117 | 160 | 160 |
| | f | 6,3 | 6,3 | 6,3 | 6,3 | 6,3 | 8,1 | 8,1 |
| | g. | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | h | 391 | 395 | 398 | 408 | 411 | 200 | 200 |
| | M | 32/40 | 32/40 | 32/40 | 32/40 | 32/40 | 40 | 40 |
| | M* | 2x32 | 2x32 | 2x32 | 2x32 | 2x32 | 2x40 | 2x40 |
| Max. cable diam. (mm) | | 27 | 27 | 27 | 27 | 27 | 27 | 27 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —10 | 2,5 —10 | 6 —25 | 6 —25 |

# Receptacles ■ Panel mounted receptacles, screw terminals, 16A -125A,

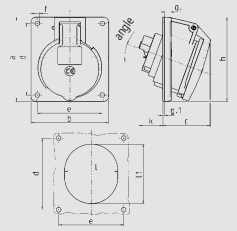
to DIN VDE 0623, EN 60309-2. Colour: electric grey and/or colour code. Enclosure and insert made of AMAPLAST.

| Image | Title | Description |
|---|---|---|
|  | **Panel mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1044.<br>Image 1463. | ■ screw terminals<br>■ suitable for through wiring<br>■ 20° inclination<br>■ 32A receptacles optional fitted with auxiliary contact |
|  | **Panel mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 5<br><br>Product group 1044.<br>Image 1155A. | ■ screw terminals<br>■ SoftCONTACT<br>■ 20° inclination<br>■ products with pilot contact: part no. + index P |
|  | **Panel mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1056.<br>Image 1385. | ■ screw terminals<br>■ straight |
|  | **Panel mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 5<br><br>Product group 1056.<br>Image 1252A. | ■ screw terminals<br>■ SoftCONTACT<br>■ straight<br>■ products with pilot contact: part no. + index P |
|  | **Panel mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10<br><br>Product group 1048.<br>Image 1551. | ■ screw terminals<br>■ 20° inclination<br>■ 32A receptacles optional fitted with auxiliary contact |
|  | **Panel mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 5<br><br>Product group 1048.<br>Image 209A. | ■ screw terminals<br>■ 63A: SoftCONTACT<br>■ 125A: TorsionSpringCONTACT<br>■ 20° inclination for 63A<br>■ 15° inclination for 125A<br>■ products with pilot contact: part no. + index P |

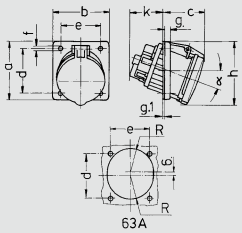
# IP 44 and IP 67

Other voltages and frequencies available on request.

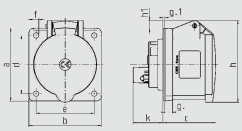
| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | >50 - 500V 100-300 Hz | >50 - 500V 300-500 Hz | Drawing |
|---|---|---|---|---|---|---|---|---|
| | | 3p 4p 5p<br>4h 4h 4h | 3p 4p 5p<br>6h 9h 9h | 3p 4p 5p<br>9h 6h 6h | 3p 4p 5p<br>7h 7h 7h | 3p 4p 5p<br>10h 10h 10h | 3p 4p 5p<br>2h 2h 2h | |
| | | Part number | | | | | | |
| 16 | 3 | 1462 | 1463 | 1464 | | 3186 | 3187 | |
| 16 | 4 | 1465 | 1466 | 1467 | 1468 | 1469 | 1470 | |
| 16 | 5 | 1471 | 1472 | 1473 | 3188 | 3189 | 3190 | |
| 32 | 3 | 1491 | 1492 | 1493 | | 3201 | 3202 | |
| 32 | 4 | 1494 | 1495 | 1496 | 1497 | 1486 | 1487 | |
| 32 | 5 | 1498 | 1499 | 1500 | 3191 | 3192 | 3193 | |
| 63 | 3 | 1146A | 1147A | 1148A | | | | |
| 63 | 4 | 1149A | 1150A | 1151A | 1152A | | | |
| 63 | 5 | 1153A | 1154A | 1155A | | | | |
| 16 | 3 | 1365 | 1366 | 1367 | | 3054 | 3055 | |
| 16 | 4 | 1388 | 1389 | 1390 | 1391 | 1392 | 1393 | |
| 16 | 5 | 1384 | 1386 | 1385 | 3057 | 3059 | 3060 | |
| 32 | 3 | 1394 | 1395 | 1396 | | | | |
| 32 | 4 | 1397 | 1398 | 1399 | 1400 | 1401 | 1402 | |
| 32 | 5 | 3449 | 3454 | 3451 | 3452 | 3455 | 3447 | |
| 63 | 3 | 1260A | 1261A | 1262A | | | | |
| 63 | 4 | | 1247A | 1248A | 1249A | | | |
| 63 | 5 | 1250A | 1251A | 1252A | | | | |
| 16 | 3 | 1474 | 1475 | 1476 | | | | |
| 16 | 4 | 1477 | 1478 | 1479 | 1480 | 1481 | | |
| 16 | 5 | | | 1485 | | | | |
| 32 | 3 | 1501 | 1502 | 1503 | | | | |
| 32 | 4 | 1504 | 1505 | 1506 | 1507 | | | |
| 32 | 5 | | 1490 | 1551 | | | | |
| 63 | 3 | 2179A | 2180A | 2181A | | | | |
| 63 | 4 | | 204A | 205A | 206A | | | |
| 63 | 5 | 207A | 208A | 209A | 3507 | | | |
| 125 | 3 | | 3575 | | | | | |
| 125 | 4 | 210A | 211A | 212A | 213A | | | |
| 125 | 5 | | 215A | 216A | | | | |



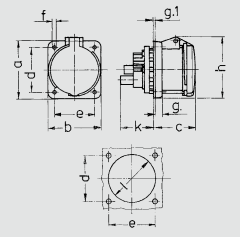
| Drawing | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| 1 MB 260 | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 73.5 | 100 | 100 | 100 | 100 | 100 |
| | b | 64 | 92 | 92 | 92 | 92 | 92 |
| | c | 50 | 59 | 58 | 62 | 62 | 61 |
| | d | 60 | 85 | 85 | 85 | 85 | 85 |
| | e | 52 | 77 | 77 | 77 | 77 | 77 |
| | f | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 |
| | g. | 7 | 8 | 8 | 8 | 8 | 8 |
| | g.1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | h | 79 | 100 | 100 | 103 | 103 | 106 |
| | k | 44 | 34 | 34 | 54 | 54 | 49 |
| | l | 52 | 55 | 65 | 67 | 67 | 72 |
| | l1 | 60 | 63 | 72 | 82 | 82 | 85 |
| | α | 20° | 20° | 20° | 20° | 20° | 20° |
| Terminal for cond. cross section (mm²) min.-max. | | 1.5 —4 | 1.5 —4 | 1.5 —4 | 2.5 —10 | 2.5 —10 | 2.5 —10 |



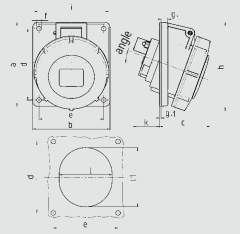

| Drawing | Amp. | 63 | | |
|---|---|---|---|---|
| 1 MB 297 | Poles | 3 | 4 | 5 |
| Dim. in mm | a | 110 | 110 | 110 |
| | b | 106 | 106 | 106 |
| | c | 85 | 85 | 85 |
| | d | 85 | 85 | 85 |
| | e | 77 | 77 | 77 |
| | f | 6,2 | 6,2 | 6,2 |
| | g. | 12 | 12 | 12 |
| | g.1 | 2 | 2 | 2 |
| | h | 122 | 122 | 122 |
| | k | 69 | 69 | 69 |
| | R | 46 | 46 | 46 |
| | α | 20° | 20° | 20° |
| Terminal for cond. cross section (mm²) min.-max. | | 6 —25 | 6 —25 | 6 —25 |



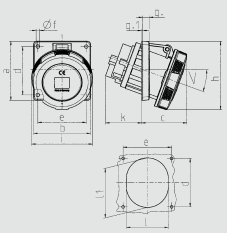
| Drawing | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| 1 MB 247 | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 75 | 75 | 75 | 75 | 75 | 75 |
| | b | 75 | 75 | 75 | 75 | 75 | 75 |
| | c | 53 | 53 | 55 | 64 | 64 | 65 |
| | d | 60 | 60 | 60 | 60 | 60 | 60 |
| | e | 60 | 60 | 60 | 60 | 60 | 60 |
| | f | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 |
| | g. | 8 | 8 | 8 | 8 | 8 | 8 |
| | g.1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | h | 75 | 80 | 83 | 89 | 89 | 100 |
| | h1 | | 6 | 8 | 11 | 11 | 12 |
| | k | 31 | 32 | 32 | 39 | 39 | 39 |
| | l | 43 | 52 | 54 | 58 | 58 | 62 |
| Terminal for cond. cross section (mm²) min.-max. | | 1.5 —4 | 1.5 —4 | 1.5 —4 | 2.5 —10 | 2.5 —10 | 2.5 —10 |



| Drawing | Amp. | 63 | | |
|---|---|---|---|---|
| 1 MB 211 | Poles | 3 | 4 | 5 |
| Dim. in mm | a | 107 | 107 | 107 |
| | b | 100 | 100 | 100 |
| | c | 80 | 80 | 80 |
| | d | 85 | 85 | 85 |
| | e | 77 | 77 | 77 |
| | f | 6. | 6. | 6. |
| | g. | 12 | 12 | 12 |
| | g.1 | 2 | 2 | 2 |
| | h | 113 | 113 | 113 |
| | k | 55 | 55 | 55 |
| | l | 88 | 88 | 88 |
| Terminal for cond. cross section (mm²) min.-max. | | 6 —25 | 6 —25 | 6 —25 |



| Drawing | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| 1 MB 251 | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 73,5 | 100 | 100 | 100 | 100 | 100 |
| | b | 64 | 92 | 92 | 92 | 92 | 92 |
| | c | 52 | 60 | 62 | 64 | 64 | 66 |
| | d | 60 | 85 | 85 | 85 | 85 | 85 |
| | e | 52 | 77 | 77 | 77 | 77 | 77 |
| | f | 5,5 | 5,5 | 5,5 | 5,5 | 5,5 | 5,5 |
| | g. | 8 | 8 | 8 | 8 | 8 | 8 |
| | g.1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | h | 84 | 100 | 105 | 109 | 109 | 113 |
| | i | 78 | 85 | 96 | 103 | 103 | 110 |
| | k | 43 | 32 | 32 | 53 | 53 | 45 |
| | l | 52 | 55 | 65 | 67 | 67 | 72 |
| | l1 | 60 | 63 | 72 | 82 | 82 | 85 |
| | α | 20° | 20° | 20° | 20° | 20° | 20° |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —10 | 2,5 —10 | 2,5 —10 |



| 1 MB 298<br>1 MB 601 | Amp.<br>Poles | 63<br>3 | 4 | 5 | 125<br>3 | 4 | 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 110 | 110 | 110 | 114 | 114 | 114 |
| | b | 106 | 106 | 106 | 110 | 110 | 110 |
| | c | 85 | 85 | 85 | 75 | 75 | 75 |
| | d | 85 | 85 | 85 | 90 | 90 | 90 |
| | e | 77 | 77 | 77 | 90 | 90 | 90 |
| | f | 6,2 | 6,2 | 6,2 | 6,2 | 6,2 | 6,2 |
| | g. | 12 | 12 | 12 | 13 | 13 | 13 |
| | g.1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | h | 128 | 128 | 128 | 133 | 133 | 133 |
| | i | 113 | 113 | 113 | 126 | 126 | 126 |
| | k | 67 | 67 | 67 | 103 | 103 | 103 |
| | l | 92 | 92 | 92 | 94 | 94 | 94 |
| | l1 | 98 | 98 | 98 | 107 | 107 | 107 |
| | < | 20° | 20° | 20° | 15° | 15° | 15° |
| Terminal for cond. cross section (mm²) min.-max. | | 6 —25 | 6 —25 | 6 —25 | 25 70 | 25 70 | 25 70 |

# Receptacles ■ Panel mounted receptacles, screw terminals, 16A - 125A,

to DIN VDE 0623, EN 60309-2. Colour: electric grey and/or colour code. Enclosure and insert made of AMAPLAST.

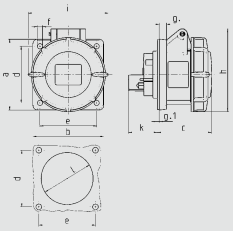
| Image | Title | Description |
|---|---|---|
|  | **Panel mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10<br><br>Product group 1046.<br>Image 228A. | ■ screw terminals<br>■ straight |
|  | **Panel mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 5<br><br>Product group 1046.<br>Image 1128A. | ■ screw terminals<br>■ 63A: SoftCONTACT<br>■ 125A: TorsionSpringCONTACT<br>■ straight<br>■ products with pilot contact: part no. + index P |
|  | **Panel mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10<br><br>Product group 1045.<br>Image 1103. | ■ screw terminals<br>■ 20° inclination |
|  | **Panel mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1032.<br>Image 857. | ■ screw terminals<br>■ small flange dimensions<br>■ 20° inclination |
|  | **Panel mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10/5<br><br>Product group 1044.<br>Image 20147. | ■ screw terminals<br>■ 63A: SoftCONTACT<br>■ standard flange dimensions<br>■ uniform fixing hole spacing<br>■ 15° inclination for 16A and 32A, 20° inclination for 63A<br>■ 63A receptacles with pilot contact: part no. + index P |
|  | **Panel mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 5<br><br>Product group 1190.<br>Image 3641. | ■ screw terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ 80° inclination<br>■ 20 fixing screws in bag enclosed<br>■ products with pilot contact: part no. + index P |

# IP 44 and IP 67

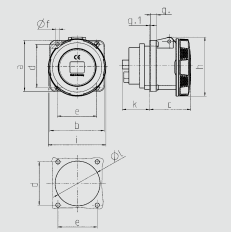
Other voltages and frequencies available on request.

| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | >50 - 500V 100-300 Hz | >50 - 500V 300-500 Hz |
|---|---|---|---|---|---|---|---|
| | | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p |
| | | 4h 4h 4h | 6h 9h 9h | 9h 6h 6h | 7h 7h 7h | 10h 10h 10h | 2h 2h 2h |
| | | Part number | | | | | |
| 16 | 3 | 217A | 218A | 219A | | | |
| 16 | 4 | 220A | 221A | 222A | 223A | 224A | |
| 16 | 5 | 226A | 227A | 228A | | | |
| 32 | 3 | 229A | 230A | 231A | | | |
| 32 | 4 | 232A | 233A | 234A | 235A | 236A | 237A |
| 32 | 5 | 238A | 239A | 240A | | | |
| 63 | 3 | 1263A | 1264A | 1265A | | | |
| 63 | 4 | 1122A | 1123A | 1124A | 1125A | | |
| 63 | 5 | | 1127A | 1128A | | | |
| 125 | 3 | | 3380 | | | | |
| 125 | 4 | 1455 | 1456 | 1457 | 1458 | | |
| 125 | 5 | | 1460 | 1461 | 3283 | | |
| 16 | 3 | 903 | 905 | | | | |
| 16 | 4 | | | 1081 | 1082 | | |
| 16 | 5 | | | 1103 | | | |
| 32 | 3 | 3197 | 3200 | | | | |
| 32 | 4 | | | 3254 | 3256 | | |
| 32 | 5 | | | 3524 | | | |
| 16 | 3 | 858 | 857 | | | | |
| 16 | 5 | | | 20146A | | | |
| 32 | 5 | | | 20147A | | | |
| 63 | 5 | | | 21160A | | | |
| 63 | 5 | | | 3641 | | | |

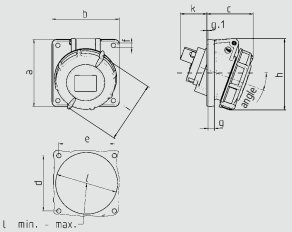
**Drawing**



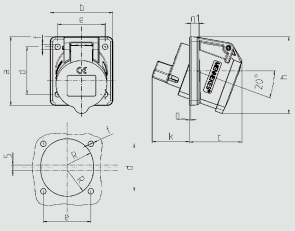
| Drawing 1 MB 141 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 75 | 75 | 75 | 85 | 85 | 85 |
| | b | 75 | 75 | 75 | 75 | 75 | 75 |
| | c | 60 | 61 | 61 | 70 | 70 | 72 |
| | d | 60 | 60 | 60 | 60 | 60 | 60 |
| | e | 60 | 60 | 60 | 60 | 60 | 60 |
| | f | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 |
| | g | 8 | 8 | 8 | 8 | 8 | 8 |
| | g.1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | h | 83 | 88 | 95 | 99 | 99 | 105 |
| | i | 78 | 85 | 96 | 103 | 103 | 110 |
| | k | 31 | 32 | 32 | 39 | 39 | 39 |
| | l | 43 | 52 | 54 | 58 | 58 | 65 |
| Terminal for cond. cross section (mm²) min.-max. | | 1.5 —4 | 1.5 —4 | 1.5 —4 | 2.5 —10 | 2.5 —10 | 2.5 —10 |



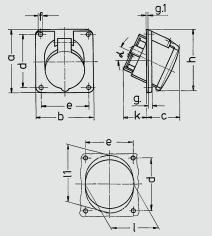
| Drawing 1 MB 212/258 | Amp. | 63 | | | 125 | |
|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 4 | 5 |
| Dim. in mm | a | 107 | 107 | 107 | 130 | 130 |
| | b | 100 | 100 | 100 | 130 | 130 |
| | c | 81 | 81 | 81 | 119 | 119 |
| | d | 85 | 85 | 85 | 104 | 104 |
| | e | 77 | 77 | 77 | 104 | 104 |
| | f | 6 | 6 | 6 | 6,5 | 6,5 |
| | g | 12 | 12 | 12 | 18 | 18 |
| | g.1 | 2 | 2 | 2 | 2 | 2 |
| | h | 117 | 117 | 117 | 129 | 129 |
| | i | 113 | 113 | 113 | 126 | 126 |
| | k | 55 | 55 | 55 | 43 | 43 |
| | l | 88 | 88 | 88 | 95 | 95 |
| Terminal for cond. cross section (mm²) min.-max. | | 6 —25 | 6 —25 | 6 —25 | 25 —70 | 25 —70 |



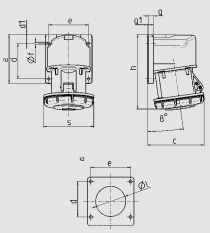
| Drawing 1 MB 452 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 85 | 85 | 85 | 85 | 85 | 85 |
| | b | 85 | 85 | 85 | 85 | 85 | 85 |
| | c | 57 | 59 | 60 | 68 | 68 | 72 |
| | d | 70 | 70 | 70 | 70 | 70 | 70 |
| | e | 70 | 70 | 70 | 70 | 70 | 70 |
| | f | 5,5 | 5,5 | 5,5 | 5,5 | 5,5 | 5,5 |
| | g | 8 | 8 | 8 | 8 | 8 | 8 |
| | g.1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | h | 87 | 91 | 99 | 105 | 105 | 110 |
| | i | 78 | 85 | 96 | 103 | 103 | 110 |
| | k | 39 | 34 | 33 | 53 | 53 | 41 |
| | l min. | 57 | 64 | 70 | 78 | 78 | 78 |
| | l max. | 78 | 78 | 78 | 78 | 78 | 78 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —10 | 2,5 —10 | 2,5 —10 |



| Drawing 1 MB 472 | Amp. | 16 |
|---|---|---|
| | Poles | 3 |
| Dim. in mm | a | 68 |
| | b | 62 |
| | c | 52 |
| | d | 47 |
| | e | 47 |
| | f | 5,5 |
| | g. | 8 |
| | g.1 | 1,5 |
| | h | 76 |
| | k | 37 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 |



| Drawing 1 MB 235 | Amp. | 16 | 32 | 63 |
|---|---|---|---|---|
| | Poles | 5 | 5 | 5 |
| Dim. in mm | a | 110 | 110 | 110 |
| | b | 106 | 106 | 106 |
| | c | 48 | 51 | 85 |
| | d | 90 | 90 | 90 |
| | e | 90 | 90 | 90 |
| | f | 5,2 | 5,2 | 6,5 |
| | g. | 6. | 6. | 12 |
| | g.1 | 2 | 2 | 2 |
| | h | 110 | 110 | 122 |
| | k | 38 | 58 | 69 |
| | l | 78 | 87 | 92 |
| | l1 | – | – | 98 |
| | α | 20° | 20° | 20° |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 2,5 —10 | 6 —25 |



| Drawing 1 MB 561 | Amp. | 63 |
|---|---|---|
| | Poles | 5 |
| Dim. in mm | a | 110 |
| | b | 106 |
| | c | 129 |
| | d | 80 |
| | d1 | 20 |
| | e | 90 |
| | f | 5.5 |
| | g | 12 |
| | g1 | 2 |
| | h | 168 |
| | l | 68 |
| | s | 118 |

# Receptacles ■ Panel mounted receptacles, screw terminals, 16A - 125A,

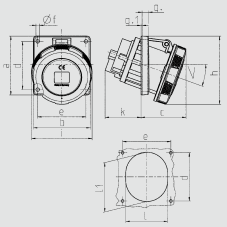
to DIN VDE 0623, EN 60309-2. Colour: electric grey and/or colour code. Enclosure and insert made of AMAPLAST.

| Image | Title | Description |
|---|---|---|
|  | **Panel mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10/5<br><br>Product group 1048.<br>Image 216A. | ■ screw terminals<br>■ 63A: SoftCONTACT<br>■ 125A: TorsionSpringCONTACT<br>■ uniform fixing hole spacing<br>■ receptacles 63A and 125A with pilot contact: part no. + index P |

Other voltages and frequencies available on request.

| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | >50 - 500V 100-300 Hz | >50 - 500V 300-500 Hz |
|---|---|---|---|---|---|---|---|
| | | 3p 4p 5p<br>4h 4h 4h | 3p 4p 5p<br>6h 9h 9h | 3p 4p 5p<br>9h 6h 6h | 3p 4p 5p<br>7h 7h 7h | 3p 4p 5p<br>10h 10h 10h | 3p 4p 5p<br>2h 2h 2h |
| | | Part number | | | | | |
| 16 | 5 | | | 3333 | | | |
| 32 | 5 | | | 3334 | | | |
| 63 | 5 | | | 20148A | | | |
| 125 | 5 | | | 216A | | | |

Drawing



| Drawing | Amp. | 16 | 32 | 63 | | 125 |
|---|---|---|---|---|---|---|
| 1 MB 580/601 | Poles | 5 | 5 | 4 | 5 | 5 |
| Dim. in mm | a | 110 | 110 | 110 | 110 | 114 |
| | b | 106 | 106 | 106 | 106 | 110 |
| | c | 55 | 59 | 84 | 84 | 75 |
| | d | 90 | 90 | 90 | 90 | 90 |
| | e | 90 | 90 | 90 | 90 | 90 |
| | f | 5,2 | 5,2 | 6,5 | 6,5 | 6,2 |
| | g | 8 | 8 | 12 | 12 | 13 |
| | g.1 | 2 | 2 | 2 | 2 | 2 |
| | h | 110 | 115 | 128 | 128 | 133 |
| | i | 89 | 106 | 113 | 113 | 126 |
| | k | 28 | 46 | 64 | 67 | 103 |
| | l | 78 | 87 | 92 | 92 | 94 |
| | l1 | – | – | 98 | 98 | 107 |
| | < | 15° | 15° | 20° | 15° | 15° |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 2,5 —10 | 6 —20 | 6 —20 | 25 —70 |

# Receptacles ■ Cepex flush mounted and panel mounted receptacles,

to DIN VDE 0623, EN 60309-2. Colour: pearl white (RAL 1013). Enclosure and insert made of AMAPLAST.

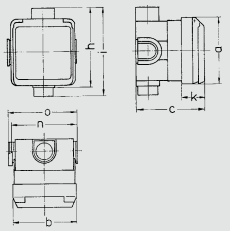
| Image | Title | Description |
|---|---|---|
|  | **Cepex flush mounted receptacle, pearl white**<br><br>**IP 44**<br><br>Std. Pack. Qty: 5<br><br>Product group 1026.<br>Image 4125. | ■ screw terminals<br>■ with flush mounted installation box<br>■ ⚽ meeting DIN 18032 standards for ball rebound |
|  | **Cepex panel mounted receptacle, pearl white**<br><br>**IP 44**<br><br>Std. Pack. Qty: 5<br><br>Product group 1028.<br>Image 4115. | ■ screw terminals<br>■ also suitable for installation in cable ducts and columns<br>■ ⚽ meeting DIN 18032 standards for ball rebound |
|  | **Cepex panel mounted receptacle, pearl white**<br><br>**IP 44**<br><br>Std. Pack. Qty: 5<br><br>Product group 1028.<br>Image 4145. | ■ screw terminals<br>■ with labelling field<br>■ suitable for installation in cable ducts and columns |
|  | **Cepex panel mounted receptacle, pearl white**<br><br>**IP 44**<br><br>Std. Pack. Qty: 5<br><br>Product group 1028.<br>Image 4175. | ■ screw terminals<br>■ with labelling field<br>■ with safety lock<br>■ two keys<br>■ cannot be dismantled when locked<br>■ on request with identical locks<br>■ suitable for installation in cable ducts and columns<br>■ with identical lock: part no. + index G |
|  | **Flush mounted installation box**<br><br>Std. Pack. Qty: 5<br><br>Product group 8236.<br>Image 41404. | ■ for Cepex CEE receptacles 16A and 32A and Cepex receptacles SCHUKO®<br>■ can be combined with all Cepex panel mounted receptacles |

# screw terminals, 16A - 32A, IP 44

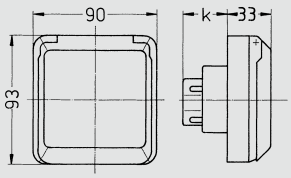
Other voltages and frequencies available on request.

| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | >50 - 500V 100-300 Hz | >50 - 500V 300-500 Hz |
|---|---|---|---|---|---|---|---|
| | | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p |
| | | 4h 4h 4h | 6h 9h 9h | 9h 6h 6h | 7h 7h 7h | 10h 10h 10h | 2h 2h 2h |
| | | Part number | | | | | |
| 16 | 3 | | 4122 | | | | |
| 16 | 5 | | | 4125 | | | |
| 32 | 3 | | 4127 | | | | |
| 32 | 5 | | | 4130 | | | |
| 16 | 3 | 4111 | 4112 | | | | |
| 16 | 4 | | 4233 | 4113 | 4114 | | |
| 16 | 5 | | | 4115 | | | |
| 32 | 3 | 4116 | 4117 | | | | |
| 32 | 4 | | | 4118 | 4119 | | |
| 32 | 5 | | | 4120 | | | |
| 16 | 3 | 4141 | 4142 | | | | |
| 16 | 4 | | | 4143 | | | |
| 16 | 5 | | | 4145 | | | |
| 32 | 3 | 4146 | 4147 | | | | |
| 32 | 4 | | | 4148 | | | |
| 32 | 5 | | | 4150 | | | |
| 16 | 3 | | 4172 | | | | |
| 16 | 4 | | | 4173 | | | |
| 16 | 5 | | | 4175 | | | |
| 32 | 3 | | 4177 | | | | |
| 32 | 4 | | | 4178 | | | |
| 32 | 5 | | | 4180 | | | |
| | | | | 41404 | | | |

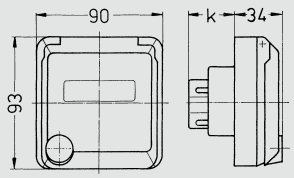
Drawing



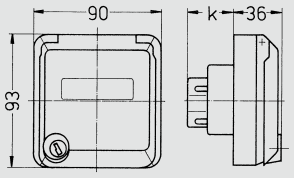

| Drawing 1 MB 336 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 93 | 93 | 93 | 93 | 93 | 93 |
| | b | 90 | 90 | 90 | 90 | 90 | 90 |
| | c | 95 | 95 | 95 | 95 | 95 | 95 |
| | h | 111 | 111 | 111 | 111 | 111 | 111 |
| | i | 124 | 124 | 124 | 124 | 124 | 124 |
| | k | 33 | 33 | 33 | 33 | 33 | 33 |
| | n | 91 | 91 | 91 | 91 | 91 | 91 |
| | o | 95 | 95 | 95 | 95 | 95 | 95 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —6 | 2,5 —6 | 2,5 —6 |



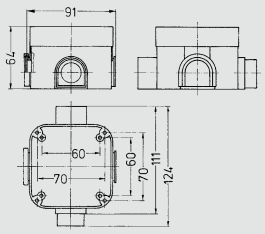

| Drawing 1 MB 315 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | k | 32 | 32 | 32 | 48 | 48 | 48 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —6 | 2,5 —6 | 2,5 —6 |




| Drawing 1 MB 318 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | k | 32 | 32 | 32 | 48 | 48 | 48 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —6 | 2,5 —6 | 2,5 —6 |




| Drawing 1 MB 320 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | k | 32 | 32 | 32 | 48 | 48 | 48 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —6 | 2,5 —6 | 2,5 —6 |




Drawing
1 MB 334

Dim. in mm

# Receptacles ■ Cepex flush mounted and panel mounted receptacles,

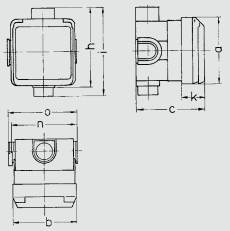
to DIN VDE 0623, EN 60309-2. Colour: alpine white (RAL 9010). Enclosure and insert made of AMAPLAST.

| Image | Title | Description |
|---|---|---|
|  | **Cepex flush mounted receptacle, alpine white**<br><br>**IP 44**<br><br>Std. Pack. Qty: 5<br><br>Product group 1026.<br>Image 4244. | ■ screw terminals<br>■ with flush mounted installation box<br>■ ⚽ meeting DIN 18032 standards for ball rebound |
|  | **Cepex flush mounted receptacle, alpine white**<br><br>**IP 44**<br><br>Std. Pack. Qty: 5<br><br>Product group 1026.<br>Image 4246. | ■ screw terminals<br>■ with labelling field<br>■ with safety lock<br>■ two keys<br>■ cannot be dismantled when locked<br>■ on request with identical locks<br>■ with flush mounted installation box<br>■ with identical lock: part no + index G |
|  | **Cepex panel mounted receptacle, alpine white**<br><br>**IP 44**<br><br>Std. Pack. Qty: 5<br><br>Product group 1028.<br>Image 4262. | ■ screw terminals<br>■ suitable for installation in cable ducts and columns<br>■ ⚽ meeting DIN 18032 standards for ball rebound |
|  | **Cepex panel mounted receptacle, alpine white**<br><br>**IP 44**<br><br>Std. Pack. Qty: 5<br><br>Product group 1028.<br>Image 4247. | ■ screw terminals<br>■ with labelling field<br>■ suitable for installation in cable ducts and columns |
|  | **Flush mounted installation box**<br><br>Std. Pack. Qty: 5<br><br>Product group 8236.<br>Image 41404. | ■ for Cepex CEE receptacles 16A and 32A and Cepex receptacles SCHUKO®<br>■ can be combined with all Cepex panel mounted receptacles |

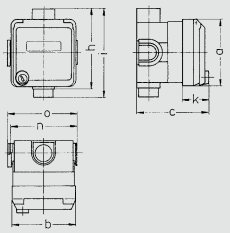
# screw terminals, 16A - 32A, IP 44

Other voltages and frequencies available on request.

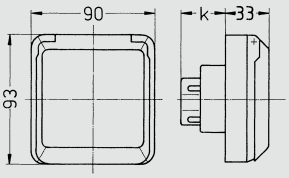
| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | >50 - 500V 100-300 Hz | >50 - 500V 300-500 Hz | Drawing |
|---|---|---|---|---|---|---|---|---|
| | | 3p 4p 5p<br>4h 4h 4h | 3p 4p 5p<br>6h 9h 9h | 3p 4p 5p<br>9h 6h 6h | 3p 4p 5p<br>7h 7h 7h | 3p 4p 5p<br>10h 10h 10h | 3p 4p 5p<br>2h 2h 2h | |
| | | Part number | | | | | | |
| 16 | 3 | | 4243 | | | | | |
| 16 | 5 | | | 4244 | | | | |
| 32 | 5 | | | 4245 | | | | |
| 16 | 5 | | | 4246 | | | | |
| 16 | 5 | | | 4262 | | | | |
| 32 | 5 | | | 4263 | | | | |
| 16 | 3 | | 4247 | | | | | |
| 16 | 4 | | | 4273 | | | | |
| 16 | 5 | | | 4237 | | | | |
| 32 | 3 | | 4274 | | | | | |
| 32 | 4 | | | 4275 | | | | |
| 32 | 5 | | | 4238 | | | | |
| | | | | 41404 | | | | |



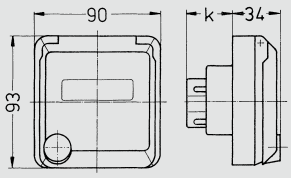

| Drawing 1 MB 336 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 93 | 93 | 93 | 93 | 93 | 93 |
| | b | 90 | 90 | 90 | 90 | 90 | 90 |
| | c | 95 | 95 | 95 | 95 | 95 | 95 |
| | h | 111 | 111 | 111 | 111 | 111 | 111 |
| | i | 124 | 124 | 124 | 124 | 124 | 124 |
| | k | 33 | 33 | 33 | 33 | 33 | 33 |
| | n | 91 | 91 | 91 | 91 | 91 | 91 |
| | o | 95 | 95 | 95 | 95 | 95 | 95 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —6 | 2,5 —6 | 2,5 —6 |



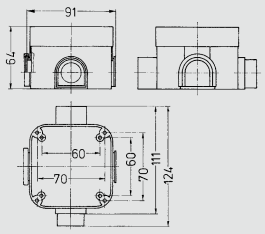

| Drawing 1 MB 352 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 93 | 93 | 93 | 93 | 93 | 93 |
| | b | 90 | 90 | 90 | 90 | 90 | 90 |
| | c | 98 | 98 | 98 | 98 | 98 | 98 |
| | h | 111 | 111 | 111 | 111 | 111 | 111 |
| | i | 124 | 124 | 124 | 124 | 124 | 124 |
| | k | 36 | 36 | 36 | 36 | 36 | 36 |
| | n | 91 | 91 | 91 | 91 | 91 | 91 |
| | o | 95 | 95 | 95 | 95 | 95 | 95 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —6 | 2,5 —6 | 2,5 —6 |




| Drawing 1 MB 315 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | k | 32 | 32 | 32 | 48 | 48 | 48 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —6 | 2,5 —6 | 2,5 —6 |




| Drawing 1 MB 318 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | k | 32 | 32 | 32 | 48 | 48 | 48 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —6 | 2,5 —6 | 2,5 —6 |




Drawing 1 MB 334

Dim. in mm

# Receptacles ■ Cepex panel mounted receptacles, screw terminals,

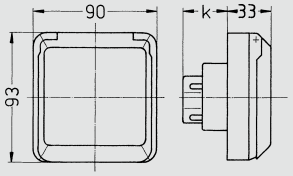
to DIN VDE 0623, EN 60309-2. Colour: grey (RAL 7035). Enclosure and insert made of AMAPLAST.

| Image | Title | Description |
|---|---|---|
|  | **Cepex panel mounted receptacle, grey**<br><br>**IP 44**<br><br>Std. Pack. Qty: 5<br><br>Product group 1028.<br>Image 4211. | ■ screw terminals<br>■ suitable for installation in cable ducts and columns<br>■ ⚽ meeting DIN 18032 standards for ball rebound |
|  | **Cepex panel mounted receptacle, grey**<br><br>**IP 44**<br><br>Std. Pack. Qty: 5<br><br>Product group 1028.<br>Image 4215. | ■ screw terminals<br>■ with labelling field<br>■ suitable for installation in cable ducts and columns |
|  | **Flush mounted installation box**<br><br>Std. Pack. Qty: 5<br><br>Product group 8236.<br>Image 41404. | ■ for Cepex CEE receptacles 16A and 32A and Cepex receptacles SCHUKO®<br>■ can be combined with all Cepex panel mounted receptacles |

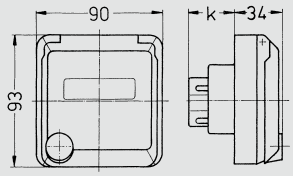
# 16A - 32A, IP 44

Other voltages and frequencies available on request.

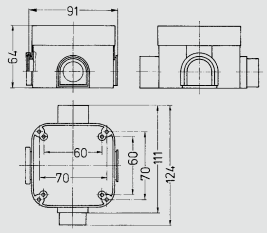
| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | >50 - 500V 100-300 Hz | >50 - 500V 300-500 Hz | Drawing |
|---|---|---|---|---|---|---|---|---|
| | | 3p 4p 5p<br>4h 4h 4h | 3p 4p 5p<br>6h 9h 9h | 3p 4p 5p<br>9h 6h 6h | 3p 4p 5p<br>7h 7h 7h | 3p 4p 5p<br>10h 10h 10h | 3p 4p 5p<br>2h 2h 2h | |
| | | Part number | | | | | | |
| 16 | 3 | | 4210 | | | | | |
| 16 | 5 | | | 4211 | | | | |
| 32 | 3 | | 4212 | | | | | |
| 32 | 4 | | | 4230 | | | | |
| 32 | 5 | | | 4213 | | | | |
| 16 | 3 | | 4214 | | | | | |
| 16 | 5 | | | 4215 | | | | |
| 32 | 5 | | | 4217 | | | | |
| | | | | 41404 | | | | |




| Drawing 1 MB 315 | Amp. / Poles | 16 3 | 16 4 | 16 5 | 32 3 | 32 4 | 32 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | k | 32 | 32 | 32 | 48 | 48 | 48 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —6 | 2,5 —6 | 2,5 —6 |




| Drawing 1 MB 318 | Amp. / Poles | 16 3 | 16 4 | 16 5 | 32 3 | 32 4 | 32 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | k | 32 | 32 | 32 | 48 | 48 | 48 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —6 | 2,5 —6 | 2,5 —6 |




Drawing 1 MB 334

Dim. in mm

# Receptacles ■ Cepex panel mounted receptacles, screw terminals,

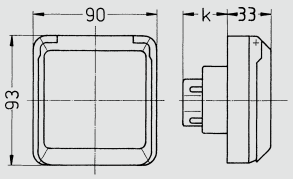
to DIN VDE 0623, EN 60309-2. Colour: silver (RAL 9006). Enclosure and insert made of AMAPLAST.

| Image | Title | Description |
|---|---|---|
|  | **Cepex panel mounted receptacle, silver**<br><br>**IP 44**<br><br>Std. Pack. Qty: 5<br><br>Product group 1028.<br>Image 4279. | ■ screw terminals<br>■ suitable for installation in cable ducts and columns<br>■ ⚽ meeting DIN 18032 standards for ball rebound |
|  | **Cepex panel mounted receptacle, silver**<br><br>**IP 44**<br><br>Std. Pack. Qty: 5<br><br>Product group 1028.<br>Image 4145ME. | ■ screw terminals<br>■ with labelling field<br>■ suitable for installation in cable ducts and columns |
|  | **Flush mounted installation box**<br><br>Std. Pack. Qty: 5<br><br>Product group 8236.<br>Image 41404. | ■ for Cepex CEE receptacles 16A and 32A and Cepex receptacles SCHUKO®<br>■ can be combined with all Cepex panel mounted receptacles |

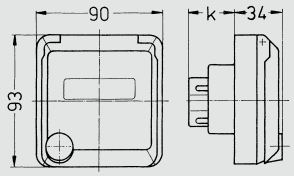
# 16A - 32A, IP 44

Other voltages and frequencies available on request.

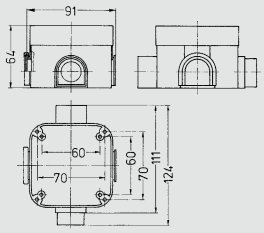
| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | >50 - 500V 100-300 Hz | >50 - 500V 300-500 Hz | Drawing |
|---|---|---|---|---|---|---|---|---|
| | | 3p 4p 5p<br>4h 4h 4h | 3p 4p 5p<br>6h 9h 9h | 3p 4p 5p<br>9h 6h 6h | 3p 4p 5p<br>7h 7h 7h | 3p 4p 5p<br>10h 10h 10h | 3p 4p 5p<br>2h 2h 2h | |
| | | Part number | | | | | | |
| 16 | 3 | | 4278 | | | | | |
| 16 | 5 | | | 4279 | | | | |
| 32 | 5 | | | 4280 | | | | |
| 16 | 5 | | | 4145ME | | | | |
| | | 41404 | | | | | | |




| Drawing 1 MB 315 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | k | 32 | 32 | 32 | 48 | 48 | 48 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —6 | 2,5 —6 | 2,5 —6 |




| Drawing 1 MB 318 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | k | 32 | 32 | 32 | 48 | 48 | 48 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —6 | 2,5 —6 | 2,5 —6 |




Drawing
1 MB 334

Dim. in mm

# Receptacles ■ Panel mounted receptacles, screwless, TwinCONTACT,

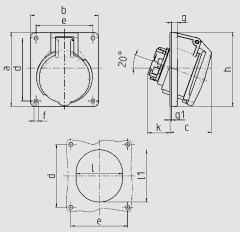
to DIN VDE 0623, EN 60309-2. Colour: electric grey and/or colour code. Enclosure and insert made of AMAPLAST.

| Image | Title | Description |
|---|---|---|
|  | **Panel mounted receptacle with TwinCONTACT**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1133.<br>Image 1643. | ■ screwless spring terminals<br>■ suitable for through wiring<br>■ 20° inclination<br>■ 32A receptacles are designed for adding an auxiliary contact switch |
|  | **Panel mounted receptacle with TwinCONTACT**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1134.<br>Image 3385. | ■ screwless spring terminals<br>■ suitable for through wiring<br>■ straight<br>■ blanking flange to close unused apertures for 16A panel mounted receptacles part no. 41419 |
|  | **Panel mounted receptacle with TwinCONTACT**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1148.<br>Image 3070. | ■ screwless spring terminals<br>■ standard flange dimensions<br>■ 20° inclination<br>■ receptacles are designed for adding an auxiliary contact switch |
|  | **Panel mounted receptacle with TwinCONTACT**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10<br><br>Product group 1135.<br>Image 3485. | ■ screwless spring terminals<br>■ suitable for through wiring<br>■ 20° inclination<br>■ 32A receptacles are designed for adding an auxiliary contact switch |
|  | **Panel mounted receptacle with TwinCONTACT**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10<br><br>Product group 1136.<br>Image 1131. | ■ screwless spring terminals<br>■ suitable for through wiring<br>■ straight |
|  | **Panel mounted receptacle with TwinCONTACT**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10<br><br>Product group 1146.<br>Image 1173. | ■ screwless spring terminals<br>■ standard flange dimensions<br>■ suitable for through wiring<br>■ 20° inclination<br>■ receptacles optional fitted with auxiliary contact |

# 16A - 32A, IP 44 and IP 67

Other voltages and frequencies available on request.

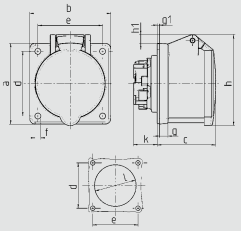
| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | >50 - 500V 100-300 Hz | >50 - 500V 300-500 Hz | Drawing |
|---|---|---|---|---|---|---|---|---|
| | | 3p 4p 5p<br>4h 4h 4h | 3p 4p 5p<br>6h 9h 9h | 3p 4p 5p<br>9h 6h 6h | 3p 4p 5p<br>7h 7h 7h | 3p 4p 5p<br>10h 10h 10h | 3p 4p 5p<br>2h 2h 2h | |
| | | Part number | | | | | | |
| 16 | 3 | 1631 | 1632 | 1633 | | | 1635 | |
| 16 | 4 | 1636 | 1637 | 1638 | 1639 | 1640 | 1641 | |
| 16 | 5 | 1642 | 1643 | 3473 | 1644 | | 1646 | |
| 32 | 3 | 1733 | 1734 | 1735 | | | 1737 | |
| 32 | 4 | 1738 | 1739 | 1740 | 1741 | 1742 | 1743 | |
| 32 | 5 | 1744 | 1745 | 1746 | 1747 | | 1749 | |



| Drawing 1 MB 465 | Amp. / Poles | 16 3 | 16 4 | 16 5 | 32 3 | 32 4 | 32 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 73,5 | 100 | 100 | 100 | 100 | 100 |
| | b | 64 | 92 | 92 | 92 | 92 | 92 |
| | c | 52 | 58 | 58 | 61 | 61 | 60 |
| | d | 60 | 85 | 85 | 85 | 85 | 85 |
| | e | 52 | 77 | 77 | 77 | 77 | 77 |
| | f | 5,5 | 5,5 | 5,5 | 5,5 | 5,5 | 5,5 |
| | g. | 7 | 8 | 8 | 8 | 8 | 8 |
| | g.1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | h | 79 | 100 | 100 | 103 | 103 | 105 |
| | k | 31 | 31 | 31 | 44 | 44 | 54 |
| | l | 52 | 55 | 65 | 70 | 70 | 73 |
| | l1 | 60 | 63 | 72 | 82 | 82 | 85 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —6 | 2,5 —6 | 2,5 —6 |

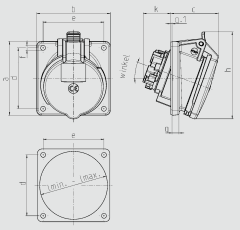
| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | >50 - 500V 100-300 Hz | >50 - 500V 300-500 Hz | Drawing |
|---|---|---|---|---|---|---|---|---|
| 16 | 3 | 1667 | 1668 | 1669 | | | 1671 | |
| 16 | 4 | 1672 | 1673 | 1674 | 1675 | 1676 | 1677 | |
| 16 | 5 | 1678 | 1679 | 3385 | 1680 | | 1682 | |
| 32 | 3 | 1786 | 1787 | 1788 | | | | |
| 32 | 4 | | 1790 | 1791 | 1792 | 1793 | | |
| 32 | 5 | 1795 | 1796 | 1797 | 1798 | | 1800 | |

Panel mounted receptacles for cable ducts and flush mounted installation boxes see page 118/119.



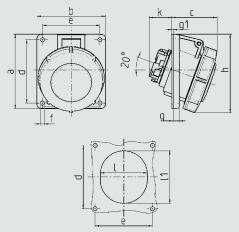
| Drawing 1 MB 464 | Amp. / Poles | 16 3 | 16 4 | 16 5 | 32 3 | 32 4 | 32 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 75 | 75 | 75 | 75 | 75 | 75 |
| | b | 75 | 75 | 75 | 75 | 75 | 75 |
| | c | 53 | 53 | 54 | 64 | 64 | 64 |
| | d | 60 | 60 | 60 | 60 | 60 | 60 |
| | e | 60 | 60 | 60 | 60 | 60 | 60 |
| | f | 5,5 | 5,5 | 5,5 | 5,5 | 5,5 | 5,5 |
| | g. | 8 | 8 | 8 | 8 | 8 | 8 |
| | g.1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | h | 75 | 80 | 85 | 89 | 89 | 95 |
| | h1 | | 6 | 9 | 10 | 10 | 12 |
| | k | 22 | 22 | 22 | 28 | 28 | 38 |
| | l | 43 | 52 | 57 | 60 | 60 | 65 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —6 | 2,5 —6 | 2,5 —6 |

| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | >50 - 500V 100-300 Hz | >50 - 500V 300-500 Hz | Drawing |
|---|---|---|---|---|---|---|---|---|
| 16 | 3 | 3004 | 3008 | | | | | |
| 16 | 4 | | | 3048 | 3049 | | | |
| 16 | 5 | | | 3070 | | | | |
| 32 | 3 | 3124 | 3126 | | | | | |
| 32 | 4 | | | 3155 | 3157 | | | |
| 32 | 5 | | | 3171 | | | | |



| Drawing 1 MB 519 | Amp. / Poles | 16 3 | 16 4 | 16 5 | 32 3 | 32 4 | 32 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 85 | 85 | 85 | 85 | 85 | 85 |
| | b | 85 | 85 | 85 | 85 | 85 | 85 |
| | c | 52 | 57 | 55 | 61 | 60 | 66 |
| | d | 70 | 70 | 70 | 70 | 70 | 70 |
| | e | 70 | 70 | 70 | 70 | 70 | 70 |
| | f | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 |
| | g | 8 | 8 | 8 | 8 | 8 | 8 |
| | g.1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | h | 86 | 96 | 100 | 96 | 104 | 110 |
| | k | 31 | 32 | 33 | 43 | 44 | 48 |
| | l min. | 57 | 64 | 70 | 78 | 78 | 78 |
| | l max. | 76 | 76 | 76 | 78 | 78 | 78 |
| | ∂ | 20 | 20 | 20 | 20 | 20 | 20 |
| Terminal for cond. cross section (mm²) min.-max. | | 1.5 —4 | 1.5 —4 | 1.5 —4 | 2.5 —10 | 2.5 —10 | 2.5 —10 |

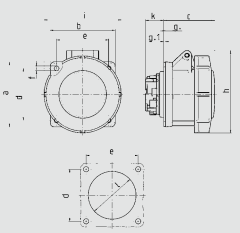
| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | >50 - 500V 100-300 Hz | >50 - 500V 300-500 Hz | Drawing |
|---|---|---|---|---|---|---|---|---|
| 16 | 3 | 1700 | 1701 | 1702 | | | | |
| 16 | 4 | | 1703 | 1704 | 1705 | 1706 | | |
| 16 | 5 | | | 3485 | | | | |
| 32 | 3 | 1801 | 1802 | 1803 | | | | |
| 32 | 4 | | 1804 | 1805 | 1806 | 1807 | | |
| 32 | 5 | | | 1808 | | | | |



| Drawing 1 MB 466 | Amp. / Poles | 16 3 | 16 4 | 16 5 | 32 3 | 32 4 | 32 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 73,5 | 100 | 100 | 100 | 100 | 100 |
| | b | 64 | 92 | 92 | 92 | 92 | 92 |
| | c | 52 | 60 | 62 | 66 | 66 | 66 |
| | d | 60 | 85 | 85 | 85 | 85 | 85 |
| | e | 52 | 77 | 77 | 77 | 77 | 77 |
| | f | 5,5 | 5,5 | 5,5 | 5,5 | 5,5 | 5,5 |
| | g. | 7 | 8 | 8 | 8 | 8 | 8 |
| | g.1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | h | 84 | 100 | 106 | 109 | 109 | 113 |
| | k | 31 | 31 | 31 | 44 | 44 | 54 |
| | l | 52 | 55 | 65 | 70 | 70 | 73 |
| | l1 | 60 | 63 | 72 | 82 | 82 | 85 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —6 | 2,5 —6 | 2,5 —6 |

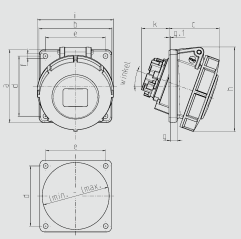
| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | >50 - 500V 100-300 Hz | >50 - 500V 300-500 Hz | Drawing |
|---|---|---|---|---|---|---|---|---|
| 16 | 3 | 1707 | 1708 | 1709 | | | | |
| 16 | 4 | 1710 | 1711 | 1712 | 1713 | 1714 | | |
| 16 | 5 | 1716 | 1717 | 1131 | | | | |
| 32 | 3 | 1809 | 1810 | | | | | |
| 32 | 4 | 1812 | 1813 | 1814 | 1815 | 1816 | 1817 | |
| 32 | 5 | 1818 | | 1820 | | | | |

Panel mounted receptacles for cable ducts and flush mounted installation boxes see page 118/119.



| Drawing 1 MB 467 | Amp. / Poles | 16 3 | 16 4 | 16 5 | 32 3 | 32 4 | 32 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 75 | 75 | 75 | 85 | 85 | 85 |
| | b | 75 | 75 | 75 | 75 | 75 | 75 |
| | c | 60 | 61 | 61 | 69 | 69 | 72 |
| | d | 60 | 60 | 60 | 60 | 60 | 60 |
| | e | 60 | 60 | 60 | 60 | 60 | 60 |
| | f | 5,5 | 5,5 | 5,5 | 5,5 | 5,5 | 5,5 |
| | g. | 8 | 8 | 8 | 8 | 8 | 8 |
| | g.1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | h | 83 | 88 | 95 | 99 | 99 | 105 |
| | i | 78 | 85 | 96 | 103 | 103 | 110 |
| | k | 21 | 21 | 21 | 28 | 28 | 38 |
| | l | 43 | 52 | 54 | 60 | 60 | 65 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —6 | 2,5 —6 | 2,5 —6 |

| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | >50 - 500V 100-300 Hz | >50 - 500V 300-500 Hz | Drawing |
|---|---|---|---|---|---|---|---|---|
| 16 | 3 | | 1168 | | | | | |
| 16 | 4 | | | 1169 | 1171 | | | |
| 16 | 5 | | | 1173 | | | | |
| 32 | 3 | 3566 | 3573 | | | | | |
| 32 | 4 | | | 3581 | 3587 | | | |
| 32 | 5 | | | 3590 | | | | |



| Drawing 1 MB 520 | Amp. / Poles | 16 3 | 16 4 | 16 5 | 32 3 | 32 4 | 32 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 85 | 85 | 85 | 85 | 85 | 85 |
| | b | 85 | 85 | 85 | 85 | 85 | 85 |
| | c | 56 | 59 | 59 | 64 | 64 | 71 |
| | d | 70 | 70 | 70 | 70 | 70 | 70 |
| | e | 70 | 70 | 70 | 70 | 70 | 70 |
| | f | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 |
| | g | 8 | 8 | 8 | 8 | 8 | 8 |
| | g.1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | h | 87 | 91 | 99 | 103 | 103 | 110 |
| | i | 78 | 85 | 89 | 103 | 103 | 106 |
| | k | 32 | 32 | 33 | 44 | 44 | 49 |
| | l min. | 57 | 64 | 70 | 78 | 78 | 78 |
| | l max. | 76 | 76 | 76 | 78 | 78 | 78 |
| Terminal for cond. cross section (mm²) min.-max. | | 1.5 —4 | 1.5 —4 | 1.5 —4 | 2.5 —6 | 2.5 —6 | 2.5 —6 |

# Receptacles ■ Panel mounted receptacles, screwless, TwinCONTACT,

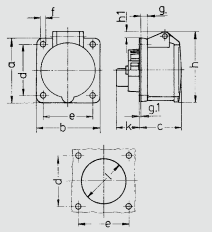
to DIN VDE 0623, EN 60309-2. Colour: electric grey and/or colour code. Enclosure and insert made of AMAPLAST.

| Image | Title | Description |
|---|---|---|
|  | **Panel mounted receptacle with TwinCONTACT**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1147.<br>Image 1619. | ■ screwless spring terminals<br>■ suitable for through wiring<br>■ small flange dimensions<br>■ straight |
|  | **Panel mounted receptacle with TwinCONTACT**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1147.<br>Image 1337. | ■ screwless spring terminals<br>■ suitable for through wiring<br>■ straight |
|  | **Panel mounted receptacle with TwinCONTACT**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1145.<br>Image 154. | ■ screwless spring terminals<br>■ suitable for through wiring<br>■ 20° inclination |
|  | **Panel mounted receptacle RAPIDO® with TwinCONTACT**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1154.<br>Image 997. | ■ screwless spring terminals<br>■ suitable for through wiring<br>■ for wall apertures 61 mm Ø<br>■ central fixing |
|  | **Panel mounted receptacle RAPIDO® with TwinCONTACT**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1154.<br>Image 907. | ■ screwless spring terminals<br>■ suitable for through wiring<br>■ for wall apertures 70 mm diameter<br>■ central fixing |

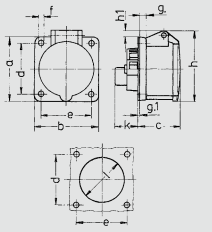
# 16A - 32A, IP 44

Other voltages and frequencies available on request.

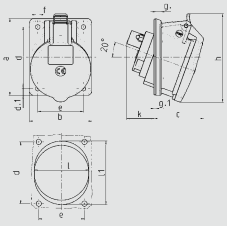
| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | >50 - 500V 100-300 Hz | >50 - 500V 300-500 Hz | Drawing |
|---|---|---|---|---|---|---|---|---|
| | | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | |
| | | 4h 4h 4h | 6h 9h 9h | 9h 6h 6h | 7h 7h 7h | 10h 10h 10h | 2h 2h 2h | |
| | | Part number | | | | | | |
| 16 | 3 | 1618 | 1619 | | | | | |
| 16 | 3 | 1337 | 1350 | 1351 | | | | |
| 16 | 4 | | 1352 | 1353 | | 1404 | | |
| 16 | 5 | | | 1405 | | | | |
| 16 | 4 | | 123 | 154 | 155 | | | |
| 16 | 5 | | | 156 | | | | |
| 16 | 3 | 1132 | 997 | | | | | |
| 16 | 4 | | 1133 | 998 | 1134 | | | |
| 16 | 5 | | | 907 | | | | |
| 32 | 3 | | 987 | | | | | |
| 32 | 4 | | 1166 | 988 | | | | |
| 32 | 5 | | | 989 | | | | |



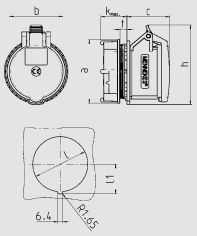
| Drawing | Amp. | 16 |
|---|---|---|
| 1 MB 426 | Poles | 3 |
| Dim. in mm | a | 55 |
| | b | 55 |
| | c | 54 |
| | d | 45 |
| | e | 45 |
| | f | 5,5 |
| | g. | 8 |
| | g.1 | 2 |
| | h | 70 |
| | h1 | 12 |
| | k | 28 |
| | l | 47 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 |



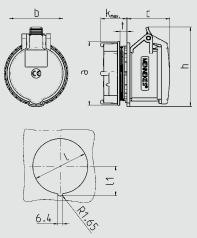
| Drawing | Amp. | 16 | | |
|---|---|---|---|---|
| 1 MB 259 | Poles | 3 | 4 | 5 |
| Dim. in mm | a | 62 | 72 | 72 |
| | b | 62 | 65 | 65 |
| | c | 54 | 54 | 54 |
| | d | 47 | 52 | 52 |
| | e | 47 | 52 | 52 |
| | f | 5,5 | 5,5 | 5,5 |
| | g. | 8 | 8 | 8 |
| | g.1 | 2 | 2 | 2 |
| | h | 68 | 77 | 85 |
| | h1 | 7 | 7 | 11 |
| | k | 28 | 28 | 28 |
| | l | 50 | 52 | 57 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 |



| Drawing | Amp. | 16 | |
|---|---|---|---|
| 1 MB 147 | Poles | 4 | 5 |
| Dim. in mm | a | 87 | 87 |
| | b | 71 | 71 |
| | c | 46 | 46 |
| | d | 70 | 70 |
| | d1 | 7,5 | 7,5 |
| | e | 52 | 52 |
| | f | 5,1 | 5,1 |
| | g. | 6. | 6. |
| | g.1 | 2 | 2 |
| | h | 92 | 92 |
| | k | 39 | 39 |
| | l | 64 | 64 |
| | l1 | 80 | 80 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 |



| Drawing | Amp. | 16 |
|---|---|---|
| 1 MB 468 | Poles | 3 |
| Dim. in mm | a | 69 |
| | b | 57 |
| | c | 55 |
| | k | max. 30 |
| | h | 87 |
| | l | 61 |
| | l1 | 33,25 |
| | t | 2-9 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 |



| Drawing | Amp. | 16 | | 32 | | |
|---|---|---|---|---|---|---|
| 1 MB 468 | Poles | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 81 | 81 | 81 | 81 | 81 |
| | b | 66 | 69 | 71 | 71 | 80 |
| | c | 58 | 55 | 66 | 66 | 64 |
| | k | max. 33 | max. 33 | max. 33 | max. 33 | max. 33 |
| | h | 100 | 102 | 101 | 101 | 108 |
| | l | 70 | 70 | 70 | 70 | 70 |
| | l1 | 37.75 | 37.75 | 37.75 | 37.75 | 37.75 |
| | t | 2-9 | 2-9 | 2-9 | 2-9 | 2-9 |
| Terminal for cond. cross section (mm²) min.-max. | | 1.5 —4 | 1.5 —4 | 2.5 —6 | 2.5 —6 | 2.5 —6 |

# Receptacles ■ Panel mounted receptacles for cable ducts of various

to DIN VDE 0623, EN 60309-2. Colour: electric grey and/or colour code. (Cepex pearl white). Enclosure and insert made of AMAPLAST.

| Cable duct built-in boxes<br>Brand / Flange | Cepex panel mounted receptacle<br>■ screw terminals<br>■ colour: pearl white<br>■ IP 44 | | | | Panel mounted receptacle with TwinCONTACT<br>■ screwless spring terminals<br>■ flange 75 x 75 mm<br>■ fixing hole spacing 60 x 60 mm<br>■ IP 44 | | | | Panel mounted receptacle<br>■ screw terminals<br>■ flange 75 x 75 mm<br>■ fixing hole spacing 60 x 60 mm<br>■ IP 44 | | | | Panel mounted receptacle with TwinCONTACT<br>■ screwless spring terminals<br>■ flange 75 x 75 mm<br>■ fixing hole spacing 60 x 60 mm<br>■ IP 67 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | P | 230V | 400V | A | P | 230V | 400V | A | P | 230V | 400V | A | P | 230V | 400V |
| **Hager-Tehalit**<br>built-in box no. G 2744 and G 2745 / frames of Tehalit | 16 | 3 | 4112 | | 16 | 3 | 1668 | 1669 | 16 | 3 | 1366 | 1367 | 16 | 3 | 1708 | 1709 |
| | 16 | 4 | 4233 | 4113 | 16 | 4 | 1673 | 1674 | 16 | 4 | 1389 | 1390 | 16 | 4 | 1711 | 1712 |
| | 16 | 5 | | 4115 | 16 | 5 | 1679 | 3385 | 16 | 5 | 1386 | 1385 | 16 | 5 | 1717 | 1131 |
| All panel mounted receptacles with flange 75 x 75 mm can be installed without any additional MENNEKES masking frame with a frame of Tehalit. | | | | | | | | | | | | | | | | |
| **Rehau**<br>built-in box no. 268591-100 / frames of Rehau with fixing hole spacing 60 x 60 (2) / fixing hole spacing 70 x 70 (1) | 16 | 3 (1) | 4112 | | 16 | 3 (2) | 1668 | 1669 | 16 | 3 | 1366 | 1367 | 16 | 3 (2) | 1708 | 1709 |
| | 16 | 4 (1) | 4233 | 4113 | 16 | 4 (2) | 1673 | 1674 | 16 | 4 | 1389 | 1390 | 16 | 4 (2) | 1711 | 1712 |
| | 16 | 5 (1) | | 4115 | 16 | 5 (2) | 1679 | 3385 | 16 | 5 | 1386 | 1385 | 16 | 5 (2) | 1717 | 1131 |
| For the installation of CEE receptacles Rehau offers one built-in box only. Rehau offers a frame and a flange for the mounting of various receptacles.<br>(1) Cepex receptacles can be installed with flange size 70 x 70 mm only.<br>(2) Panel mounted receptacles with flange size 75 x 75 mm and fixing hole spacing 60 x 60 mm have to be installed with a frame of 60 x 60 mm fixing hole spacing. | | | | | | | | | | | | | | | | |
| **Niedax**<br>built-in box no. GDHR 50 / MENNEKES 40102 or Niedax masking frame | | | | | 16 | 3 | 1668 | 1669 | 16 | 3 | 1366 | 1367 | 16 | 3 | 1708 | 1709 |
| | | | | | 16 | 4 | 1673 | 1674 | 16 | 4 | 1389 | 1390 | 16 | 4 | 1711 | 1712 |
| | | | | | 16 | 5 | 1679 | 3385 | 16 | 5 | 1386 | 1385 | 16 | 5 | 1717 | 1131 |
| built-in box no. KEDB 80 / MENNEKES 40102 | | | | | | | | | | | | | | | | |
| The built-in box GDHR 50 and KEDB 80 cannot be used for the installation of Cepex receptacles. | | | | | | | | | | | | | | | | |
| **Niedax**<br>built-in box no. GDI 60/70 / frames of Niedax | 16 | 3 | 4112 | | 16 | 3 | 1668 | 1669 | 16 | 3 | 1366 | 1367 | 16 | 3 | 1708 | 1709 |
| | 16 | 4 | 4233 | 4113 | 16 | 4 | 1673 | 1674 | 16 | 4 | 1389 | 1390 | 16 | 4 | 1711 | 1712 |
| | 16 | 5 | | 4115 | 16 | 5 | 1679 | 3385 | 16 | 5 | 1386 | 1385 | 16 | 5 | 1717 | 1131 |
| built-in box no. CED 80 / frames of Niedax | | | | | | | | | | | | | | | | |

Other voltages and frequencies and 32A devices available on request.



**Cable duct built-in boxes**

**Brand** / **Flange**

### Cepex panel mounted receptacle
- screw terminals
- colour: pearl white
- IP 44



### Panel mounted receptacle with TwinCONTACT
- screwless spring terminals
- flange 75 x 75 mm
- fixing hole spacing 60 x 60 mm
- IP 44



### Panel mounted receptacle
- screw terminals
- flange 75 x 75 mm
- fixing hole spacing 60 x 60 mm
- IP 44



### Panel mounted receptacle with TwinCONTACT
- screwless spring terminals
- flange 75 x 75 mm
- fixing hole spacing 60 x 60 mm
- IP 67



| Brand | Flange | A | P | Cepex 230V | Cepex 400V | Panel mounted receptacle with TwinCONTACT A | P | 230V | 400V | Panel mounted receptacle A | P | 230V | 400V | Panel mounted receptacle with TwinCONTACT A | P | 230V | 400V |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **OBO-Bettermann** | | | | | | | | | | | | | | | | | |
| built-in box type 71GD6 | MENNEKES 40102 | 16 | 3 | 4112 | | 16 | 3 | 1668 | 1669 | 16 | 3 | 1366 | 1367 | 16 | 3 | 1708 | 1709 |
| | | 16 | 4 | | | 16 | 4 | 1673 | 1674 | 16 | 4 | 1389 | 1390 | 16 | 4 | 1711 | 1712 |
| | | 16 | 5 | | | 16 | 5 | 1679 | 3385 | 16 | 5 | 1386 | 1385 | 16 | 5 | 1717 | 1131 |
| **GGK-Kunststoffwerke** | | | | | | | | | | | | | | | | | |
| built-in box no. 1261 blue GED 50 (1) | Flange 1263 | 16 | 3 | 4112 | | 16 | 3 | 1668 | 1669 | 16 | 3 | 1366 | 1367 | 16 | 3 | 1708 | 1709 |
| | | 16 | 4(1) | 4233 | 4113 | 16 | 4 | 1673 | 1674 | 16 | 4 | 1389 | 1390 | 16 | 4 | 1711 | 1712 |
| | | 16 | 5 | | | 16 | 5 | 1679 | 3385 | 16 | 5 | 1386 | 1385 | 16 | 5 | 1717 | 1131 |
| built-in box no. 1268 black GDS 50 (2) | Flange 1263 | | | | | | | | | | | | | | | | |
| **van Geel** | | | | | | | | | | | | | | | | | |
| built-in box type 121 | MENNEKES 40102 | 16 | 3 | 4112 | | 16 | 3 | 1668 | 1669 | 16 | 3 | 1366 | 1367 | 16 | 3 | 1708 | 1709 |
| | | 16 | 4 | | | 16 | 4 | 1673 | 1674 | 16 | 4 | 1389 | 1390 | 16 | 4 | 1711 | 1712 |
| | | 16 | 5 | | | 16 | 5 | 1679 | 3385 | 16 | 5 | 1386 | 1385 | 16 | 5 | 1717 | 1131 |
| **Unex** | | | | | | | | | | | | | | | | | |
| built-in box no. 93709 | MENNEKES 40102 | 16 | 3 | 4112 | | 16 | 3 | 1668 | 1669 | 16 | 3 | 1366 | 1367 | 16 | 3 | 1708 | 1709 |
| | | 16 | 4 | | | 16 | 4 | 1673 | 1674 | 16 | 4 | 1389 | 1390 | 16 | 4 | 1711 | 1712 |
| | | 16 | 5 | | | 16 | 5 | 1679 | 3385 | 16 | 5 | 1386 | 1385 | 16 | 5 | 1717 | 1131 |











All panel mounted receptacles with flange 75 x 75 mm have to be installed with MENNEKES frame 40102 (fig. page 120).

(1) GED 50: Cepex receptacles 4p have to be installed with care to ensure a perfect plug-in of the plug.
(2) GDS 50: The built-in box is not suitable for the mounting of Cepex receptacles.

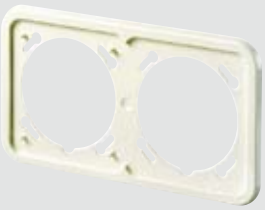
For all panel mounted receptacles with flange 75 x 75 mm, the flange 1263 of GGK is necessary.

All panel mounted receptacles with flange 75 x 75 mm have to be mounted with MENNEKES frame 40102 (fig. page 120).
The wiring space of the built-in receptacle Type 121 is for CEE receptacles limited.

| Image | Title | Description |
|---|---|---|
|  | **Auxiliary contact**<br><br>Std. Pack. Qty: 10<br><br>Product group 8300.<br>Image 41000. | ■ for receptacles and panel mounted receptacles 16A and 32A of product groups 1018, 1019, 1041, 1049, 1132, 1141, 1146 and 1148 as well as 32A of product groups 1044, 1048, 1133 and 1135<br>■ funktion: change-over contact = NC/NO<br>■ connected load: 16A (4A)* / ~ 250V, 10A (3A)* / ~ 400V<br>*for inductive or motor load<br><br>**Part no. 41000** |
|  | **Terminal strip**<br><br>Std. Pack. Qty: 10<br><br>Product group 5072.<br>Image 40115. | ■ for receptacles for through wiring of product group 1052<br>■ 63A 4-pole and 5-pole consisting of 4-pole and 5-pole frame terminals, with connecting cables 10 mm² and terminals 2 x 35 mm²<br><br>for 16A and 32A, 4-pole and 5-pole **Part no. 40113**<br>for 63A, 4-pole **Part no. 40114**<br>for 63A, 5-pole **Part no. 40115** |
|  | **Flange**<br><br>Std. Pack. Qty: 50<br><br>Product group 8234.<br>Image 40102. | ■ for panel mounted receptacles 16A, 3-, 4- and 5-pole of product groups 1046, 1056, 1136 and 1134 as well as 32A, 5-pole of product group 1056 to be attached to cable ducts<br><br>**Part no. 40102** |
|  | **Flush mounted installation box**<br><br>Std. Pack. Qty: 5<br><br>Product group 8236.<br>Image 40369. | ■ with accessories<br>■ suitable together with the appropriate flange for mounting a 16A or 32A panel mounted receptacle of product groups 1046, 1056, 1134 and 1136<br><br>**Part no. 40369** |
|  | **Flange**<br><br>Std. Pack. Qty: 100<br><br>Product group 8234.<br>Image 41340. | ■ with a gasket for fitting a 16A or 32A panel mounted receptacle of product groups 1046, 1056, 1134 and 1136 on a flush mounted installation box part no. 40369<br><br>**Part no. 41340** |



Overview Index

| Image | Title | Description |
|---|---|---|
|  | **Cepex masking frame**<br><br>Std. Pack. Qty: 25<br><br>Product group 8234.<br>Image 41423. | ■ single<br>■ matching all Cepex flush mounted and panel mounted 16A and 32A receptacles, for the installation of single appliances and for vertical combination of any number of receptacles<br><br>alpine white **Part no. 41423**<br>pearl white **Part no. 41406**<br>grey **Part no. 41407** |
|  | **Cepex masking frame**<br><br>Std. Pack. Qty: 25<br><br>Product group 8234.<br>Image 41424. | ■ double<br>■ matching all Cepex flush mounted and panel mounted 16A and 32A receptacles for horizontal installation of two receptacles<br><br>alpine white **Part no. 41424**<br>pearl white **Part no. 41408**<br>grey **Part no. 41409** |
|  | **Spacer frame**<br><br>Std. Pack. Qty: 25<br><br>Product group 8237.<br>Image 4191. | ■ to compensate for unequal heights<br>■ matching all Cepex surface mounted receptacles SCHUKO® as well as all Cepex CEE surface mounted 16A and 32A receptacles<br><br>alpine white **Part no. 4239**<br>pearl white **Part no. 4192**<br>grey **Part no. 4191** |
|  | **Protection plate**<br><br>Std. Pack. Qty: 50<br><br>Product group 8236.<br>Image 41414. | ■ for flush mounted installation box to protect fixing holes and the box from plaster and dirt until the receptacle is installed<br><br>**Part no. 41414** |
|  | **Blanking flange**<br><br>Std. Pack. Qty: 100/150<br><br>Product group 8234.<br>Image 41418. | ■ to close unused apertures<br>■ grey<br>■ for product groups 1930/1936 and 1950/1951 (50 x 50 mm) respectively product group 1134, 1136, 1955/1956 and 1957/1958 (75 x 75 mm)<br><br>50 x 50 mm **Part no. 41418**<br>75 x 75 mm **Part no. 41419** |

# Plugs and connectors

## Plugs 16A - 125A, IP 44 and IP 67

### Screw terminals



**Standard**
16A - 32A,
IP 44 and IP 67

Pages 128 - 129

**Product information**
Page 124



**Angled plugs**
16A - 32A,
IP 44

Pages 128 - 129

**Product information**
Page 125



**Highly heat resistant contact carrier, nickel plated contacts**
16A - 125A,
IP 44 and IP 67

Pages 130 - 133

**Product information**
Page 125 - 127



**Phase inverter plugs**
16A - 32A,
IP 44 and IP 67

Pages 134 - 135

**Product information**
Page 125

### Screwless connection technology SafeCONTACT with insulation displacement technique



**StarTOP®**
16A - 32A,
IP 44

Pages 128 - 129

**Product information**
Page 124

### Inlets



**Wall mounted**
16A - 125A,
IP 44 and IP 67

Pages 136 - 137



**Panel mounted**
16A - 125A,
IP 44 and IP 67

Pages 138 - 141



**Phase inverters**
16A - 32A,
IP 44

Pages 142 - 143

### Test plugs



**Phase sequence test plugs**
16A - 63A,
IP 44

Pages 144- 145

# Connectors 16A - 125A, IP 44 and IP 67

## Screw terminals



**Standard**
16A - 32A,
IP 44 and IP 67

Pages 146 - 147



**Angled connectors**
16A,
IP 44

Pages 146 - 147



**Hanging connectors PowerTOP®**
16A - 32A,
IP 44

Pages 148 - 149



**Highly heat resistant contact carrier, partly nickel plated contacts**
16A - 125A,
IP 44 and IP 67

Pages 148 - 151

**Product information**
Page 125 - 127

## Screwless connection technology SafeCONTACT with insulation displacement technique



**StarTOP®**
16A - 32A,
IP 44

Pages 146 - 147

**Product information**
Page 124

# Accessories

## For plugs and connectors



- **Hinged lids**
- **Protective covers**
- **Plug guards**
- **Hanging clips**

Page 153

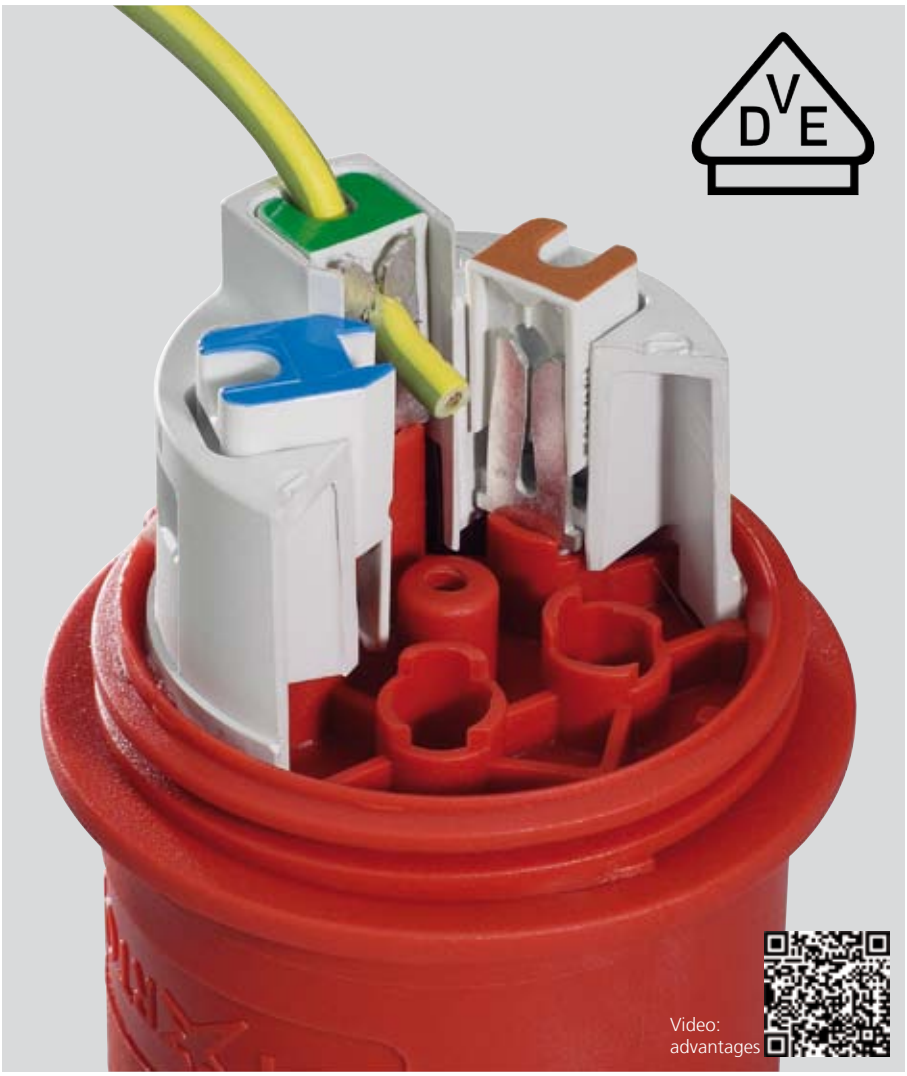
## StarTOP® with SafeCONTACT. Quick. Safe. Tight.

**A high degree of safety.**
In one operation, the insulation is cut, the contact is safely established and the wire is firmly held in place.

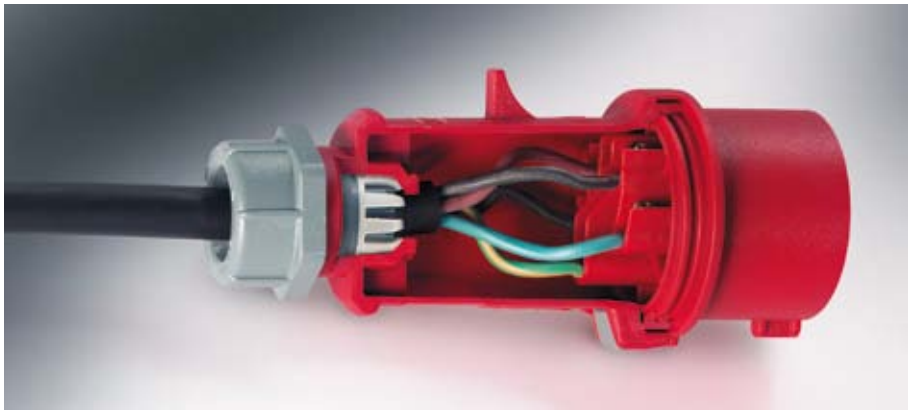


**Under cover.**
A stable lock ensures permanent safety.




## ProTOP. With standard connection technology.



Many handy features, e.g., the self-locating thread for tight and stable connection of cover and front part. Cable grip and seal in one single operation by locking the cable gland.

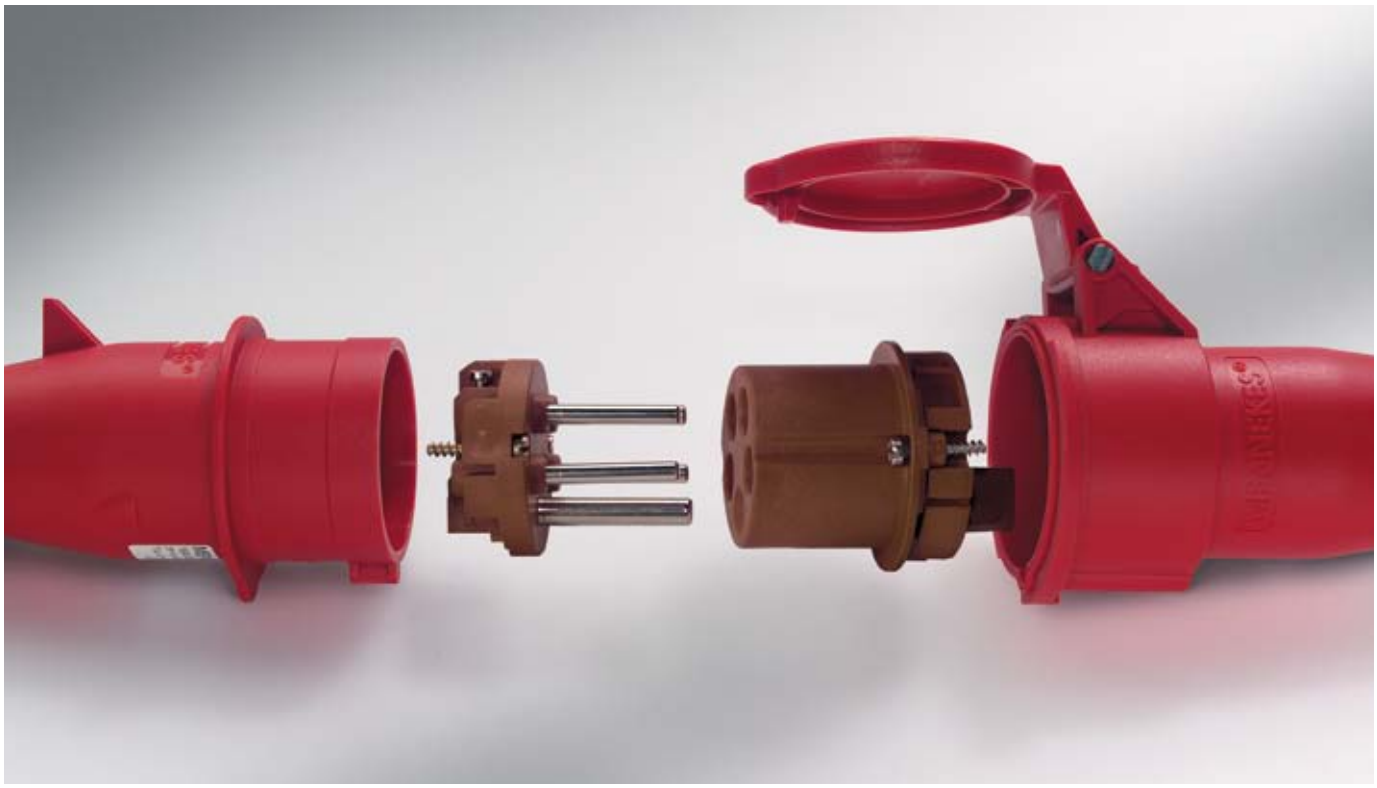


**Ingeniously toothed.**
The additional teeth on the locking ring audibly lock as the ring is tightened, thereby providing a protection against automatic release.



Overview Index

## AM-TOP® and PowerTOP® for use in corrosive environments.



**Highly heat resistant contact carrier and nickel plated contacts.**
These appliances are guaranteed to be resistant to corrosive environments: High humidity, salt or acidic air, corrosive gases and vapours.

Accordingly, they are mainly used **in the food processing industry, in breweries, dairies, farms and market gardens, wineries.**

## Phase inverter ProTOP 16A and 32A.



If three phase equipment rotates in the wrong direction the MENNEKES phase inverter plug solves the problem rapidly and safely. Simply depress the latch with a screw-driver and turn the insulating element in which the two phase pins are fitted and the motor will rotate in the correct direction.
Two outer conductors rotatable through 180°.

## Angled plug VarioTOP.



**Ergonomic. Practical. Safe.**
The first CEE angled plug with cable entry rotating up to 60° to the left or to the right.

## PowerTOP® Xtra 63A and 125A. More safety under high loads.



Comfortable self-locating thread lock between front and back part. Stable and fast locking without screws. Unlocking only with just a tool according to the regulations.

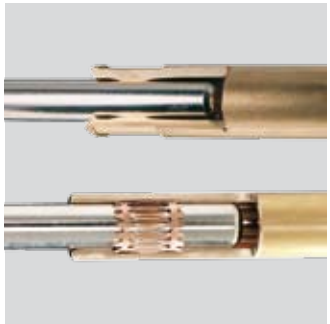
Video: mounting instructions

**Comfortable:**
Easier opening and closing of the hinged lid through integrated opening aid on the connector lid.




**Clean:**
Closed, easy to clean surface: cable gland is always located directly on the plug and connector body.

Video: advantages



**Secure contact:**
Convenient inserting and withdrawing through SoftCONTACT at 63A and TorsionSpringContact at 125A.



**Tough:**
The plugs provide better corrosion protection in aggressive environments and at high degrees of air humidity thanks to nickel plated contacts. More safety through highly heat resistant contact carriers.



Overview Index

**Captive:**
Molded seals in the connector lid and the front part of the plug.

**Slip-proof:**
Even easier inserting and withdrawing through optimum grip, even with working gloves. Best performance at high humidity, snow and dirt thanks to the unique rubber coating of the grip surfaces as well as the ergonomic design.






**Durable:**
Connectors with highly heat resistant contact carriers; nickel-plated contact sleeves also available on request. Pilot contact standard with plugs; optionally available for connectors.
(Part number + index P).



**Tested:**
All PowerTOP® Xtra plugs and connectors apply with the amended standard EN/IEC 60 309-2. Touch proof in accordance with EN 50 274.

# Plugs and connectors ■ Plugs, 16A - 32A, IP 44

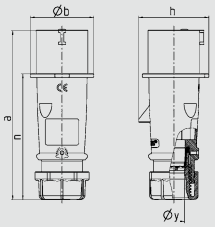
to DIN VDE 0623, EN 60309-2. Colour: electric grey and/or colour code. Enclosure and insert made of AMAPLAST.

| Image | Title | Description |
|---|---|---|
|  | **Plug AM-TOP®**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 2141.<br>Image 3. | ■ screw terminals<br>■ single part body<br>■ cable gland and sealing<br>■ strain relief and protection against kinking |
|  | **Plug ProTOP**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 2197.<br>Image 148A. | ■ screw terminals<br>■ cable gland and sealing<br>■ strain relief and protection against kinking<br>■ enclosure with thread lock and safety slide |
|  | **Plug StarTOP®**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 2101.<br>Image 33. | ■ screwless, with insulating displacement technique<br>■ SafeCONTACT<br>■ cable gland and sealing<br>■ strain relief and protection against kinking<br>■ enclosure with thread lock and safety slide |
|  | **Angled plug VarioTOP**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 2139.<br>Image 3980. | ■ screw terminals<br>■ cable entry hood rotating up to 60° to the left or the right<br>■ with grommet<br>■ cable entry hood in colour code red or blue<br>■ especially suited for use with receptacles of the Cepex range |
|  | **Angled plug**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 2039.<br>Image 1411. | ■ screw terminals<br>■ with grommet<br>■ especially suited for use with receptacles of the Cepex range |
|  | **Plug AM-TOP®**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10<br><br>Product group 2149.<br>Image 300. | ■ screw terminals<br>■ single part body<br>■ cable gland and sealing<br>■ strain relief and protection against kinking |

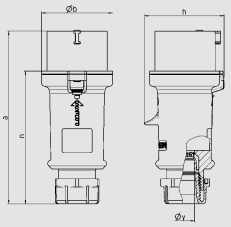
Other voltages and frequencies available on request.

| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | >50 - 500V 100-300 Hz | >50 - 500V 300-500 Hz |
|---|---|---|---|---|---|---|---|
| | | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p |
| | | 4h 4h 4h | 6h 9h 9h | 9h 6h 6h | 7h 7h 7h | 10h 10h 10h | 2h 2h 2h |
| | | Part number | | | | | |
| 16 | 3 | 247 | 248 | 249 | 2151 | 2168 | 2271 |
| 16 | 4 | 250 | 251 | 252 | 253 | 254 | 255 |
| 16 | 5 | 256 | 257 | 3 | 2014 | 2189 | 2243 |
| 32 | 3 | 259 | 260 | 261 | | 2195 | 2341 |
| 32 | 4 | 262 | 263 | 264 | 265 | 266 | 267 |
| 32 | 5 | 268 | 269 | 4 | 2015 | 2244 | 2178 |
| 16 | 3 | 147A | 148A | 149A | | 647 | |
| 16 | 4 | 654 | 151A | 152A | 153A | 657 | 658 |
| 16 | 5 | | 157A | 13A | 659 | 757 | 769 |
| 32 | 3 | 159 | 160 | | | | |
| 32 | 4 | | 163 | 164 | 165 | 773 | |
| 32 | 5 | | 169A | 14A | 777 | | |
| 16 | 3 | 947 | 948 | | | | |
| 16 | 4 | | 951 | 952 | 953 | 954 | |
| 16 | 5 | | | 33 | | | |
| 32 | 3 | 711 | 712 | | | | |
| 32 | 4 | | 717 | 719 | 723 | | |
| 32 | 5 | | | 34 | | | |
| 16 | 5 | | 3981 | 3980 | | | |
| 16 | 3 | 1410 | 1411 | | | | |
| 16 | 4 | | 891 | 315 | | | |
| 32 | 3 | 3312 | 3306 | | | | |
| 32 | 4 | | 3646 | 3987 | | | |
| 32 | 5 | | 3424 | 3266 | | | |
| 16 | 3 | 277 | 278 | 279 | | | |
| 16 | 4 | 280 | 281 | 282 | 283 | 284 | 285 |
| 16 | 5 | 286 | 287 | 288 | 2020 | | |
| 32 | 3 | 289 | 290 | 291 | | | |
| 32 | 4 | 292 | 293 | 294 | 295 | 296 | 297 |
| 32 | 5 | 298 | 299 | 300 | 2021 | | |

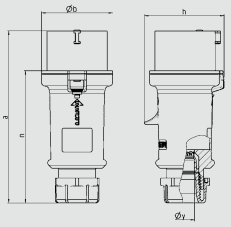
**Drawing**



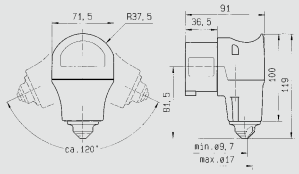

| Drawing 2 MB 217 | Amp. / Poles | 16 3 | 16 4 | 16 5 | 32 3 | 32 4 | 32 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 142 | 147 | 147 | 186 | 186 | 180 |
| | b | 53 | 59 | 67 | 70 | 70 | 77 |
| | h | 59 | 69,4 | 76 | 81 | 81 | 89,5 |
| | n | 105,2 | 110,5 | 110,5 | 141 | 141 | 135 |
| | y | 14,5 | 16 | 16 | 22 | 22 | 22 |
| Terminal for cond. cross | | 1 | 1 | 1 | 2,5 | 2,5 | 2,5 |
| section (mm²) min.-max. | | –2,5 | –2,5 | –2,5 | –6 | –6 | –6 |




| Drawing 2 MB 214 | Amp. / Poles | 16 3 | 16 4 | 16 5 | 32 3 | 32 4 | 32 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 148 | 160 | 160 | 197 | 197 | 197 |
| | b | 55 | 65,6 | 65,6 | 75 | 75 | 75 |
| | h | 61 | 72,5 | 72,5 | 80,5 | 80,5 | 85 |
| | n | 112 | 123,5 | 123,5 | 152 | 152 | 152 |
| | y | 14,5 | 16 | 16 | 22 | 22 | 22 |
| Terminal for cond. cross | | 1 | 1 | 1 | 2,5 | 2,5 | 2,5 |
| section (mm²) min.-max. | | –2,5 | –2,5 | –2,5 | –6 | –6 | –6 |

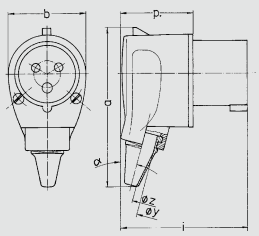



| Drawing 2 MB 214 | Amp. / Poles | 16 3 | 16 4 | 16 5 | 32 3 | 32 4 | 32 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 148 | 160 | 160 | 197 | 197 | 197 |
| | b | 55 | 65,6 | 65,6 | 75 | 75 | 75 |
| | h | 61 | 72,5 | 72,5 | 80,5 | 80,5 | 85 |
| | n | 112 | 123,5 | 123,5 | 152 | 152 | 152 |
| | y | 14,5 | 16 | 16 | 22 | 22 | 22 |
| Terminal for cond. cross | | 1 | 1 | 1 | 2,5 | 2,5 | 2,5 |
| section (mm²) min.-max. | | –2,5 | –2,5 | –2,5 | –6 | –6 | –6 |

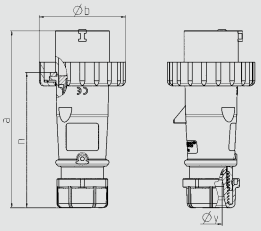



**Drawing**
**2 MB 208**

**Dim. in mm**



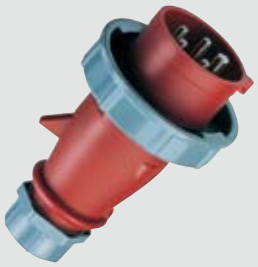

| 2 MB 69 / 2 MB 45 | Amp. / Poles | 16 3 | 16 4 | 32 3 | 32 4 | 32 5 |
|---|---|---|---|---|---|---|
| Dim. in mm | a | 107 | 129 | 96 | 96 | 101 |
| | b | 53 | 58 | 72 | 72 | 72 |
| | h | — | — | — | — | 115 |
| | i | 85 | 71 | 115 | 115 | — |
| | o | — | — | — | — | 70 |
| | p | 49 | 35 | 70 | 70 | — |
| | y | 17,5 | 17,5 | 22 | 22 | 22 |
| | z | 7 | 7 | 11 | 11 | 11 |
| | α | 15° | — | 8° | 8° | — |
| Terminal for cond. cross | | 1 | 1 | 2,5 | 2,5 | 2,5 |
| section (mm²) min.-max. | | –2,5 | –2,5 | –6 | –6 | –6 |




| Drawing 2 MB 218 | Amp. / Poles | 16 3 | 16 4 | 16 5 | 32 3 | 32 4 | 32 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 142 | 144 | 147 | 186 | 186 | 180 |
| | b | 70 | 78 | 87 | 94 | 94 | 101 |
| | n | 109 | 111 | 114 | 145 | 145 | 138 |
| | y | 14,5 | 16 | 16 | 22 | 22 | 22 |
| Terminal for cond. cross | | 1 | 1 | 1 | 2,5 | 2,5 | 2,5 |
| section (mm²) min.-max. | | –2,5 | –2,5 | –2,5 | –6 | –6 | –6 |

# Plugs and connectors ■ Plugs, highly heat resistant contact carrier,

to DIN VDE 0623, EN 60309-2. Colour: grey (RAL 7000) and colour code. Enclosure and insert made of AMAPLAST.

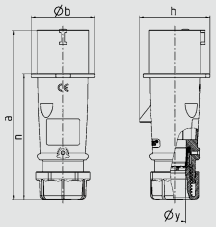
| Image | Title | Description |
|---|---|---|
|  | **Plug AM-TOP®**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 2141.<br>Image 21421. | ■ screw terminals<br>■ single part body<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ cable gland and sealing<br>■ strain relief and protection against kinking |
|  | **Plug AM-TOP®**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10<br><br>Product group 2149.<br>Image 21362. | ■ screw terminals<br>■ single part body<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ cable gland and sealing<br>■ strain relief and protection against kinking |
|  | **Plug PowerTOP®**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 2015.<br>Image 3935. | ■ screw terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ cable gland and external cable grip |
|  | **Plug PowerTOP®**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10<br><br>Product group 2016.<br>Image 3821. | ■ screw terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ cable gland and external cable grip |

# nickel plated contacts, 16A - 32A, IP 44 and IP 67

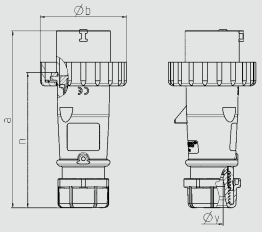
Other voltages and frequencies available on request

| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | >50 - 500V 100-300 Hz | >50 - 500V 300-500 Hz |
|---|---|---|---|---|---|---|---|
| | | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p |
| | | 4h 4h 4h | 6h 9h 9h | 9h 6h 6h | 7h 7h 7h | 10h 10h 10h | 2h 2h 2h |
| | | Part number | | | | | |
| 16 | 3 | 22737 | 22302 | | | | |
| 16 | 4 | | 22262 | 22289 | 20844 | | |
| 16 | 5 | | | 21421 | | | |
| 32 | 4 | | 22263 | 22326 | 20781 | | |
| 32 | 5 | | | 21428 | | | |
| 16 | 3 | | 21516 | | | | |
| 16 | 4 | | 21517 | 20764 | 21491 | | |
| 16 | 5 | | | 21362 | | | |
| 32 | 4 | | 21519 | 20709 | 21492 | | |
| 32 | 5 | | | 21363 | | | |
| 16 | 3 | 3918 | 3919 | 3920 | | | |
| 16 | 4 | 3925 | 3927 | 3926 | 3928 | | |
| 16 | 5 | 3934 | 3936 | 3935 | | | |
| 32 | 3 | 3942 | 3943 | 3944 | | | |
| 32 | 4 | 3945 | 3946 | 3947 | 3948 | | |
| 32 | 5 | 3951 | 3952 | 3977 | | | |
| 16 | 3 | 3794 | 3796 | 3799 | | | |
| 16 | 4 | 3807 | 3811 | 3809 | 3810 | | |
| 16 | 5 | 3819 | 3823 | 3821 | | | |
| 32 | 3 | 3829 | 3830 | 3832 | | | |
| 32 | 4 | 3839 | 3844 | 3841 | 3842 | | |
| 32 | 5 | 3851 | 3855 | 3853 | | | |

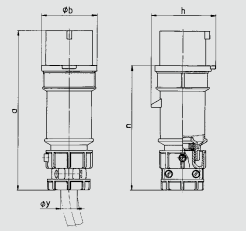
**Drawing**



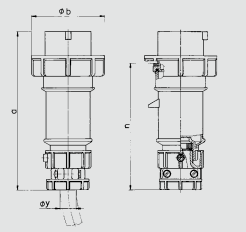

| Drawing 2 MB 217 | Amp. / Poles | 16 3 | 16 4 | 16 5 | 32 3 | 32 4 | 32 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 142 | 147 | 147 | 186 | 186 | 180 |
| | b | 53 | 59 | 67 | 70 | 70 | 77 |
| | h | 59 | 69,4 | 76 | 81 | 81 | 89,5 |
| | n | 105,2 | 110,5 | 110,5 | 141 | 141 | 135 |
| | y | 14,5 | 16 | 16 | 22 | 22 | 22 |
| Terminal for cond. cross | | 1 | 1 | 1 | 2,5 | 2,5 | 2,5 |
| section (mm²) min.-max. | | —2,5 | —2,5 | —2,5 | —6 | —6 | —6 |




| Drawing 2 MB 218 | Amp. / Poles | 16 3 | 16 4 | 16 5 | 32 3 | 32 4 | 32 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 142 | 144 | 147 | 186 | 186 | 180 |
| | b | 70 | 78 | 87 | 94 | 94 | 101 |
| | n | 109 | 111 | 114 | 145 | 145 | 138 |
| | y | 14,5 | 16 | 16 | 22 | 22 | 22 |
| Terminal for cond. cross | | 1 | 1 | 1 | 2,5 | 2,5 | 2,5 |
| section (mm²) min.-max. | | —2,5 | —2,5 | —2,5 | —6 | —6 | —6 |




| Drawing 2 MB 174 | Amp. / Poles | 16 3 | 16 4 | 16 5 | 32 3 | 32 4 | 32 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 162 | 172 | 186 | 199 | 199 | 213 |
| | b | 54 | 60 | 69 | 72 | 72 | 79 |
| | h | 60 | 67 | 77 | 83 | 83 | 91 |
| | n | 126 | 136 | 149 | 154 | 154 | 169 |
| | y | 19 | 19 | 22 | 24,5 | 24,5 | 28,5 |
| Terminal for cond. cross | | 1 | 1 | 1 | 2,5 | 2,5 | 2,5 |
| section (mm²) min.-max. | | —2,5 | —2,5 | —2,5 | —6 | —6 | —6 |




| Drawing 2 MB 171 | Amp. / Poles | 16 3 | 16 4 | 16 5 | 32 3 | 32 4 | 32 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 162 | 172 | 186 | 199 | 199 | 213 |
| | b | 71 | 79 | 89 | 95 | 95 | 102 |
| | n | 129 | 139 | 152 | 157 | 157 | 172 |
| | y | 19 | 19 | 22 | 24,5 | 24,5 | 28,5 |
| Terminal for cond. cross | | 1 | 1 | 1 | 2,5 | 2,5 | 2,5 |
| section (mm²) min.-max. | | —2,5 | —2,5 | —2,5 | —6 | —6 | —6 |

# Plugs and connectors ■ Plugs, highly heat resistant contact carrier,

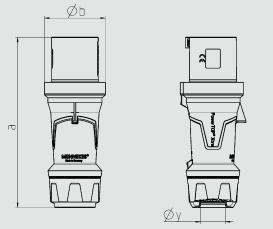
to DIN VDE 0623, EN 60309-2. Colour: grey (RAL 7000) and colour code. Enclosure and insert made of AMAPLAST.

| Image | Title | Description |
|---|---|---|
|  | **Plug PowerTOP® Xtra**<br><br>**IP 44**<br><br>Std. Pack. Qty: 5<br><br>Product group 2215.<br>Image 13112. | ■ screw terminals<br>■ rubberised grip area<br>■ frame terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ cable gland and sealing<br>■ strain relief and protection against kinking<br>■ enclosure with thread lock<br>■ two safety slides |
|  | **Plug PowerTOP® Xtra**<br><br>**IP 67**<br><br>Std. Pack. Qty: 5<br><br>Product group 2216.<br>Image 13212. | ■ screw terminals<br>■ rubberised grip area<br>■ frame terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ cable gland and sealing<br>■ strain relief and protection against kinking<br>■ enclosure with thread lock<br>■ two safety slides |

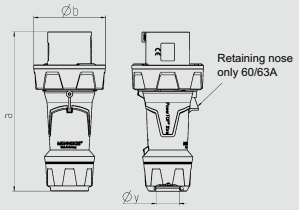
# nickel plated contacts, 63A - 125A, IP 44 and IP 67

Other voltages and frequencies available on request

| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | >50 - 500V 100-300 Hz | >50 - 500V 300-500 Hz | Drawing |
|---|---|---|---|---|---|---|---|---|
| | | 3p 4p 5p<br>4h 4h 4h | 3p 4p 5p<br>6h 9h 9h | 3p 4p 5p<br>9h 6h 6h | 3p 4p 5p<br>7h 7h 7h | 3p 4p 5p<br>10h 10h 10h | 3p 4p 5p<br>2h 2h 2h | |
| | | Part number | | | | | | |
| 63 | 3 | 13101 | 13102 | | | | | |
| 63 | 4 | | 13105 | 13106 | 13107 | | | |
| 63 | 5 | | 13111 | 13112 | | | | |
| 63 | 3 | 13201 | 13202 | 13203 | | | | |
| 63 | 4 | 13204 | 13205 | 13206 | 13207 | 13208 | 13209 | |
| 63 | 5 | 13210 | 13211 | 13212 | 13213 | | 13214 | |
| 125 | 3 | 13215 | 13216 | | | | | |
| 125 | 4 | 13217 | 13218 | 13219 | 13220 | | | |
| 125 | 5 | 13223 | 13224 | 13225 | 13226 | | 13227 | |

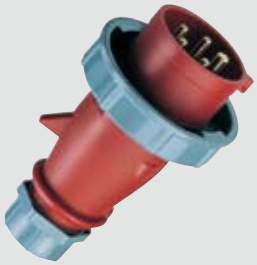
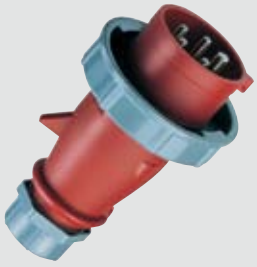



| Drawing 2 MB 226 | Amp. / Poles | 63 3 | 63 4 | 63 5 |
|---|---|---|---|---|
| Dim. in mm | a | 250 | 250 | 250 |
| | b | 90 | 90 | 90 |
| | y | 36 | 36 | 36 |
| Terminal for cond. cross section (mm²) min.-max. | | 6 —16 | 6 —16 | 6 —16 |




| Drawing 2 MB 225 | Amp. / Poles | 63 3 | 63 4 | 63 5 | 125 3 | 125 4 | 125 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 250 | 250 | 250 | 290 | 290 | 290 |
| | b | 114 | 114 | 114 | 130 | 130 | 130 |
| | y | 36 | 36 | 36 | 49 | 49 | 49 |
| Terminal for cond. cross section (mm²) min.-max. | | 6 —16 | 6 —16 | 6 —16 | 25 —50 | 25 —50 | 25 —50 |

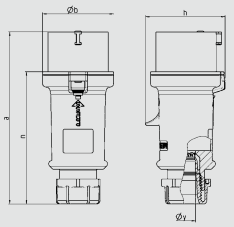
to DIN VDE 0623, EN 60309-2. Colour: grey (RAL 7000) and colour code. Enclosure and insert made of AMAPLAST.

| Image | Title | Description |
|---|---|---|
|  | **Phase inverter plug ProTOP**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 2144.<br>Image 3322. | ■ screw terminals<br>■ cable gland and sealing<br>■ strain relief and protection against kinking<br>■ enclosure with thread lock and safety slide |
|  | **Phase inverter plug AM-TOP®**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 2244.<br>Image 318. | ■ screw terminals<br>■ single part body<br>■ cable gland and sealing<br>■ strain relief and protection against kinking |
|  | **Phase inverter plug AM-TOP®**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 2244.<br>Image 22811. | ■ screw terminals<br>■ single part body<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ cable gland and sealing<br>■ strain relief and protection against kinking |
|  | **Phase inverter plug VarioTOP**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 2091.<br>Image 859. | ■ screw terminals<br>■ cable entry hood rotating up to 60° to the left or the right<br>■ with grommet<br>■ cable entry hood in colour code red<br>■ especially suited for use with receptacles of the Cepex range |
|  | **Phase inverter plug AM-TOP®**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10<br><br>Product group 2147.<br>Image 328. | ■ screw terminals<br>■ single part body<br>■ cable gland and sealing<br>■ strain relief and protection against kinking |
|  | **Phase inverter plug AM-TOP®**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10<br><br>Product group 2147.<br>Image 22814. | ■ screw terminals<br>■ single part body<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ cable gland and sealing<br>■ strain relief and protection against kinking |

# resistant contact carrier, nickel plated contacts, 16A - 32A, IP 44 and IP 67

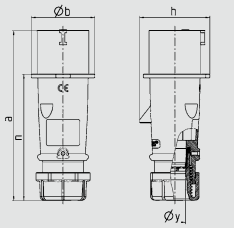
Other voltages and frequencies available on request

| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | >50 - 500V 100-300 Hz | >50 - 500V 300-500 Hz | Drawing |
|---|---|---|---|---|---|---|---|---|
| | | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | |
| | | 4h 4h 4h | 6h 9h 9h | 9h 6h 6h | 7h 7h 7h | 10h 10h 10h | 2h 2h 2h | |
| | | Part number | | | | | | |
| 16 | 5 | | | 3319A | | | | |
| 32 | 5 | | | 3322 | | | | |



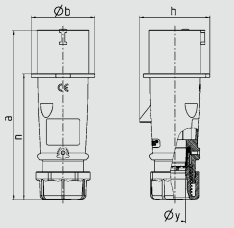
| Drawing 2 MB 214 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 148 | 160 | 160 | 197 | 197 | 197 |
| | b | 55 | 65,6 | 65,6 | 75 | 75 | 75 |
| | h | 61 | 72,5 | 72,5 | 80,5 | 80,5 | 85 |
| | n | 112 | 123,5 | 123,5 | 152 | 152 | 152 |
| | y | 14,5 | 16 | 16 | 22 | 22 | 22 |
| Terminal for cond. cross | | 1 | 1 | 1 | 2,5 | 2,5 | 2,5 |
| section (mm²) min.-max. | | –2,5 | –2,5 | –2,5 | –6 | –6 | –6 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 16 | 4 | | 338 | 339 | | | | |
| 16 | 5 | | 318 | 319 | | | | |
| 32 | 4 | | 396 | 397 | | | | |
| 32 | 5 | | 321 | 322 | | | | |



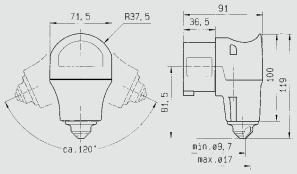
| Drawing 2 MB 217 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 142 | 147 | 147 | 186 | 186 | 180 |
| | b | 53 | 59 | 67 | 70 | 70 | 77 |
| | h | 59 | 69,4 | 76 | 81 | 81 | 89,5 |
| | n | 105,2 | 110,5 | 110,5 | 141 | 141 | 135 |
| | y | 14,5 | 16 | 16 | 22 | 22 | 22 |
| Terminal for cond. cross | | 1 | 1 | 1 | 2,5 | 2,5 | 2,5 |
| section (mm²) min.-max. | | –2,5 | –2,5 | –2,5 | –6 | –6 | –6 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 16 | 5 | | | 22811 | | | | |
| 32 | 5 | | | 22812 | | | | |



| Drawing 2 MB 217 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 142 | 147 | 147 | 186 | 186 | 180 |
| | b | 53 | 59 | 67 | 70 | 70 | 77 |
| | h | 59 | 69,4 | 76 | 81 | 81 | 89,5 |
| | n | 105,2 | 110,5 | 110,5 | 141 | 141 | 135 |
| | y | 14,5 | 16 | 16 | 22 | 22 | 22 |
| Terminal for cond. cross | | 1 | 1 | 1 | 2,5 | 2,5 | 2,5 |
| section (mm²) min.-max. | | –2,5 | –2,5 | –2,5 | –6 | –6 | –6 |

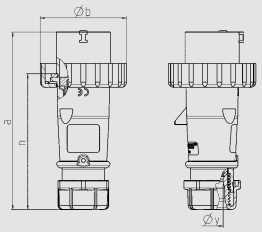
| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 16 | 5 | | | 859 | | | | |




Drawing 2 MB 208

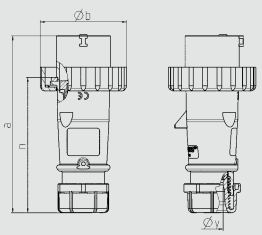
Dim. in mm

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 16 | 4 | | 3338 | 3339 | | | | |
| 16 | 5 | | | 325 | | | | |
| 32 | 4 | | 3340 | 3341 | | | | |
| 32 | 5 | | 327 | 328 | | | | |



| Drawing 2 MB 218 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 142 | 144 | 147 | 186 | 186 | 180 |
| | b | 70 | 78 | 87 | 94 | 94 | 101 |
| | n | 109 | 111 | 114 | 145 | 145 | 138 |
| | y | 14,5 | 16 | 16 | 22 | 22 | 22 |
| Terminal for cond. cross | | 1 | 1 | 1 | 2,5 | 2,5 | 2,5 |
| section (mm²) min.-max. | | –2,5 | –2,5 | –2,5 | –6 | –6 | –6 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 16 | 5 | | | 22814 | | | | |
| 32 | 5 | | | 22815 | | | | |



| Drawing 2 MB 218 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 142 | 144 | 147 | 186 | 186 | 180 |
| | b | 70 | 78 | 87 | 94 | 94 | 101 |
| | n | 109 | 111 | 114 | 145 | 145 | 138 |
| | y | 14,5 | 16 | 16 | 22 | 22 | 22 |
| Terminal for cond. cross | | 1 | 1 | 1 | 2,5 | 2,5 | 2,5 |
| section (mm²) min.-max. | | –2,5 | –2,5 | –2,5 | –6 | –6 | –6 |

# Plugs and connectors ■ Wall mounted inlets, partly highly heat

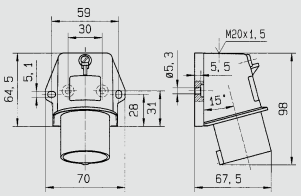
to DIN VDE 0623, EN 60309-2. Colour: grey and/or colour code. Enclosure and insert made of AMAPLAST.

| Image | Title | Description |
|---|---|---|
|  | **Wall mounted inlet**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 2036.<br>Image 844. | ■ screw terminals<br>■ for internal or external fixing<br>■ cable entry also possible from top or from the rear<br>■ for hinged lids for retrofit see accessories |
|  | **Wall mounted inlet**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 2037.<br>Image 847. | ■ screw terminals<br>■ with hinged lid<br>■ for internal or external fixing<br>■ cable entry also possible from top or from the rear |
|  | **Wall mounted inlet**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 2136.<br>Image 801. | ■ screw terminals<br>■ for external fixing<br>■ for hinged lids for retrofit see accessories |
|  | **Wall mounted inlet**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 2045.<br>Image 342. | ■ screw terminals<br>■ cable entry for 32A devices also possible on the back side<br>■ enclosure base with stamped recess for quick cutting out |
|  | **Wall mounted inlet**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 2045.<br>Image 21497. | ■ screw terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ cable entry for 32A devices also possible on the back side<br>■ enclosure base with stamped recess for quick cutting out |
|  | **Wall mounted inlet**<br><br>**IP 67**<br><br>Std. Pack. Qty: 5/3<br><br>Product group 2048.<br>Image 361. | ■ screw terminals<br>■ for a suitable watertight protective cover for 63A see part no. 40434 |

# resistant contact carrier, nickel plated contacts, 16A - 125A, IP 44 and IP 67

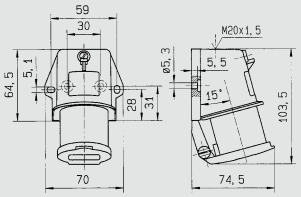
Other voltages and frequencies available on request.

| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | >50 - 500V 100-300 Hz | >50 - 500V 300-500 Hz | Drawing |
|---|---|---|---|---|---|---|---|---|
| | | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | |
| | | 4h 4h 4h | 6h 9h 9h | 9h 6h 6h | 7h 7h 7h | 10h 10h 10h | 2h 2h 2h | |
| | | Part number | | | | | | |
| 16 | 3 | 843 | 844 | | | | | |
| 16 | 3 | 846 | 847 | | | | | |
| 16 | 4 | | | 800 | | | | |
| 16 | 5 | | | 801 | | | | |
| 32 | 3 | | 802 | | | | | |
| 32 | 4 | | | 803 | | | | |
| 32 | 5 | | | 804 | | | | |
| 16 | 3 | 331 | 332 | 333 | | | | |
| 16 | 4 | 334 | 335 | 336 | 337 | 921 | 922 | |
| 16 | 5 | 340 | 341 | 342 | 2359 | 2668 | 2400 | |
| 32 | 3 | 343 | 344 | 345 | | | | |
| 32 | 4 | 346 | 347 | 348 | 349 | | | |
| 32 | 5 | 352 | 353 | 354 | 2386 | | | |
| 16 | 5 | | | 21497 | | | | |
| 32 | 5 | | | 21369 | | | | |
| 63 | 3 | 1216 | 1107 | 1217 | | | | |
| 63 | 4 | 355 | 356 | 357 | 358 | | | |
| 63 | 5 | 359 | 360 | 361 | | | | |
| 125 | 4 | 362 | 363 | 364 | 365 | | | |
| 125 | 5 | | 367 | 368 | | | | |



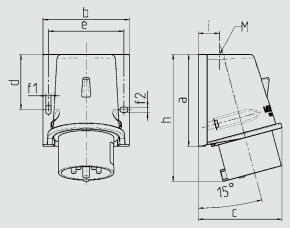

Drawing
2 MB 213

Dim. in mm

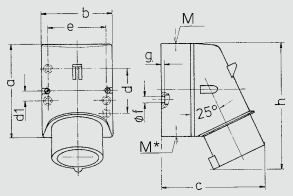



Drawing
2 MB 212

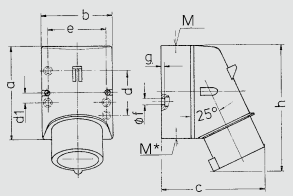
Dim. in mm



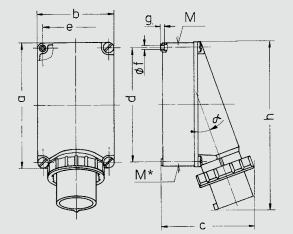

| Drawing 2 MB 221 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 4 | 5 | | 3 | 4 | 5 |
| Dim. in mm | a | 92.5 | 92.5 | | 102 | 102 | 102 |
| | b | 87 | 87 | | 94 | 94 | 94 |
| | c | 84.5 | 84.5 | | 94 | 94 | 94 |
| | d | 55.5 | 55.5 | | 62 | 62 | 62 |
| | e | 76 | 76 | | 84 | 84 | 84 |
| | f1 | 5.3 | 5.3 | | 5.3 | 5.3 | 5.3 |
| | f2 | 5.3 | 5.3 | | 5.3 | 5.3 | 5.3 |
| | h | 128 | 128 | | 146 | 146 | 146 |
| | i | 21,5 | 21,5 | | 26 | 26 | 26 |
| | M | 25x1.5 | 25x1.5 | | 25x1.5 | 25x1.5 | 32x1.5 |




| Drawing 2 MB 32 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 87 | 100 | 100 | 128 | 128 | 128 |
| | b | 64 | 75 | 75 | 84 | 84 | 84 |
| | c | 93 | 106 | 110 | 133 | 133 | 135 |
| | d | 40 | — | — | — | — | — |
| | d1 | — | 10,5 | 10,5 | 11 | 11 | 11 |
| | e | 50,5 | 59 | 59 | 68 | 68 | 68 |
| | f | 4,5 | 5 | 5 | 5,3 | 5,3 | 5,3 |
| | g. | 4 | 4 | 4 | 4 | 4 | 4 |
| | h | 122 | 133 | 135 | 169 | 169 | 170 |
| | M | 20 | 20 | 20 | 32 | 32 | 32 |
| | M* | 1x20 (blind) to be cut out | | | 2x25 (blind) to be cut out | | |
| Max. cable diam. (mm) | | 15 | 15 | 15 | 18/25 | 18/25 | 18/25 |
| Terminal for cond. cross section (mm²) min.-max. | | 1 —2,5 | 1 —2,5 | 1 —2,5 | 2,5 —6 | 2,5 —6 | 2,5 —6 |




| Drawing 2 MB 32 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 87 | 100 | 100 | 128 | 128 | 128 |
| | b | 64 | 75 | 75 | 84 | 84 | 84 |
| | c | 93 | 106 | 110 | 133 | 133 | 135 |
| | d | 40 | — | — | — | — | — |
| | d1 | — | 10,5 | 10,5 | 11 | 11 | 11 |
| | e | 50,5 | 59 | 59 | 68 | 68 | 68 |
| | f | 4,5 | 5 | 5 | 5,3 | 5,3 | 5,3 |
| | g. | 4 | 4 | 4 | 4 | 4 | 4 |
| | h | 122 | 133 | 135 | 169 | 169 | 170 |
| | M | 20 | 20 | 20 | 32 | 32 | 32 |
| | M* | 1x20 (blind) to be cut out | | | 2x25 (blind) to be cut out | | |
| Max. cable diam. (mm) | | 15 | 15 | 15 | 18/25 | 18/25 | 18/25 |
| Terminal for cond. cross section (mm²) min.-max. | | 1 —2,5 | 1 —2,5 | 1 —2,5 | 2,5 —6 | 2,5 —6 | 2,5 —6 |




| Drawing 2 MB 36 | Amp. | 63 | | | 125 | |
|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 4 | 5 |
| Dim. in mm | a | 170 | 170 | 170 | 264 | 264 |
| | b | 118 | 118 | 118 | 163 | 163 |
| | c | 171 | 171 | 171 | 205 | 205 |
| | d | 136 | 136 | 136 | 240 | 240 |
| | e | 104 | 104 | 104 | 140 | 140 |
| | f | 6,1 | 6,1 | 6,1 | 8,1 | 8,1 |
| | g. | 6 | 6 | 6 | 8 | 8 |
| | h | 250 | 250 | 250 | 355 | 355 |
| | M | 40 | 40 | 40 | 50 | 50 |
| | M* | 2x40 | 2x40 | 2x40 | 50 | 50 |
| | α | 25° | 25° | 25° | 20° | 20° |
| Max. cable diam. (mm) | | 32 | 32 | 32 | 38 | 38 |
| Terminal for cond. cross section (mm²) min.-max. | | 4 —10 | 4 —10 | 4 —10 | 16 —35 | 16 —35 |

# Plugs and connectors ■ Panel mounted inlets, 16A - 63A,

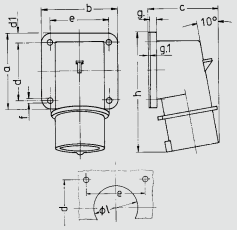
to DIN VDE 0623, EN 60309-2. Colour: electric grey and/or colour code. Enclosure and insert made of AMAPLAST.

| Image | Title | Description |
|---|---|---|
|  | **Panel mounted inlet**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 2051.<br>Image 379. | ■ screw terminals |
|  | **Panel mounted inlet**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 2057.<br>Image 402. | ■ screw terminals<br>■ with hinged lid |
|  | **Panel mounted inlet**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 2055.<br>Image 432. | ■ screw terminals |
|  | **Panel mounted inlet**<br><br>**IP 67**<br><br>Std. Pack. Qty: 5<br><br>Product group 2190.<br>Image 3611. | ■ screw terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ 80° inclination<br>■ frame terminals<br>■ special mount flange<br>■ apparat partial mounted<br>■ 20 fixing screws in bag enclosed |
|  | **Panel mounted inlet**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10/5<br><br>Product group 2050.<br>Image 464. | ■ screw terminals<br>■ with hinged lid |
|  | **Panel mounted inlet**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10/5<br><br>Product group 2067.<br>Image 1253. | ■ screw terminals<br>■ with protective cover |

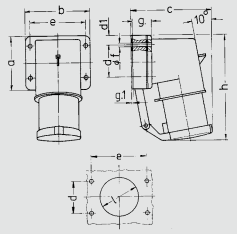
# IP 44 and IP 67

Other voltages and frequencies available on request.

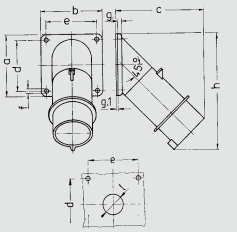
| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | >50 - 500V 100-300 Hz | >50 - 500V 300-500 Hz | Drawing |
|---|---|---|---|---|---|---|---|---|
| | | 3p 4p 5p<br>4h 4h 4h | 3p 4p 5p<br>6h 9h 9h | 3p 4p 5p<br>9h 6h 6h | 3p 4p 5p<br>7h 7h 7h | 3p 4p 5p<br>10h 10h 10h | 3p 4p 5p<br>2h 2h 2h | |
| | | Part number | | | | | | |
| 16 | 4 | | 372 | 373 | | | | |
| 16 | 5 | | | 379 | | | | |
| 32 | 3 | | 381 | | | | | |
| 32 | 4 | | | 385 | | | | |
| 32 | 5 | | | 391 | | | | |
| 16 | 4 | 392 | 393 | 394 | 395 | | | |
| 16 | 5 | 398 | 399 | 400 | | | | |
| 32 | 3 | 401 | 402 | 403 | | | | |
| 32 | 4 | 404 | 405 | 406 | 407 | | | |
| 32 | 5 | 410 | 411 | 412 | | | | |
| 16 | 5 | | | 432 | | | | |
| 32 | 3 | | 434 | | | | | |
| 32 | 4 | | | 438 | | | | |
| 32 | 5 | | | 444 | | | | |
| 63 | 5 | | | 3611 | | | | |
| 16 | 5 | | 461 | 462 | | | | |
| 32 | 3 | | 464 | | | | | |
| 32 | 4 | | 467 | 468 | 469 | | | |
| 32 | 5 | | 473 | 474 | | | | |
| 63 | 4 | | 476 | 477 | 2624 | | | |
| 63 | 5 | | 479 | 480 | | | | |
| 16 | 3 | 3530 | 3531 | | | | | |
| 16 | 5 | | | 1253 | | | | |
| 32 | 5 | | | 1254 | | | | |
| 63 | 4 | | | 1256 | 1257 | | | |
| 63 | 5 | | | 1259 | | | | |



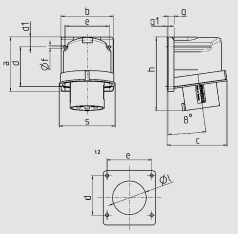
| Drawing 2 MB 73 | Amp. | 16 | | 32 | | |
|---|---|---|---|---|---|---|
| | Poles | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 85 | 85 | 75 | 75 | 75 |
| | b | 85 | 85 | 90 | 90 | 90 |
| | c | 75 | 79 | 87 | 87 | 90 |
| | d | 64 | 64 | 45 | 45 | 45 |
| | d1 | 10 | 10 | 13 | 13 | 13 |
| | e | 64 | 64 | 78 | 78 | 78 |
| | f | 5,5 | 5,5 | 5,5 | 5,5 | 5,5 |
| | g. | 6 | 6 | 6 | 6 | 6 |
| | g.1 | 2 | 2 | 2 | 2 | 2 |
| | h | 129 | 129 | 137 | 137 | 138 |
| | l | 50 | 50 | 55 | 55 | 55 |
| Terminal for cond. cross section (mm²) min.-max. | | –2,5 | –2,5 | –6 | –6 | –6 |



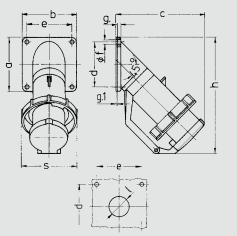
| Drawing 2 MB 43 | Amp. | 16 | | 32 | | |
|---|---|---|---|---|---|---|
| | Poles | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 85 | 85 | 75 | 75 | 75 |
| | b | 85 | 85 | 90 | 90 | 90 |
| | c | 104 | 106 | 115 | 115 | 117 |
| | d | 64 | 64 | 45 | 45 | 45 |
| | d1 | 10 | 10 | 13 | 13 | 13 |
| | e | 64 | 64 | 78 | 78 | 78 |
| | f | 5,5 | 5,5 | 5,5 | 5,5 | 5,5 |
| | g. | 27 | 27 | 27 | 27 | 27 |
| | g.1 | 2 | 2 | 1 | 1 | 1 |
| | h | 140 | 140 | 150 | 150 | 150 |
| | l | 50 | 50 | 55 | 55 | 55 |
| Terminal for cond. cross section (mm²) min.-max. | | –2,5 | –2,5 | –6 | –6 | –6 |



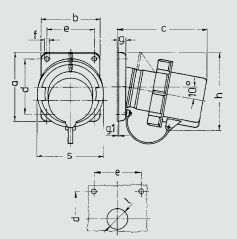
| Drawing 2 MB 39 | Amp. | 16 | 32 | | |
|---|---|---|---|---|---|
| | Poles | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 85 | 85 | 85 | 85 |
| | b | 85 | 85 | 85 | 85 |
| | c | 122 | 126 | 126 | 129 |
| | d | 70 | 70 | 70 | 70 |
| | e | 70 | 70 | 70 | 70 |
| | f | 6,2 | 6,2 | 6,2 | 6,2 |
| | g. | 6 | 6 | 6 | 6 |
| | g.1 | 2 | 2 | 2 | 2 |
| | h | 161 | 163 | 163 | 170 |
| | l | 30 | 30 | 30 | 30 |
| Terminal for cond. cross section (mm²) min.-max. | | –2,5 | –6 | –6 | –6 |



| Drawing 2 MB 230 | Amp. | 63 |
|---|---|---|
| | Poles | 5 |
| Dim. in mm | a | 110 |
| | b | 106 |
| | c | 121 |
| | d | 80 |
| | d1 | 20 |
| | e | 90 |
| | f | 5.5 |
| | g | 12 |
| | g1 | 2 |
| | h | 149 |
| | l | 68 |
| | s | 113 |



| Drawing 2 MB 40 | Amp. | 16 | 32 | | | 63 | |
|---|---|---|---|---|---|---|---|
| | Poles | 5 | 3 | 4 | 5 | 4 | 5 |
| Dim. in mm | a | 85 | 85 | 85 | 85 | 114 | 114 |
| | b | 85 | 85 | 85 | 85 | 114 | 114 |
| | c | 141 | 141 | 141 | 144 | 180 | 180 |
| | d | 70 | 70 | 70 | 70 | 90 | 90 |
| | e | 70 | 70 | 70 | 70 | 90 | 90 |
| | f | 6,2 | 6,2 | 6,2 | 6,2 | 6,2 | 6,2 |
| | g. | 6 | 6 | 6 | 6 | 6 | 6 |
| | g.1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | h | 181 | 181 | 181 | 188 | 242 | 242 |
| | s | 86 | 93 | 93 | 100 | 113 | 113 |
| | l | 30 | 30 | 30 | 30 | 40 | 40 |
| Terminal for cond. cross section (mm²) min.-max. | | –2,5 | –6 | –6 | –6 | –10 | –10 |



| Drawing 2 MB 62 | Amp. | 16 | | 32 | 63 | |
|---|---|---|---|---|---|---|
| | Poles | 3 | 5 | 5 | 4 | 5 |
| Dim. in mm | a | 85 | 85 | 85 | 108 | 108 |
| | b | 85 | 85 | 85 | 101 | 101 |
| | c | 132 | 132 | 137 | 164 | 164 |
| | d | 70 | 70 | 70 | 85 | 85 |
| | e | 70 | 70 | 70 | 77 | 77 |
| | f | 6,3 | 6,3 | 6,3 | 6,5 | 6,5 |
| | g. | 11 | 11 | 11 | 12 | 12 |
| | g.1 | 2 | 2 | 2 | 2 | 2 |
| | h | 100 | 107 | 111 | 130 | 130 |
| | s | 70 | 86 | 102 | 114 | 114 |
| | l | 30 | 30 | 30 | 40 | 40 |
| Terminal for cond. cross section (mm²) min.-max. | | –2,5 | –2,5 | –6 | –16 | –16 |

# Plugs and connectors ■ Panel mounted inlets, partly highly heat

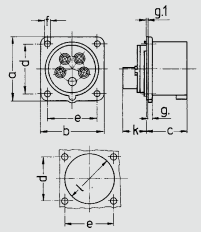
to DIN VDE 0623, EN 60309-2. Colour: electric grey and/or colour code. Enclosure and insert made of AMAPLAST.

| Image | Title | Description |
|---|---|---|
|  | **Panel mounted inlet**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 2084.<br>Image 853. | ■ screw terminals<br>■ a retaining nose to hold the hinged lid of the connector must be provided by the customer in order to ensure satisfactory locking |
|  | **Panel mounted inlet**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 2069.<br>Image 1408. | ■ screw terminals<br>■ a retaining nose to hold the hinged lid of the connector must be provided by the customer in order to ensure satisfactory locking |
|  | **Panel mounted inlet**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 2083.<br>Image 812. | ■ screw terminals<br>■ nickel plated contacts<br>■ a retaining nose to hold the hinged lid of the connector must be provided by the customer in order to ensure satisfactory locking |
|  | **Panel mounted inlet**<br><br>**IP 44**<br><br>Std. Pack. Qty: 5<br><br>Product group 2069.<br>Image 1688. | ■ screw terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ a retaining nose to hold the hinged lid of the connector must be provided by the customer in order to ensure satisfactory locking |
|  | **Panel mounted inlet**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10<br><br>Product group 2080.<br>Image 826. | ■ screw terminals<br>■ nickel plated contacts<br>■ a retaining nose to hold the hinged lid of the connector must be provided by the customer in order to ensure satisfactory locking |
|  | **Panel mounted inlet**<br><br>**IP 67**<br><br>Std. Pack. Qty: 5<br><br>Product group 2076.<br>Image 1983. | ■ screw terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ 63A: a retaining nose to hold the hinged lid of the connector must be provided by the customer in order to ensure satisfactory locking |

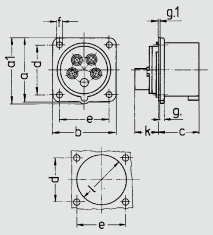
# resistant contact carrier, nickel plated contacts, 16A - 125A, IP 44 and IP 67

Other voltages and frequencies available on request.

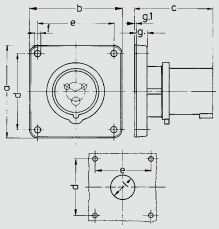
| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | >50 - 500V 100-300 Hz | >50 - 500V 300-500 Hz | Drawing |
|---|---|---|---|---|---|---|---|---|
| | | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | |
| | | 4h 4h 4h | 6h 9h 9h | 9h 6h 6h | 7h 7h 7h | 10h 10h 10h | 2h 2h 2h | |
| | | Part number | | | | | | |
| 16 | 5 | | | 853 | | | | |
| 16 | 5 | | | 1408 | | | | |
| 32 | 5 | | | 1409 | | | | |
| 16 | 3 | | 812 | | | | | |
| 16 | 4 | | 837 | 813 | 814 | | | |
| 16 | 5 | | | 815 | | | | |
| 32 | 3 | | 817 | | | | | |
| 32 | 4 | | 838 | 819 | 820 | | | |
| 32 | 5 | | | 821 | | | | |
| 63 | 3 | | 1981 | | | | | |
| 63 | 4 | | 1984 | 1982 | 824 | | | |
| 63 | 5 | | | 1688 | | | | |
| 16 | 3 | 825 | 826 | | | | | |
| 16 | 4 | | 839 | 827 | 828 | | | |
| 16 | 5 | | | 829 | | | | |
| 32 | 3 | 830 | 831 | | | | | |
| 32 | 4 | | 840 | 832 | 833 | | | |
| 32 | 5 | | | 834 | | | | |
| 63 | 3 | 835 | 836 | | | | | |
| 63 | 4 | | 3704 | 3656 | 3657 | | | |
| 63 | 5 | | | 3658 | | | | |
| 125 | 3 | | 3665 | | | | | |
| 125 | 4 | | 3413 | 3583 | 3600 | | | |
| 125 | 5 | | | 1983 | | | | |



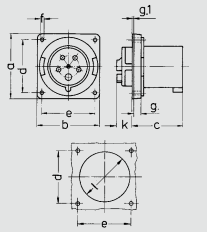
| Drawing 2 MB 68/853 | Amp. / Poles | 16 / 5 |
|---|---|---|
| Dim. in mm | a | 75 |
| | b | 75 |
| | c | 42 |
| | d | 60 |
| | e | 60 |
| | f | 5,5 |
| | g. | 7,3 |
| | g.1 | 2 |
| | k | 13 |
| | l | 52 |
| Terminal for cond. cross section (mm²) min.-max. | | —2,5 |



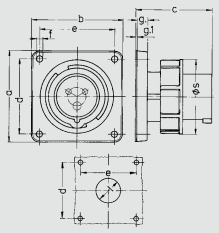
| Drawing 2 MB 68 | Amp. | 16 | 32 |
|---|---|---|---|
| | Poles | 5 | 5 |
| Dim. in mm | a | 66 | 72 |
| | a1 | 69 | 78 |
| | b | 66 | 72 |
| | c | 43 | 52 |
| | d | 52 | 60 |
| | e | 52 | 60 |
| | f | 4,5 | 4,5 |
| | g. | 4,5 | 4,5 |
| | g.1 | 2 | 2 |
| | k | 27 | 32 |
| | l | 59 | 63 |
| Terminal for cond. cross section (mm²) min.-max. | | —2,5 | —6 |



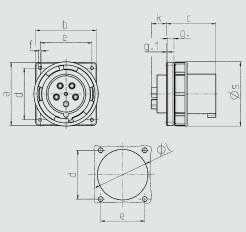
| Drawing 2 MB 173/2 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 85,7 | 85,7 | 85,7 | 85,7 | 85,7 | 85,7 |
| | b | 85,7 | 85,7 | 85,7 | 85,7 | 85,7 | 85,7 |
| | c | 72 | 72 | 72 | 90 | 90 | 90 |
| | d | 69,5 | 69,5 | 69,5 | 69,5 | 69,5 | 69,5 |
| | e | 69,5 | 69,5 | 69,5 | 69,5 | 69,5 | 69,5 |
| | f | 5,5 | 5,5 | 5,5 | 5,5 | 5,5 | 5,5 |
| | g. | 11 | 11 | 11 | 11 | 11 | 11 |
| | g.1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | l | 32 | 36 | 36 | 47 | 47 | 47 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —10 | 2,5 —10 | 2,5 —10 |



| Drawing 2 MB 155 | Amp. | 63 | | |
|---|---|---|---|---|
| | Poles | 3 | 4 | 5 |
| Dim. in mm | a | 110 | 110 | 110 |
| | b | 106 | 106 | 106 |
| | c | 86 | 86 | 86 |
| | d | 90 | 90 | 90 |
| | e | 90 | 90 | 90 |
| | f | 5,5 | 5,5 | 5,5 |
| | g. | 12 | 12 | 12 |
| | g.1 | 2 | 2 | 2 |
| | k | 28 | 28 | 28 |
| | l | 86 | 86 | 86 |
| Terminal for cond. cross section (mm²) min.-max. | | 6 —16 | 6 —16 | 6 —16 |



| Drawing 2 MB 187/2 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 85,7 | 85,7 | 85,7 | 85,7 | 85,7 | 85,7 |
| | b | 85,7 | 85,7 | 85,7 | 85,7 | 85,7 | 85,7 |
| | c | 72 | 72 | 72 | 90 | 90 | 90 |
| | d | 69,5 | 69,5 | 69,5 | 69,5 | 69,5 | 69,5 |
| | e | 69,5 | 69,5 | 69,5 | 69,5 | 69,5 | 69,5 |
| | f | 5,5 | 5,5 | 5,5 | 5,5 | 5,5 | 5,5 |
| | g. | 11 | 11 | 11 | 11 | 11 | 11 |
| | g.1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | l | 32 | 36 | 47 | 47 | 47 | 47 |
| | s | 71 | 79 | 89 | 94 | 94 | 102 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —10 | 2,5 —10 | 2,5 —10 |



| Drawing 2 MB 166 | Amp. | 63 | | | 125 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 110 | 110 | 110 | 130 | 130 | 130 |
| | b | 106 | 106 | 106 | 130 | 130 | 130 |
| | c | 86 | 86 | 86 | 112 | 112 | 112 |
| | d | 90 | 90 | 90 | 104 | 104 | 104 |
| | e | 90 | 90 | 90 | 104 | 104 | 104 |
| | f | 5,5 | 5,5 | 5,5 | 6,5 | 6,5 | 6,5 |
| | g. | 12 | 12 | 12 | 18 | 18 | 18 |
| | g.1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | k | 28 | 28 | 28 | 28 | 28 | 28 |
| | l | 88.5 | 88.5 | 88.5 | 95 | 95 | 95 |
| | s | 113 | 113 | 113 | 132 | 132 | 132 |
| Terminal for cond. cross section (mm²) min.-max. | | 6 —16 | 6 —16 | 6 —16 | 25 —70 | 25 —70 | 25 —70 |

# Plugs and connectors ■ Phase inverter inlets, 16A and 32A, IP 44

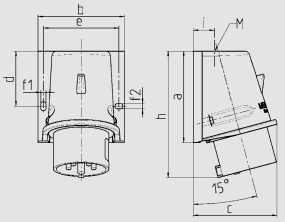
to DIN VDE 0623, EN 60309-2. Colour: electric grey and/or colour code. Enclosure and insert made of AMAPLAST.

| Image | Title | Description |
|---|---|---|
|  | **Wall mounted phase inverter inlet**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 2052.<br>Image 3517. | ■ screw terminals<br>■ external fixing<br>■ hinged lid for 16A for retrofit see accessories |
|  | **Wall mounted phase inverter inlet**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 2066.<br>Image 2511. | ■ screw terminals<br>■ cable entry for 32A devices also possible on the back side<br>■ enclosure base with stamped recess for quick cutting out |
|  | **Panel mounted phase inverter inlet**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 2060.<br>Image 329. | ■ screw terminals |
|  | **Panel mounted phase inverter inlet**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 2062.<br>Image 20970. | ■ screw terminals<br>■ with hinged lid |
|  | **Panel mounted phase inverter inlet**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 2085.<br>Image 854. | ■ screw terminals<br>■ a retaining nose to hold the hinged lid of the connector must be provided by the customer in order to ensure satisfactory locking |
|  | **Panel mounted inlet RAPIDO® as phase inverter inlet**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 2086.<br>Image 937. | ■ screw terminals<br>■ for wall apertures 70 mm diameter<br>■ central fixing<br>■ a retaining nose to hold the hinged lid of the connector must be provided by the customer in order to ensure satisfactory locking |

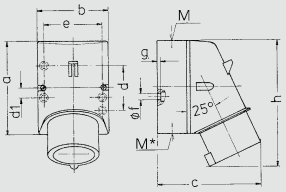
Other voltages and frequencies available on request.

| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | >50 - 500V 100-300 Hz | >50 - 500V 300-500 Hz |
|---|---|---|---|---|---|---|---|
| | | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p |
| | | 4h 4h 4h | 6h 9h 9h | 9h 6h 6h | 7h 7h 7h | 10h 10h 10h | 2h 2h 2h |
| | | Part number | | | | | |
| 16 | 5 | | | 3517 | | | |
| 32 | 5 | | | 3523 | | | |
| 16 | 4 | | 3342 | 3343 | | | |
| 16 | 5 | | | 2511 | | | |
| 32 | 4 | | 3345 | 3346 | | | |
| 32 | 5 | | 3347 | 2478 | | | |
| 16 | 4 | | 3357 | 855 | | | |
| 16 | 5 | | | 329 | | | |
| 32 | 4 | | 3367 | 3368 | | | |
| 32 | 5 | | 913 | 330 | | | |
| 16 | 4 | | 3348 | 3350 | | | |
| 16 | 5 | | | 20970 | | | |
| 32 | 4 | | 3355 | 3356 | | | |
| 32 | 5 | | 3717 | 21241 | | | |
| 16 | 5 | | | 854 | | | |
| 16 | 5 | | | 937 | | | |
| 32 | 5 | | | 992 | | | |

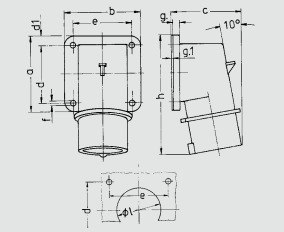
Drawing



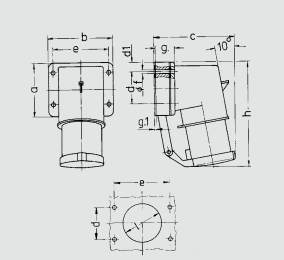
| Drawing 2 MB 221 | Amp. | 16 | | 32 | | |
|---|---|---|---|---|---|---|
| | Poles | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 92.5 | 92.5 | 102 | 102 | 102 |
| | b | 87 | 87 | 94 | 94 | 94 |
| | c | 84.5 | 84.5 | 94 | 94 | 94 |
| | d | 55.5 | 55.5 | 62 | 62 | 62 |
| | e | 76 | 76 | 84 | 84 | 84 |
| | f1 | 5.3 | 5.3 | 5.3 | 5.3 | 5.3 |
| | f2 | 5.3 | 5.3 | 5.3 | 5.3 | 5.3 |
| | h | 128 | 128 | 146 | 146 | 146 |
| | i | 21,5 | 21,5 | 26 | 26 | 26 |
| | M | 25x1.5 | 25x1.5 | 25x1.5 | 25x1.5 | 32x1.5 |



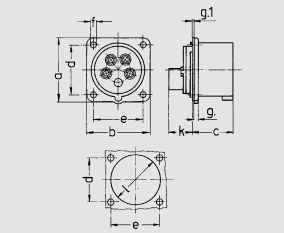
| Drawing 2 MB 32 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 87 | 100 | 100 | 128 | 128 | 128 |
| | b | 64 | 75 | 75 | 84 | 84 | 84 |
| | c | 93 | 106 | 110 | 133 | 133 | 135 |
| | d | 40 | — | — | — | — | — |
| | d1 | — | 10,5 | 10,5 | 11 | 11 | 11 |
| | e | 50,5 | 59 | 59 | 68 | 68 | 68 |
| | f | 4,5 | 5 | 5 | 5,3 | 5,3 | 5,3 |
| | g. | 4 | 4 | 4 | 4 | 4 | 4 |
| | h | 122 | 133 | 135 | 169 | 169 | 170 |
| | M | 20 | 20 | 20 | 32 | 32 | 32 |
| | M* | 1x20 (blind) to be cut out | | | 2x25 (blind) to be cut out | | |
| Max. cable diam. (mm) | | 15 | 15 | 15 | 18/25 | 18/25 | 18/25 |
| Terminal for cond. cross section (mm²) min.-max. | | 1 —2,5 | 1 —2,5 | 1 —2,5 | 2,5 —6 | 2,5 —6 | 2,5 —6 |



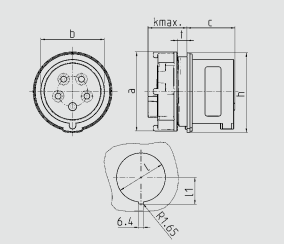
| Drawing 2 MB 73 | Amp. | 16 | | 32 | | |
|---|---|---|---|---|---|---|
| | Poles | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 85 | 85 | 75 | 75 | 75 |
| | b | 85 | 85 | 90 | 90 | 90 |
| | c | 75 | 79 | 87 | 87 | 90 |
| | d | 64 | 64 | 45 | 45 | 45 |
| | d1 | 10 | 10 | 13 | 13 | 13 |
| | e | 64 | 64 | 78 | 78 | 78 |
| | f | 5,5 | 5,5 | 5,5 | 5,5 | 5,5 |
| | g. | 6 | 6 | 6 | 6 | 6 |
| | g.1 | 2 | 2 | 2 | 2 | 2 |
| | h | 129 | 129 | 137 | 137 | 138 |
| | l | 50 | 50 | 55 | 55 | 55 |
| Terminal for cond. cross section (mm²) min.-max. | | 1 —2,5 | 1 —2,5 | 2,5 —6 | 2,5 —6 | 2,5 —6 |



| Drawing 2 MB 43 | Amp. | 16 | | 32 | | |
|---|---|---|---|---|---|---|
| | Poles | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 85 | 85 | 75 | 75 | 75 |
| | b | 85 | 85 | 90 | 90 | 90 |
| | c | 104 | 106 | 115 | 115 | 117 |
| | d | 64 | 64 | 45 | 45 | 45 |
| | d1 | 10 | 10 | 13 | 13 | 13 |
| | e | 64 | 64 | 78 | 78 | 78 |
| | f | 5,5 | 5,5 | 5,5 | 5,5 | 5,5 |
| | g. | 27 | 27 | 27 | 27 | 27 |
| | g.1 | 2 | 2 | 1 | 1 | 1 |
| | h | 140 | 140 | 150 | 150 | 150 |
| | l | 50 | 50 | 55 | 55 | 55 |
| Terminal for cond. cross section (mm²) min.-max. | | 1 —2,5 | 1 —2,5 | 2,5 —6 | 2,5 —6 | 2,5 —6 |



| Drawing 2 MB 68/853 | Amp. | 16 |
|---|---|---|
| | Poles | 5 |
| Dim. in mm | a | 75 |
| | b | 75 |
| | c | 42 |
| | d | 60 |
| | e | 60 |
| | f | 5,5 |
| | g. | 7,3 |
| | g.1 | 2 |
| | k | 13 |
| | l | 52 |
| Terminal for cond. cross section (mm²) min.-max. | | 1 —2,5 |



| Drawing 2 MB 215 | Amp. | 16 | | 32 | | |
|---|---|---|---|---|---|---|
| | Poles | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 78 | 78 | 78 | 78 | 78 |
| | b | 50 | 56 | 58 | 58 | 64 |
| | c | 45 | 44 | 51 | 51 | 51 |
| | k max. | 33 | 33 | 33 | 33 | 33 |
| | h | 82 | 82 | 82 | 82 | 82 |
| | l | 70 | 70 | 70 | 70 | 70 |
| | l1 | 37,75 | 37,75 | 37,75 | 37,75 | 37,75 |
| | t | wall thicknesses 2-9mm | | wall thicknesses 2-9mm | | |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 2,5 —10 | 2,5 —10 | 2,5 —10 |

VDE 0413, part 7, DIN-EN 61557-7.

| Image | Title | Description |
|---|---|---|
|  | **Phase sequence test plug**<br><br>**IP 44**<br><br>Std. Pack. Qty: 5<br><br>Product group 2070.<br>Image 1414. | ■ to VDE 0413, part 7, DIN-EN 61557-7 |



## Phase sequence test plug

The test plug enables safe control of the direction of the rotating field for CEE receptacles.

According to VDE 0100 § 31b) 5 rotary current receptacles must be connected such that a right-hand rotating field is achieved - the receptacles seen from front in clockwise direction.

The test plug differs from a standard plug by its transparent enclosure indicating a right-hand or left-hand rotating field or a missing phase by means of two control lamps.

**Correct rotating field:**
**Green lamp lights up.**

**Incorrect rotating field:**
**Red lamp lights up.**

**Phase missing:**
**Both lamps light up.**

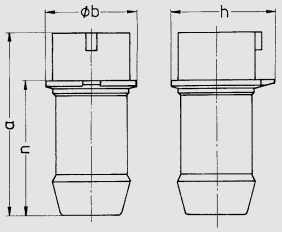
The control lamps inside the transparent enclosure are arranged so as to be perfectly visible from all sides.

Other voltages and frequencies available on request.

| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | >50 - 500V 100-300 Hz | >50 - 500V 300-500 Hz |
|---|---|---|---|---|---|---|---|
| | | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p |
| | | 4h 4h 4h | 6h 9h 9h | 9h 6h 6h | 7h 7h 7h | 10h 10h 10h | 2h 2h 2h |
| | | Part number | | | | | |
| 16 | 4 | | 3527 | 3458 | 3459 | | |
| 16 | 5 | | 3231 | 1414 | | | |
| 32 | 4 | | 3528 | 3460 | 3461 | | |
| 32 | 5 | | 3232 | 1415 | | | |
| 63 | 4 | | 3420 | 1436 | 3917 | | |
| 63 | 5 | | | 1437 | | | |

Phase sequence test plug for receptacles for reefer containers see chapter special plugs and sockets.

**Drawing**




| Drawing 2 MB 140 | Amp. | 16 | | 32 | | 63 | |
|---|---|---|---|---|---|---|---|
| | Poles | 4 | 5 | 4 | 5 | 4 | 5 |
| Dim. in mm | a | 126 | 129 | 145 | 145 | 211 | 211 |
| | b | 60 | 65 | 66 | 74 | 100 | 100 |
| | h | 62 | 69 | 71 | 80 | 100 | 100 |
| | n | 90 | 93 | 99 | 99 | 145 | 145 |



# Plugs and connectors ■ Connectors, 16A - 32A, IP 44 and IP 67

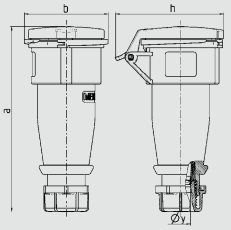
DIN VDE 0623, EN 60309-2. Colour: electric grey and/or colour code. Enclosure and insert made of AMAPLAST.

| Image | Title | Description |
|---|---|---|
|  | **Connector AM-TOP®**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 3141.<br>Image 5. | ■ screw terminals<br>■ single part body<br>■ cable gland and sealing<br>■ strain relief and protection against kinking |
|  | **Connector ProTOP**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 3197.<br>Image 15A. | ■ screw terminals<br>■ cable gland and sealing<br>■ strain relief and protection against kinking<br>■ enclosure with thread lock and safety slide |
|  | **Connector StarTOP®**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 3101.<br>Image 35. | ■ screwless, with insulation displacing technique<br>■ SafeCONTACT<br>■ cable gland and sealing<br>■ strain relief and protection against kinking<br>■ enclosure with thread lock and safety slide |
|  | **Angled connector**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 3039.<br>Image 1438. | ■ screw terminals<br>■ with grommet |
|  | **Connector AM-TOP®**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10<br><br>Product group 3149.<br>Image 550. | ■ screw terminals<br>■ single part body<br>■ cable gland and sealing<br>■ strain relief and protection against kinking |

Other voltages and frequencies available on request.

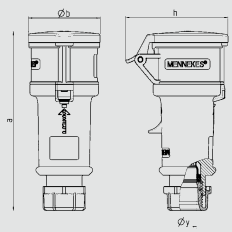
| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | >50 - 500V 100-300 Hz | >50 - 500V 300-500 Hz |
|---|---|---|---|---|---|---|---|
| | | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p |
| | | 4h 4h 4h | 6h 9h 9h | 9h 6h 6h | 7h 7h 7h | 10h 10h 10h | 2h 2h 2h |
| | | Part number | | | | | |
| 16 | 3 | 509 | 510 | 511 | 2660 | 2441 | 2517 |
| 16 | 4 | 512 | 513 | 514 | 515 | 516 | 517 |
| 16 | 5 | 518 | 519 | 5 | 2026 | 2193 | 2495 |
| 32 | 3 | 521 | 522 | 523 | | 2196 | 2674 |
| 32 | 4 | 524 | 525 | 526 | 527 | 528 | 529 |
| 32 | 5 | 530 | 531 | 6 | 2027 | 2245 | 2493 |
| | | Part no. 510: For use on camping sites, please select type 180AC. | | | | | |

Drawing



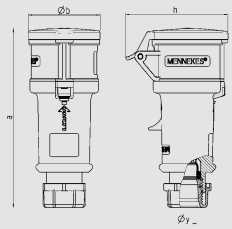

| Drawing 3 MB 63 | Amp. / Poles | 16 3 | 16 4 | 16 5 | 32 3 | 32 4 | 32 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 162 | 165 | 167 | 209 | 209 | 208 |
| | b | 60 | 68 | 76 | 82 | 82 | 89 |
| | h | 83 | 92 | 98 | 100 | 100 | 108 |
| | y | 14,5 | 16 | 16 | 22 | 22 | 22 |
| Terminal for cond. cross section (mm²) min.-max. | | 1 —2,5 | 1 —2,5 | 1 —2,5 | 2,5 —6 | 2,5 —6 | 2,5 —6 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 16 | 3 | 179A | 180A | 181A | | 201 | |
| 16 | 4 | 202 | 193A | 194A | 195A | 308 | 309 |
| 16 | 5 | | 199A | 15A | 310 | 312 | 313 |
| 32 | 3 | 121 | 122 | | | | |
| 32 | 4 | | 125 | 126 | 127 | 314 | |
| 32 | 5 | | 645 | 16A | 646 | | |
| | | Part no. 180A: For use on camping sites, please select type 180AC. | | | | | |



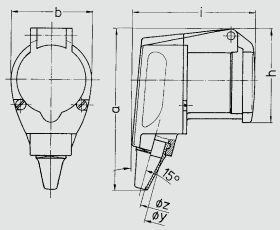

| Drawing 3 MB 60 | Amp. / Poles | 16 3 | 16 4 | 16 5 | 32 3 | 32 4 | 32 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 160 | 174 | 172 | 214 | 214 | 210 |
| | b | 57 | 61 | 69 | 75 | 75 | 80 |
| | h | 83 | 92 | 98 | 100 | 100 | 108 |
| | y | 16 | 16 | 16 | 22 | 22 | 22 |
| Terminal for cond. cross section (mm²) min.-max. | | 1 —2,5 | 1 —2,5 | 1 —2,5 | 2,5 —6 | 2,5 —6 | 2,5 —6 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 16 | 3 | 979 | 980 | | | | |
| 16 | 4 | | 993 | 994 | 965 | 996 | |
| 16 | 5 | | | 35 | | | |
| 32 | 3 | 725 | 731 | | | | |
| 32 | 4 | | 761 | 763 | 765 | | |
| 32 | 5 | | | 36 | | | |
| | | Part no. 980: For use on camping sites, please select type 180AC. | | | | | |



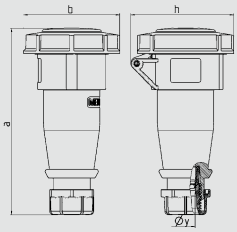

| Drawing 3 MB 60 | Amp. / Poles | 16 3 | 16 4 | 16 5 | 32 3 | 32 4 | 32 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 160 | 174 | 172 | 214 | 214 | 210 |
| | b | 57 | 61 | 69 | 75 | 75 | 80 |
| | h | 83 | 92 | 98 | 100 | 100 | 108 |
| | y | 16 | 16 | 16 | 22 | 22 | 22 |
| Terminal for cond. cross section (mm²) min.-max. | | 1 —2,5 | 1 —2,5 | 1 —2,5 | 2,5 —6 | 2,5 —6 | 2,5 —6 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 16 | 3 | | 1438 | | | | |




| Drawing 3 MB 23 | Amp. / Poles | 16 3 |
|---|---|---|
| Dim. in mm | a | 118 |
| | b | 59 |
| | h | 69 |
| | i | 88 |
| | y | 17,5 |
| | z | 7 |
| Terminal for cond. cross section (mm²) min.-max. | | 1 —2,5 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 16 | 3 | 539 | 540 | 541 | | | |
| 16 | 4 | 542 | 543 | 544 | 545 | 546 | 547 |
| 16 | 5 | 548 | 549 | 550 | | | |
| 32 | 3 | 551 | 552 | 553 | | | |
| 32 | 4 | 554 | 555 | 556 | 557 | 558 | 559 |
| 32 | 5 | 560 | 561 | 562 | | | |




| Drawing 3 MB 62 | Amp. / Poles | 16 3 | 16 4 | 16 5 | 32 3 | 32 4 | 32 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 146 | 166 | 172 | 212 | 212 | 213 |
| | b | 72 | 79 | 89 | 96 | 96 | 102 |
| | h | 80 | 88 | 95 | 98 | 98 | 105 |
| | y | 14,5 | 16 | 16 | 22 | 22 | 22 |
| Terminal for cond. cross section (mm²) min.-max. | | 1 —2,5 | 1 —2,5 | 1 —2,5 | 2,5 —6 | 2,5 —6 | 2,5 —6 |

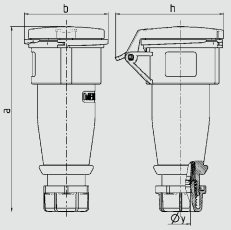
to DIN VDE 0623, EN 60309-2. Colour: electric grey and/or colour code. Enclosure and insert made of AMAPLAST.

| Image | Title | Description |
|---|---|---|
|  | **Connector AM-TOP®**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 3141.<br>Image 21422. | ■ screw terminals<br>■ single part body<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ cable gland and sealing<br>■ strain relief and protection against kinking |
|  | **Connector AM-TOP®**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10<br><br>Product group 3149.<br>Image 21366. | ■ screw terminals<br>■ single part body<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ cable gland and sealing<br>■ strain relief and protection against kinking |
|  | **Connector PowerTOP®**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 3015.<br>Image 3964. | ■ screw terminals<br>■ highly heat resistant contact carrier<br>■ cable gland and external cable grip |
|  | **Hanging connector PowerTOP®**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 3015.<br>Image 3778. | ■ screw terminals<br>■ highly heat resistant contact carrier<br>■ cable gland and external cable grip<br>■ hanging clip |
|  | **Connector PowerTOP®**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10<br><br>Product group 3016.<br>Image 3881. | ■ screw terminals<br>■ highly heat resistant contact carrier<br>■ cable gland and external cable grip |
|  | **Connector PowerTOP®**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10<br><br>Product group 3016.<br>Image 24558. | ■ screw terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ cable gland an external cable grip |

# carrier, partly nickel plated contacts, 16A - 32A, IP 44 and IP 67

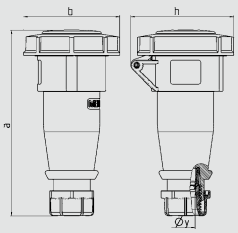
Other voltages and frequencies available on request.

| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | >50 - 500V 100-300 Hz | >50 - 500V 300-500 Hz | Drawing |
|---|---|---|---|---|---|---|---|---|
| | | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | |
| | | 4h 4h 4h | 6h 9h 9h | 9h 6h 6h | 7h 7h 7h | 10h 10h 10h | 2h 2h 2h | |
| | | Part number | | | | | | |
| 16 | 3 | | 21877 | | | | | |
| 16 | 4 | | | 21021 | | | | |
| 16 | 5 | | | 21422 | | | | |
| 32 | 4 | | | 21606 | | | | |
| 32 | 5 | | | 21039 | | | | |



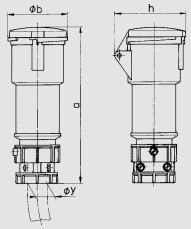

| Drawing 3 MB 63 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 162 | 165 | 167 | 209 | 209 | 208 |
| | b | 60 | 68 | 76 | 82 | 82 | 89 |
| | h | 83 | 92 | 98 | 100 | 100 | 108 |
| | y | 14,5 | 16 | 16 | 22 | 22 | 22 |
| Terminal for cond. cross section (mm²) min.-max. | | 1 —2,5 | 1 —2,5 | 1 —2,5 | 2,5 —6 | 2,5 —6 | 2,5 —6 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 16 | 3 | | 21521 | | | | | |
| 16 | 5 | | | 21365 | | | | |
| 32 | 3 | | 21523 | | | | | |
| 32 | 5 | | | 21366 | | | | |



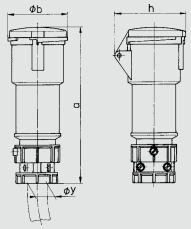

| Drawing 3 MB 62 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 146 | 166 | 172 | 212 | 212 | 213 |
| | b | 72 | 79 | 89 | 96 | 96 | 102 |
| | h | 80 | 88 | 95 | 98 | 98 | 105 |
| | y | 14,5 | 16 | 16 | 22 | 22 | 22 |
| Terminal for cond. cross section (mm²) min.-max. | | 1 —2,5 | 1 —2,5 | 1 —2,5 | 2,5 —6 | 2,5 —6 | 2,5 —6 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 16 | 3 | 3953 | 3954 | | | | | |
| 16 | 4 | 3956 | 3957 | 3958 | 3959 | | | |
| 16 | 5 | 3962 | 3963 | 3964 | | | | |
| 32 | 3 | 3965 | 3966 | 3967 | | | | |
| 32 | 4 | | 3969 | 3970 | 3971 | | | |
| 32 | 5 | 3974 | 3975 | 3976 | | | | |




| Drawing 3 MB 51/3 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 165 | 180 | 190 | 214 | 214 | 223 |
| | b | 60 | 68 | 76 | 82 | 82 | 89 |
| | h | 76 | 84 | 90 | 92 | 92 | 99 |
| | y | 19 | 19 | 22 | 24,5 | 24,5 | 28,5 |
| Terminal for cond. cross section (mm²) min.-max. | | 1 —2,5 | 1 —2,5 | 1 —2,5 | 2,5 —6 | 2,5 —6 | 2,5 —6 |

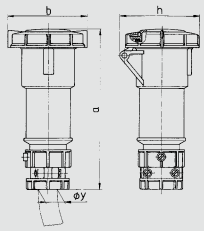
| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 16 | 5 | | | 3778 | | | | |
| 32 | 5 | | | 3999 | | | | |




| Drawing 3 MB 51/3 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 165 | 180 | 190 | 214 | 214 | 223 |
| | b | 60 | 68 | 76 | 82 | 82 | 89 |
| | h | 76 | 84 | 90 | 92 | 92 | 99 |
| | y | 19 | 19 | 22 | 24,5 | 24,5 | 28,5 |
| Terminal for cond. cross section (mm²) min.-max. | | 1 —2,5 | 1 —2,5 | 1 —2,5 | 2,5 —6 | 2,5 —6 | 2,5 —6 |

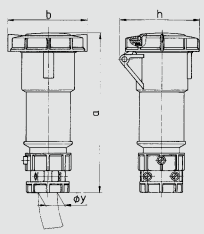
More PowerTOP® connectors for suspending purposes please see on former pages. Hanging clips have to be ordered separately.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 16 | 3 | 3859 | 3860 | | | | | |
| 16 | 4 | | 3873 | 3871 | 3872 | | | |
| 16 | 5 | | | 3881 | | | | |
| 32 | 3 | 3887 | 3888 | | | | | |
| 32 | 4 | | 3899 | 3897 | 3898 | | | |
| 32 | 5 | | | 3907 | | | | |




| Drawing 3 MB 48/3 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 171 | 182 | 194 | 217 | 217 | 229 |
| | b | 78 | 85 | 96 | 103 | 103 | 110 |
| | h | 79 | 88 | 95 | 99 | 99 | 105 |
| | y | 19 | 19 | 22 | 24,5 | 24,5 | 28,5 |
| Terminal for cond. cross section (mm²) min.-max. | | 1 —2,5 | 1 —2,5 | 1 —2,5 | 2,5 —6 | 2,5 —6 | 2,5 —6 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 16 | 5 | | | 24558 | | | | |
| 32 | 5 | | | 24559 | | | | |




| Drawing 3 MB 48/3 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 171 | 182 | 194 | 217 | 217 | 229 |
| | b | 78 | 85 | 96 | 103 | 103 | 110 |
| | h | 79 | 88 | 95 | 99 | 99 | 105 |
| | y | 19 | 19 | 22 | 24,5 | 24,5 | 28,5 |
| Terminal for cond. cross section (mm²) min.-max. | | 1 —2,5 | 1 —2,5 | 1 —2,5 | 2,5 —6 | 2,5 —6 | 2,5 —6 |

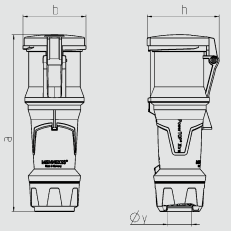
to DIN VDE 0623, EN 60309-2. Colour: electric grey and/or colour code. Enclosure and insert made of AMAPLAST.

| Image | Title | Description |
|---|---|---|
|  | **Connector PowerTOP® Xtra**<br><br>**IP 44**<br><br>Std. Pack. Qty: 5<br><br>Product group 3215.<br>Image 14112. | ■ screw terminals<br>■ with rubberised grip area<br>■ frame terminals<br>■ SoftCONTACT<br>■ highly heat resistant contact carrier<br>■ cable gland and sealing<br>■ strain relief and protection against kinking<br>■ enclosure with thread lock<br>■ two safety slides<br>■ products with pilot contact: part no. + index P |
|  | **Connector PowerTOP® Xtra**<br><br>**IP 44**<br><br>Std. Pack. Qty: 5<br><br>Product group 3215.<br>Image 14128. | ■ screw terminals<br>■ with rubberised grip area<br>■ frame terminals<br>■ SoftCONTACT<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ cable gland and sealing<br>■ strain relief and protection against kinking<br>■ enclosure with thread lock<br>■ two safety slides |
|  | **Connector PowerTOP® Xtra**<br><br>**IP 67**<br><br>Std. Pack. Qty: 5<br><br>Product group 3216.<br>Image 14212. | ■ screw terminals<br>■ with rubberised grip area<br>■ frame terminals<br>■ 63A: SoftCONTACT, 125A: TorsionSpringCONTACT<br>■ highly heat resistant contact carrier<br>■ cable gland and sealing<br>■ strain relief and protection against kinking<br>■ enclosure with thread lock<br>■ two safety slides<br>■ products with pilot contact: part no. + index P |
|  | **Connector PowerTOP® Xtra**<br><br>**IP 67**<br><br>Std. Pack. Qty: 5<br><br>Product group 3216.<br>Image 14228. | ■ screw terminals<br>■ with rubberised grip area<br>■ frame terminals<br>■ SoftCONTACT<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ cable gland and sealing<br>■ strain relief and protection against kinking<br>■ enclosure with thread lock<br>■ two safety slides |

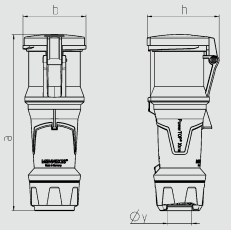
# carrier, partly nickel plated contacts, 63A - 125A, IP 44 and IP 67

Other voltages and frequencies available on request.

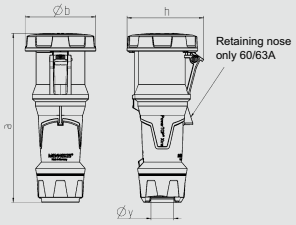
| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | >50 - 500V 100-300 Hz | >50 - 500V 300-500 Hz | Drawing |
|---|---|---|---|---|---|---|---|---|
| | | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | 3p 4p 5p | |
| | | 4h 4h 4h | 6h 9h 9h | 9h 6h 6h | 7h 7h 7h | 10h 10h 10h | 2h 2h 2h | |
| | | Part number | | | | | | |
| 63 | 3 | 14101 | 14102 | | | | | |
| 63 | 4 | | 14105 | 14106 | 14107 | | | |
| 63 | 5 | | 14111 | 14112 | | | | |
| 63 | 3 | | 14128 | | | | | |
| 63 | 4 | | | 14129 | 14130 | | | |
| 63 | 5 | | | 14131 | | | | |
| 63 | 3 | 14201 | 14202 | 14203 | | | | |
| 63 | 4 | 14204 | 14205 | 14206 | 14207 | 14208 | 14209 | |
| 63 | 5 | 14210 | 14211 | 14212 | 14213 | | 14214 | |
| 125 | 3 | 14215 | 14216 | | | | | |
| 125 | 4 | 14217 | 14218 | 14219 | 14220 | | | |
| 125 | 5 | 14223 | 14224 | 14225 | 14226 | | 14227 | |
| 63 | 3 | | 14228 | | | | | |
| 63 | 4 | | | 14229 | 14230 | | | |
| 63 | 5 | | | 14231 | | | | |
| 125 | 3 | | 14232 | | | | | |
| 125 | 4 | | | 14233 | 14234 | | | |
| 125 | 5 | | | 14235 | | | | |



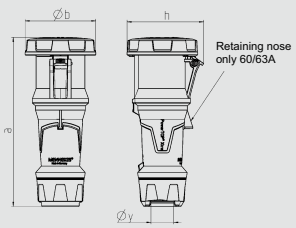

| Drawing 3 MB 69 | Amp. Poles | 63 3 | 63 4 | 63 5 |
|---|---|---|---|---|
| Dim. in mm | a | 268 | 268 | 268 |
| | b | 95 | 95 | 95 |
| | h | 109 | 109 | 109 |
| | y | 36 | 36 | 36 |
| Terminal for cond. cross section (mm²) min.-max. | | 6 —16 | 6 —16 | 6 —16 |




| Drawing 3 MB 69 | Amp. Poles | 63 3 | 63 4 | 63 5 |
|---|---|---|---|---|
| Dim. in mm | a | 268 | 268 | 268 |
| | b | 95 | 95 | 95 |
| | h | 109 | 109 | 109 |
| | y | 36 | 36 | 36 |
| Terminal for cond. cross section (mm²) min.-max. | | 6 —16 | 6 —16 | 6 —16 |




| Drawing 3 MB 68 | Amp. Poles | 63 3 | 63 4 | 63 5 | 125 3 | 125 4 | 125 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 270 | 270 | 270 | 310 | 310 | 310 |
| | b | 113 | 113 | 113 | 125 | 125 | 125 |
| | h | 123 | 123 | 123 | 135 | 135 | 135 |
| | y | 36 | 36 | 36 | 49 | 49 | 49 |
| Terminal for cond. cross section (mm²) min.-max. | | 6 —16 | 6 —16 | 6 —16 | 25 —50 | 25 —50 | 25 —50 |




| Drawing 3 MB 68 | Amp. Poles | 63 3 | 63 4 | 63 5 | 125 3 | 125 4 | 125 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 270 | 270 | 270 | 310 | 310 | 310 |
| | b | 113 | 113 | 113 | 125 | 125 | 125 |
| | h | 123 | 123 | 123 | 135 | 135 | 135 |
| | y | 36 | 36 | 36 | 49 | 49 | 49 |
| Terminal for cond. cross section (mm²) min.-max. | | 6 —16 | 6 —16 | 6 —16 | 25 —50 | 25 —50 | 25 —50 |






Overview Index

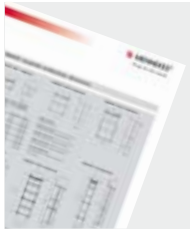
| Image | Title | Description | |
|---|---|---|---|
|  | **Hinged lid**<br><br>Std. Pack. Qty: 10<br><br>Product group 8257.<br>Image 41482. | ■ for retrofitting for wall mounted inlets and phase inverters part no. 843, 844, 846, 847, 800, 801, 3517<br><br>3p<br>4p + 5p | <br><br><br><br>**Part no. 41482**<br>**Part no. 41489** |
|  | **Protective cover**<br><br>Std. Pack. Qty: 50<br><br>Product group 8226.<br>Image 40841. | ■ for watertight plugs, wall mounted and panel mounted inlets<br><br>16A, 3p<br>16A, 4p<br>16A, 5p + 7p<br>32A, 3p + 4p<br>32A, 5p + 7p<br>63A, 3p - 5p<br>125A, 3p - 5p | <br><br><br><br><br><br><br>**Part no. 40784**<br>**Part no. 40778**<br>**Part no. 40785**<br>**Part no. 40841**<br>**Part no. 40786**<br>**Part no. 40787**<br>**Part no. 40788** |
|  | **Plug guard**<br><br>Std. Pack. Qty: 40<br><br>Product group 8300.<br>Image 41416. | ■ fits all CEE plugs, panel mounted and wall mounted inlets from 16A, 3p, up to 125A, 5p<br>■ not suitable for low voltage | <br><br><br><br>**Part no. 41416** |
|  | **Hanging clip**<br><br>Std. Pack. Qty: 100<br><br>Product group 8300.<br>Image 15453000. | ■ for PowerTOP® plugs and connectors<br><br>for 16A, 3 to 5 pole and 32A, 3 and 4 pole<br>for 32A, 5 pole | <br><br><br><br>**Part no. 15453000**<br>**Part no. 15452000** |

# Receptacle combinations

The MENNEKES receptacle combinations in the product part of the catalogue already satisfy the requirements specified in the new standard IEC 61439 for low-voltage switchgear and control gear assemblies.

## Wall mounted

### Standard, made of AMAPLAST



**Dimensions**
AMAXX® receptacle combinations

Page 167



**AMAXX®**
IP 44 - Pages 168 - 172
IP 67 - Pages 173 - 175

**AMAXX® accessories**
Page 176

**Product information**
Pages 156 - 161

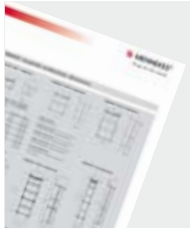


**Receptacle strips**
IP 44

Page 177

**Product information**
Page 163

### Highly resistant to chemicals, made of AMELAN®



**Dimensions**
AMAXX® receptacle combinations

Page 167



**AMAXX®**
IP 44 - Page 178
IP 67 - Page 179

**AMAXX® accessories**
Page 176

**Product information**
Pages 156 - 161

### Solid rubber



**EverGUM**
IP 44 - Pages 180 - 183

**EverGUM accessories**
Page 183

**Product information**
Page 162

### Stainless steel



**Standard**
IP 44 (43)

Pages 184 - 188

**Product information**
Page 165



**Water and power connection**
IP 44

Page 190

**Product information**
Page 164

### Accessories



- **Enclosure**
- **Column**
- **Mounting plate**
- **Weather shield**
- **Fixing set**

Pages 185, 187, 188

## Flush mounted

### Stainless steel



**Standard**
IP 44 (43)

Page 189

**Product information**
Page 165



**Water and power connection**
IP 44

Page 191

**Product information**
Page 164

### Accessories



- **Enclosure**
- **Fixing set**
- **Gland**
- **Mounting plate**

Pages 190 - 191

## Free standing

### Stainless steel



**CombiTOWER® for AMAXX®**

Pages 192 - 193

**Product information**
Page 165



**Weather shield for wall or with column**
for AMAXX® and EverGUM

Pages 194 - 195

**Product information**
Page 164

### Steel



**Power post**

Pages 196 - 197

**Product information**
Page 164

Information concerning the new standard for low voltage switchgear and control gear assemblies, IEC 61439, is provided on page 166 and on page 35 to 38.

## Hanging

### Standard, made of AMAPLAST



**AMAXX®**
IP 44
Pages 198 - 199

**AMAXX® accessories**
Page 176

**Product information**
Pages 156 - 161



**AirKRAFT® and 3KRAFT®**
for energy, data, compressed air, partly fused, IP 44 (IP 20)
Pages 200 - 203

**Product information**
Page 163



**DELTA-BOX**
for energy and compressed air,
IP 44, IP 67, IP 68

Pages 204 - 205

**Product information**
Page 163

### Highly resistant to chemicals, made of AMELAN®



**DELTA-BOX**
highly heat resistant contact carrier, nickel plated contacts,
IP 67 and IP 68
Page 205

**Product information**
Page 163

## Mobile

### Standard, made of AMAPLAST



**Dimensions**
AMAXX® receptacle combinations

Page 167



**AMAXX®**
IP 44 - Page 206
IP 67 - Page 206

**AMAXX® accessories**
Page 176

**Product information**
Pages 156 - 161



**AirKRAFT® and 3KRAFT®**
for energy, data, compressed air, partly fused, IP 44 (IP 20)
Pages 207-208

**Product information**
Page 163



**DELTA-BOX**
for energy and compressed air,
IP 44, IP 67, IP 68

Page 209

**Product information**
Page 163

### Accessories



**Cable gland**
for AMAXX® receptacle combinations

Page 176

### Solid rubber



**EverGUM units**
portable, compact and maxi,
IP 44

Pages 210 - 212

**Product information**
Page 162



**EverGUM receptacle strips**
portable, hanging,
IP 44

Pages 214 - 215

**Product information**
Page 162

## AMAXX®. Success in series.



## Superb design. Dependable technology.

Extensively configurable receptacle combinations in six different sizes – the AMAXX® range by MENNEKES.
With an appealing and unique design in many variations for almost all applications.

The AMAXX® combination with five segments completes the program. We also feature largescale combinations with all known AMAXX® advantages.

NEW! With the suspendable receptacle combinations, MENNEKES rounds out the unique versatility of the AMAXX® family. The enclosures are fitted with electrical outlets and protective devices from two sides. A chain set is included with each combination. The suspension eyes are integrated in the enclosure and the shape of recesses allows water to run off through the bore of the suspension. A convenient handle at the bottom allows for easy insertion and removal of the plugs. The combinations are available in various designs and can also be equipped with an additional compressed air connection.

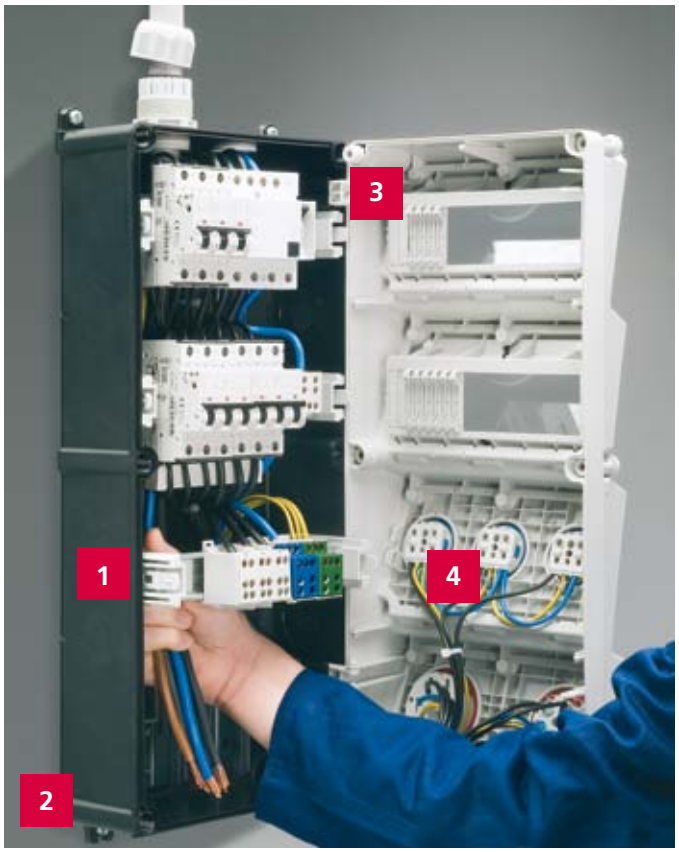


AMAXX® s is the receptacle combination for restricted installation widths and depths.
AMAXX® s is the optimum solution for restricted spaces. Besides mounting on the rear, you can also mount it on the right or the left thanks to the optionally available attachment set. Or you opt for the variant that can be swivelled by 90 degrees on the left or the right for even more comfortable application.

The smallest AMAXX® combination with one segment rounds off the program. It is available in protection class IP 44 and IP 67 as well as from 16A, 3-pole up to 32A, 5-pole and as AMAXX® DUO switched and interlocked.

Video: varieties

## Convenient connection.




**1 Liftable DIN rails.**
Liftable DIN rails and a large, smooth wiring space significantly ease the insertion as well as connection of large cables.

**2 One-man installation.**
Shorter installation times with the new, userfriendly external fixing.

**3 Hinged cover.**
The hinged cover, which opens to one side, eases connection work.

**4 Ready for application.**
All combinations are pre-wired for installation and tested for electric safety and quality

Video:
mounting instructions



■ Generally angled insertion direction, also with receptacles SCHUKO®.



■ Both hands free because inspection windows fold downwards.



■ Especially fast opening and closing of the enclosure due to captive doublethreaded cover screws.




■ Window can be locked with a padlock, enclosure can be sealed.

## Professional concepts right from the start.



**AMAXX® IP 67.**
Select from a large range of dust and water proof plugs and receptacles.



**AMAXX® combinations from AMELAN®.**
High resistance to chemicals, highly heat resistant contact carriers and nickel plated contacts for use in an aggressive atmosphere.



**AMAXX® combinations.**
For campsites, marinas, etc. Lockable CEE receptacles, 3-pole, 230V, with fusing, give the maximum safety.



**AMAXX® mobile.**
For all requiring safe distribution onsite. With cable and plug. With one, two or three segments as well as in an AMAXX® s version.

## Individual.

As specialists for receptacle combinations, we have longstanding experience in the development and realisation of individual, customised solutions.



## For container and terminals.

AMAXX® receptacle combinations are also available in container standard 32A, 4-pole, 400-440V, 3h as multiple distributor with or without monitoring receptacles.






## Function, shape and colour.

New colour variations. The silver upper part (IP 44) in combination with the black base sets a new trend in a design-oriented technical environment. Just add the index "SI" to the part number.

On request, the combinations are also available in the special colours yellow or red.

In the standard version, the upper parts are supplied in electric grey.

## You can rely on it.

**MENNEKES quality: tested and certified.**
Like all other MENNEKES combinations, the AMAXX® products are also subject to the extensive MENNEKES quality control. Each AMAXX® combination is thoroughly tested and certified prior to delivery.



**ZERTIFIKAT**

CERTIFICATE

**für stückgeprüfte Qualität nach DIN EN 61439.**

**Hiermit bestätigen wir, dass diese Steckdosenkombination einer Stückprüfung unterzogen wurde.**
Herewith we confirm that this socket-outlet combination has passed a routine test.

MENNEKES®
Plugs for the world

**Der MENNENKES-Sicherheitstest berücksichtigt nicht nur die elektrischen Prüfanforderungen nach DIN EN 61439, sondern beinhaltet darüber hinaus auch eine allpolige Hochspannungsprüfung.**
The MENNEKES safety test not just include the requirements for electrical tests acc. to DIN EN 61439 but also a high voltage test for all poles.

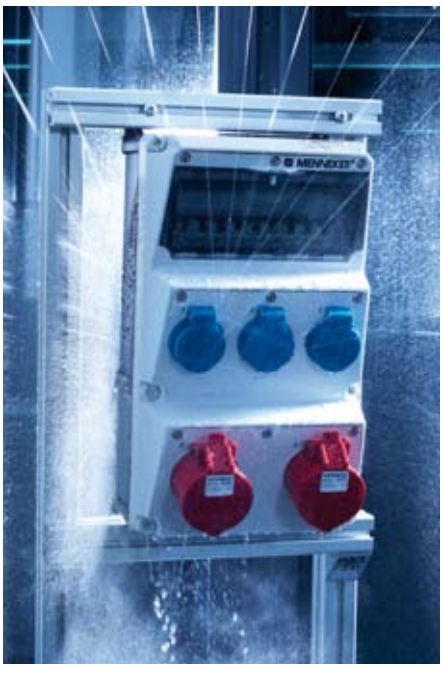
Harald Feyhl
**Leiter Qualitätssicherung** / Quality-Management

**MENNEKES Elektrotechnik GmbH & Co. KG**
Industrial plugs and sockets
Aloys-Mennekes-Straße 1
D-57399 Kirchhundem / Germany

MENNEKES®
Plugs for the world

AMAXX®
by MENNEKES

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E-Mail info@MENNEKES.de
Internet www.MENNEKES.de



## Highest degree of variability. For each application purpose.

With DUO, AMAXX® is now also available in a switched and interlocked version: After insertion and activation, the plug is interlocked. After deactivation and pulling the plug, the receptacle switch is locked. Even the smallest AMAXX® combination with one segment and a size of only 225 x 130 mm is available with the switched and interlocked DUO receptacles. The larger AMAXX® enclosures are also available as DUO multiple distributors, providing even more safety in just one enclosure.

- Protection type IP 44 and IP 67.
- 16A, 3-pole, up to 32A, 5-pole.
- Fuse elements like RCD´s, MCB´s and neozed fuse elements.
- Unique AMAXX® design with one to five segments.



- In response to customer-specific requirements, tailored designs are possible, e.g. with switched and interlocked DUO receptacles, and in IP 67° degree of protection, waterproof.








## International.

For the international market, AMAXX® combinations including receptacles to comply with various national standards are available, e.g., French/Belgian, Danish, Swiss and British standards, and also compliant with the NEMA standard for the USA and Canada.







## Flexible safety. EverGUM – portable distribution boards and receptacle strips.



With the EverGUM range MENNEKES provide a solid rubber alternative to enclosures in AMAPLAST, AMELAN® and sheet steel. This is an alternative which is suitable for the most diverse environments, especially when there is likely to be exposure to rough handling or aggressive cleaning agents. These products can also be supplied to conform to the standards of other European countries.

**The outstanding advantages:**
- Resistant to weather and ageing
- High dimensional stability and precision
- Good resistance to acids and alkalis
- High dieletric strength and creep resistance

The allround power-packages for mobile use in industry, craft and trade. They can accept quite a knock – neither their shape nor their function will be impaired. Additional benefit: they are stackable which allows space-saving storage.

**Tested safety, EverGUM details.**
The closed lower side of the enclosure with a ground clearance of 77 mm prevents ingress of water. The panel mounted receptacles can be replaced from outside. Hinged cover provided with stainless steel quick release clips. MCBs and in RCDs are immediately accessible after opening the lid. All energised parts even with the lid open are covered so that they are contact safe – in accordance with BGV A3. Screw or padlock offers additional safety.





**Receptacle strip EverGUM.**
Window size for six or eight modules for vertical installation.
Protection type IP 44.



## A strong team for electrical power, data and compressed air: AirKRAFT® and 3KRAFT®.



**For ceilings and floors.**
Receptacles, or data, or compressed air. Additionally AirKraft® receptacle combinations can be fitted with fusing and a micro Lynx light.
Ready for connection or with supply cable and plug.

Three colours:
signal yellow, red or silver.



**Protection type IP 44**

Prior to use, ensure that the receptacle combination is appropriate for the intended implementation conditions.

The installed data connection sockets without flip lids satisfy the IP 20 degree of protection requirements which accordingly reduces the overall degree of protection of the distributors.

A comment concerning the IP 44 degree of protection for mobile receptacle combinations is provided on page 45.

## DELTA BOX. The classic unit.



With cable grip.
Enclosure and socket insert of AMAPLAST® or of AMELAN®, which is particularly resistant to chemicals, temperature and impact. Each DELTA-BOX comes with a suspension bracket.
Available in the degrees of protection
IP 44 splashproof,
IP 67 watertight,
IP 68 pressure watertight.

## Receptacle strips. The versatile units.



Suspendable, portable or for wall mounting. Ready for connection with cable grip.
For horizontal installation of most of the types, the attachment receptacles can be rotated 90° without disconnecting the connection lines.
Available to IP 44.

## Stainless steel. For water and power connection.



**Useful variety for wall- and flush- mounting.**
Exacting ambiance demand sophisticated, reliable equipment. Wherever dependable protection against unauthorised access is required, when live as well as when switched off, MENNEKES stainless steel combinations, either surface or flush mounted, are the equipment of choice.

Energy and water - always available: In the workplace, in the garden, in leisure parks … and even in wintry conditions thanks to frost-proof taps with automatic emptying. Please consider the country-specific regulations for installations outside Germany!



## Weather shield made of stainless steel.





**Wind and weather proof.**
Outdoor electric appliances are exposed to unfavourable climatic conditions. Our modular system of weather shields and supports enables individual combinations of installations fixed to the wall and on the ground, with columns.

## Power post from steel tube.

**Rugged. Vandalism-proof.**
Steel power posts provide a safe means of energy supply, protection against car-crossing. Hot-dip galvanised and powder coated. Available in various sizes.



## Receptacle combinations made from stainless steel.





## CombiTOWER®.

**For outdoors and indoors.**
Short routes to your energy source. Flat finished stainless steel or painted signal yellow. The ideal tap for industry, workshops, assembly shops, loading platforms, etc.

**Safe. Practical. Timelessly elegant.**
- Protection type IP 43 or IP 44 with closed door, even when plugs are inserted
- The cable guard aperture is sufficiently dimensioned for leading through cables
- Safety lock protects against unauthorised access




## Material Properties. Important information and recommendations.

Our high-quality stainless steel products are ideally suited for continuous use in buildings and outdoors.

There is a potential risk of corrosion in open air and indoor swimming pools, in coastal regions, offshore and in industrial areas with high air pollution. Subject to location and climatic conditions discoloration and corrosion can arise.

Through specific cleaning and maintenance procedures, impairments of the surface can be reduced or avoided.

In particularly aggressive ambient conditions we recommend the use of special stainless steels or coating the surfaces to further increase corrosion resistance.

Please contact our customer service department who will be pleased to provide exhaustive and expert advice.

## New standard for low voltage switchgear and control gear assemblies - IEC 61439.

**The new standard IEC 61439 replaces IEC 60439 and describes the design and test specifications for low-voltage switchgear and control gear assemblies. The new standard has implications for the distribution of electrical energy in industry, domestic electrical installations and on construction sites.**

In the future two main standards will be required for each design of a low-voltage switchgear and control gear assembly:
- the basic standard that is referenced as "Part 1" in the specific standards.
- the applicable parts 2 to 7 of the switchgear and control gear assembly standard that deals with the particularities of the application.

The demands imposed on receptacle combinations that must be classified as a switchgear and control gear assembly have changed. Structure and manner of verification have been redefined.

In the Service tab on pages 35 to 38 you will find additional information, excerpts from the standard for low-voltage switchgear and control gear assemblies - IEC 61439, and a listing of the agreements between manufacturers of the switchgear and control gear assemblies and users.



**What has changed with the new switchgear standard - IEC 61439 and what are the benefits for the MENNEKES customer?**

- Product safety
  In the future, all low-voltage switchgear and control gear assemblies must be tested in accordance with IEC 61439. The requirement of design verification is new. Design verification replaces the type test. MENNEKS receptacle combinations are subjected to additional standard-compliant routine tests. The outgoing circuits are individually loaded with the respective rated current.

  **Your advantage: This guarantees an even higher standard of safety.**

- Clear documentation
  Significant rating plate – clearly defined mandatory information, such as rated diversity factor RDF (previously: simultaneity factor).

  **Your advantage: The main technical product information is visible on the rating plate at a glance.**

- Clear specifications
  Requests for a custom solution require clearly defined specifications by the user (such as installation site, ambient temperatures, etc.).

  **Your advantage: You get a need-based solution by MENNEKES tailored to the specific application.**

- Distinction: Original manufacturer - manufacturer
  If a product is modified on site, the company in question is considered to be the manufacturer. In this case a new verification and documentation are required from this company.

  **Your advantage: For receptacle combinations that are ready for connection, MENNEKES is the original manufacturer and manufacturer and therefore bears the complete product responsibility.**

**Example – rating plate**




$I_{nA}$ Rated current of the switchgear and control gear assembly

$U_n$ Rated voltage

$f_n$ Rated frequency

RDF Rated diversity factor

$I_{cc}$ Conditional rated short-circuit current

Protection class

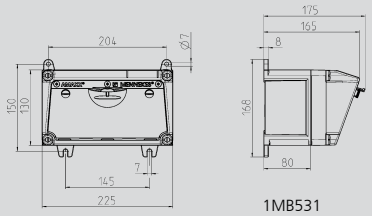
IP Ingress protection



Overview Index

# AMAXX® receptacle combinations. Dimensions.

## AMAXX® with 1 segment

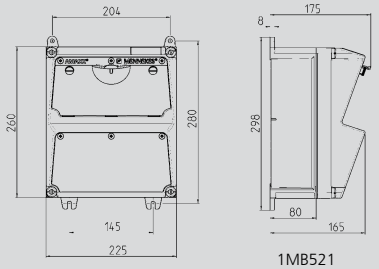



1MB531

**Depth dimensions of the AMAXX® enclosures with 1, 2 or 3 segments**
and various fittings.

| Receptacles | IP-degrees | Depth |
|---|---|---|
| SCHUKO® 16A, 230V | IP 44 | 175 mm |
| | IP 67 | 194 mm |
| CEE 16A, 3p, 230V | IP 44 | 204 mm |
| | IP 67 | 205 mm |
| CEE 16A, 5p, 400V | IP 44 | 209 mm |
| | IP 67 | 213 mm |
| CEE 32A, 5p, 400V | IP 44 | 221 mm |
| | IP 67 | 227 mm |
| CEE 63A, 5p, 400V | IP 44 | 248 mm |
| | IP 67 | 248 mm |

## AMAXX® with 2 segments




1MB521

**Cable entries:**
closed for cut out.

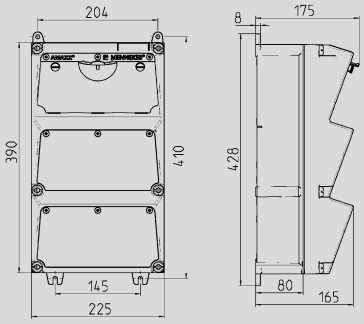
**single enclosure** 130 mm x 225 mm:
2 x M 25 each on top and bottom

**double enclosure** 260 mm x 225 mm:
2 x M 32 each on top and bottom

**triple enclosure** 390 mm x 225 mm:
2 x M 40 each on top and bottom

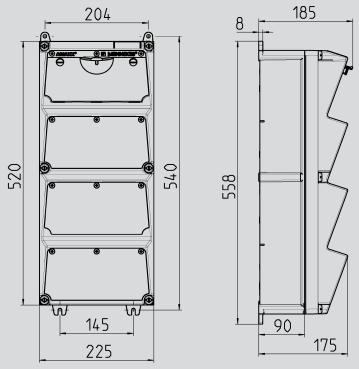
**For all enclosures:**
2 x M 20 each on top and bottom
for cut out.

## AMAXX® with 3 segments




1MB522

## AMAXX® with 4 segments



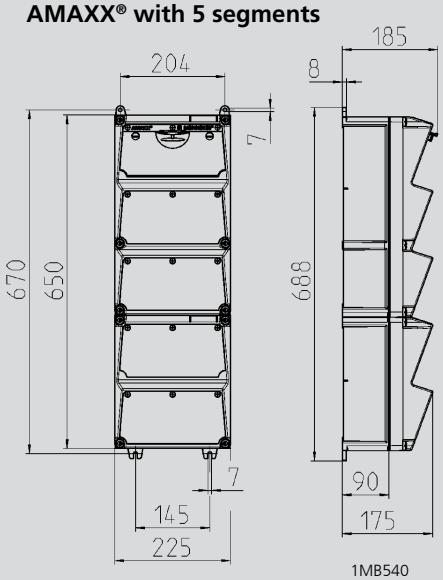

1MB523

**Depth dimensions of the AMAXX® enclosures with 4 or 5 segments**
and various fittings.

| Receptacles | IP-degrees | Depth |
|---|---|---|
| SCHUKO® 16A, 230V | IP 44 | 186 mm |
| | IP 67 | 208 mm |
| CEE 16A, 3p, 230V | IP 44 | 216 mm |
| | IP 67 | 220 mm |
| CEE 16A, 5p, 400V | IP 44 | 222 mm |
| | IP 67 | 226 mm |
| CEE 32A, 5p, 400V | IP 44 | 231 mm |
| | IP 67 | 236 mm |
| CEE 63A, 5p, 400V | IP 44 | 260 mm |
| | IP 67 | 260 mm |

**Fusing material:**
If not stated otherwise, the supplies is without fusing material

## AMAXX® with 5 segments




1MB540

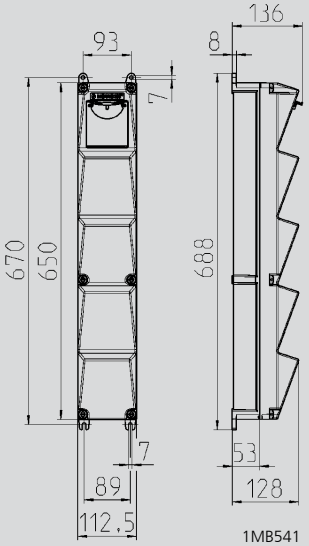
**Cable entries:**
closed for cut out.

**quadruple enclosure** 520 mm x 225 mm:
**quintuple enclosure** 650 mm x 225 mm:
2 x M 40 each on top and bottom

**For both enclosures:**
2 x M 20 each on top and bottom
for cut out.

**Dimensions of AMAXX® suspendable are provided on page 198.**

## AMAXX®s (5 segments)




1MB541

**Depth dimensions of the AMAXX®s enclosures with 5 segments**
and various fittings.

| Receptacles | IP-degrees | Depth |
|---|---|---|
| SCHUKO® 16A, 230V | IP 44 | 140 mm |
| | IP 67 | 157 mm |
| CEE 16A, 3p, 230V | IP 44 | 170 mm |
| | IP 67 | 169 mm |
| CEE 16A, 5p, 400V | IP 44 | 172 mm |
| | IP 67 | 174 mm |
| CEE 32A, 5p, 400V | IP 44 | 182 mm |
| | IP 67 | 188 mm |

**Cable entries:**
closed for cut out.

**AMAXX®s** 650 mm x 112,5 mm:
1 x M 25 each on top and bottom or
1 x M 32 each on top and bottom

**Additionally:** 1 x M 20 each on top and bottom for cut out.

**Standard made of AMAPLAST, protection type IP 44**

pre-wired for installation, enclosure front cover electric grey RAL 7035. Hinged to the side (except enclosure size 130 x 225 mm and 650 x 112.5 mm). Fusing behind a transparent cover.

For more combinations in various national standards, please contact us.

For drawings and dimensions see page 167.



| CEE receptacles | CEE receptacles | CEE receptacles | CEE receptacles |
|---|---|---|---|
| CEE receptacles | CEE receptacles | CEE receptacles | CEE receptacles |
| **Receptacles SCHUKO®** | **Receptacles NF** | **Receptacles SCHUKO®** | **Receptacles NF** |
| 2 SCHUKO® 16A, 230V | 2 NF 16A, 2p+E, 230V | 3 SCHUKO® 16A, 230V | 3 NF 16A, 2p+E, 230V |
| **Fusing** | **Fusing** | **Fusing** | **Fusing** |
| 1 RCD 25A, 2p, 0.03A<br>2 MCB´s 16A, 1p, C | 1 RCD 25A, 2p, 0.03A<br>2 MCB´s 16A, 1p+N, C | 1 RCD 40A, 4p, 0.03A<br>3 MCB´s 16A, 1p+N, C | 1 RCD 40A, 4p, 0.03A<br>3 MCB´s 16A, 1p+N, C |
| **Connection** | **Connection** | **Connection** | **Connection** |
| For 1 cable up to<br>3 x 10 mm² | For 1 cable up to<br>3 x 6 mm² | For 1 cable up to<br>5 x 10 mm² | For 1 cable up to<br>5 x 10 mm² |
| **Enclosure size** | **Enclosure size** | **Enclosure size** | **Enclosure size** |
| 130 x 225 mm (H x W) | 130 x 225 mm (H x W) | 260 x 225 mm (H x W) | 260 x 225 mm (H x W) |
| **Part no.** | **Part no.** | **Part no.** | **Part no.** |
| **910001** | **910205** | **920003** | **920043** |

**Standard made of AMAPLAST, protection type IP 44**

pre-wired for installation, enclosure front cover electric grey RAL 7035. Hinged to the side (except enclosure size 130 x 225 mm and 650 x 112.5 mm). Fusing behind a transparent cover.

For more combinations in various national standards, please contact us.

For drawings and dimensions see page 167.



**CEE receptacles**

**CEE receptacles**
3 CEE 16A, 3p, 230V

**Receptacles SCHUKO®**

**Fusing**
1 RCD 40A, 4p, 0.03A
3 MCB´s 16A, 1p, C

**Connection**
For 1 cable up to
5 x 10 mm²

**Enclosure size**
650 x 112.5 mm (H x W)

**Part no.**
**960019**



**CEE receptacles**

**CEE receptacles**
3 CEE 16A, 3p, 230V

**Receptacles SCHUKO®**

**Fusing**

**Connection**
For 1 cable up to
5 x 10 mm²

**Enclosure size**
130 x 225 mm (H x W)

**Part no.**
**910015**



**CEE receptacles**
1 CEE 16A, 5p, 400V

**CEE receptacles**

**Receptacles SCHUKO®**
2 SCHUKO® 16A, 230V

**Fusing**
1 RCD 40A, 4p, 0.03A
1 MCB 16A, 3p, C
1 MCB 16A, 1p, C

**Connection**
For 1 flex. cable up to
5 x 10 mm²

**Enclosure size**
650 x 112.5 mm (H x W)

**Part no.**
**960051**



**CEE receptacles**
1 CEE 16A, 5p, 400V

**CEE receptacles**

**Receptacles SCHUKO®**
2 SCHUKO® 16A, 230V

**Fusing**

**Connection**
For 1 flex. cable up to
5 x 10 mm²

**Enclosure size**
130 x 225 mm (H x W)

**Part no.**
**910007**

**Standard made of AMAPLAST, protection type IP 44**

pre-wired for installation, enclosure front cover electric grey RAL 7035. Hinged to the side (except enclosure size 130 x 225 mm and 650 x 112.5 mm). Fusing behind a transparent cover.

For more combinations in various national standards, please contact us.

For drawings and dimensions see page 167.



| CEE receptacles | CEE receptacles | CEE receptacles | CEE receptacles |
|---|---|---|---|
| 1 CEE 16A, 5p, 400V | 1 CEE 16A, 5p, 400V | 2 CEE 16A, 5p, 400V switched, with mechanical DUO interlock | 2 CEE 16A, 5p, 400V |
| **CEE receptacles** | **CEE receptacles** | **CEE receptacles** | **CEE receptacles** |
| **Receptacles British standard** | **Receptacles SCHUKO®** | **Receptacles SCHUKO®** | **Receptacles SCHUKO®** |
| 2 x 13A, 2p+E | 3 SCHUKO® 16A, 230V | | 3 SCHUKO® 16A, 230V |
| **Fusing** | **Fusing** | **Fusing** | **Fusing** |
| | 1 MCB 16A, 3p, C<br>1 MCB 16A, 1p, C | 2 MCB´s 16A, 3p, C | 2 MCB´s 16A, 3p, C<br>3 MCB´s 13A, 1p, C |
| **Connection** | **Connection** | **Connection** | **Connection** |
| For 1 cable up to 5 x 6 mm² | For 1 cable up to 5 x 10 mm² | For 2 cables up to 5 x 25 mm² | For 2 cables up to 5 x 25 mm² |
| **Enclosure size** | **Enclosure size** | **Enclosure size** | **Enclosure size** |
| 130 x 225 mm (H x W) | 650 x 112.5 mm (H x W) | 390 x 225 mm (H x W) | 390 x 225 mm (H x W) |
| **Part no.** | **Part no.** | **Part no.** | **Part no.** |
| **910694** | **960004** | **930031** | **930003** |







**Standard made of AMAPLAST, protection type IP 44**

pre-wired for installation, enclosure front cover electric grey RAL 7035. Hinged to the side (except enclosure size 130 x 225 mm and 650 x 112.5 mm). Fusing behind a transparent cover.

For more combinations in various national standards, please contact us.

For drawings and dimensions see page 167.



**CEE receptacles**
2 CEE 16A, 5p, 400V

**CEE receptacles**

**Receptacles British standard**
3 x 13A, 2p+E

**Fusing**
2 MCB´s 16A, 3p, C
3 MCB´s 13A, 1p, C

**Connection**
For 2 cables up to
5 x 16 mm²

**Enclosure size**
390 x 225 mm (H x W)

**Part no.**
**930734**



**CEE receptacles**
1 CEE 32A, 5p, 400V

**CEE receptacles**

**Receptacles SCHUKO®**
2 SCHUKO® 16A, 230V

**Fusing**
1 MCB 32A, 3p, C
2 MCB´s 16A, 1p, C

**Connection**
For 1 cable up to
5 x 10 mm²

**Enclosure size**
260 x 225 mm (H x W)

**Part no.**
**920011**



**CEE receptacles**
1 CEE 32A, 5p, 400V

**CEE receptacles**

**Receptacles NF**
2 NF 16A, 2p+N, 230V

**Fusing**
1 MCB 32A, 3p+N, C
2 MCB´s 16A, 1p+N, C

**Connection**
For 1 cable up to
5 x 10 mm²

**Enclosure size**
260 x 225 mm (H x W)

**Part no.**
**920295**



**CEE receptacles**
1 CEE 32A, 5p, 400V
1 CEE 16A, 5p, 400V

**CEE receptacles**

**Receptacles SCHUKO®**
3 SCHUKO® 16A, 230V

**Fusing**
1 RCD 40A, 4p, 0.03A
1 MCB 32A, 3p, C
1 MCB 16A, 3p, C
3 MCB´s 16A, 1p, C

**Connection**
For 2 cables up to
5 x 25 mm²

**Enclosure size**
520 x 225 mm (H x W)

**Part no.**
**940005**

**Standard made of AMAPLAST, protection type IP 44**

pre-wired for installation, enclosure front cover electric grey RAL 7035. Hinged to the side (except enclosure size 130 x 225 mm and 650 x 112.5 mm). Fusing behind a transparent cover.

For more combinations in various national standards, please contact us.

For drawings and dimensions see page 167.



| CEE receptacles | |
|---|---|
| 1 CEE 32A, 5p, 400V<br>1 CEE 16A, 5p, 400V | |
| **CEE receptacles** | |
| **Receptacles SCHUKO®** | |
| 3 SCHUKO® 16A, 230V | |
| **Fusing** | |
| 1 MCB 32A, 3p, C<br>1 MCB 16A, 3p, C<br>3 MCB´s 16A, 1p, C | |
| **Connection** | |
| For 2 cables up to<br>5 x 25 mm² | |
| **Enclosure size** | |
| 390 x 225 mm (H x W) | |
| **Part no.** | |
| **930011** | |



| CEE receptacles | |
|---|---|
| 1 CEE 32A, 5p, 400V<br>1 CEE 16A, 5p, 400V | |
| **CEE receptacles** | |
| **Receptacles SCHUKO®** | |
| 6 SCHUKO® 16A, 230V | |
| **Fusing** | |
| 1 RCD 63A, 4p, 0.03A<br>1 MCB 32A, 3p, C<br>1 MCB 16A, 3p, C<br>6 MCB´s 16A, 1p, C | |
| **Connection** | |
| For 2 cables up to<br>5 x 25 mm² | |
| **Enclosure size** | |
| 650 x 225 mm (H x W) | |
| **Part no.** | |
| **950004** | |



| CEE receptacles | |
|---|---|
| 1 CEE 63A, 5p, 400V<br>1 CEE 32A, 5p, 400V<br>1 CEE 16A, 5p, 400V | |
| **CEE receptacles** | |
| **Receptacles NF** | |
| 4 NF 16A, 2p+E, 230V | |
| **Fusing** | |
| 1 RCD 63A, 4p, 0.03A<br>1 MCB 32A, 3p+N, C<br>1 MCB 16A, 3p+N, C<br>4 MCB´s 16A, 1p+N, C | |
| **Connection** | |
| For 2 cables up to<br>5 x 25 mm² | |
| **Enclosure size** | |
| 650 x 225 mm (H x W) | |
| **Part no.** | |
| **950022** | |




| CEE receptacles | |
|---|---|
| 1 CEE 63A, 5p, 400V<br>1 CEE 32A, 5p, 400V<br>switched, with mechanical DUO interlock | |
| **CEE receptacles** | |
| **Receptacles SCHUKO®** | |
| 4 SCHUKO® 16A, 230V | |
| **Fusing** | |
| 1 RCD 63A, 4p, 0.03A<br>1 MCB 32A, 3p, C<br>4 MCB´s 16A, 1p, C | |
| **Connection** | |
| For 2 cable up to<br>5 x 25 mm² | |
| **Enclosure size** | |
| 650 x 225 mm (H x W) | |
| **Part no.** | |
| **950026** | |

**Standard made of AMAPLAST, protection type IP 67**

pre-wired for installation, enclosure front cover electric grey RAL 7035. Hinged to the side (except enclosure size 130 x 225 mm and 650 x 112.5 mm). Fusing behind a transparent cover.

For more combinations in various national standards, please contact us.

For drawings and dimensions see page 167.



**CEE receptacles**

1 CEE 16A, 5p, 400V switched, with mechanical DUO interlock

**CEE receptacles**

**Receptacles SCHUKO®**

**Fusing**

**Connection**

For 1 cable up to 5 x 10 mm²

**Enclosure size**

130 x 225 mm (H x W)

**Part no.**

**7626**



**CEE receptacles**

1 CEE 16A, 5p, 400V

**CEE receptacles**

**Receptacles SCHUKO®**

3 SCHUKO® 16A, 230V

**Fusing**

1 RCD 40A, 4p, 0.03A
1 MCB 16A, 3p, C
3 MCB´s 16A, 1p, C

**Connection**

For 2 cables up to 5 x 25 mm²

**Enclosure size**

390 x 225 mm (H x W)

**Part no.**

**930022**



**CEE receptacles**

1 CEE 16A, 4p, 400V

**CEE receptacles**

**Receptacles NF**

3 NF 16A, 230V

**Fusing**

1 RCD 40A, 4p, 0.03A
1 MCB 16A, 3p, C
3 MCB´s 16A, 1p+N, C

**Connection**

For 2 cables up to 5 x 25 mm²

**Enclosure size**

390 x 225 mm (H x W)

**Part no.**

**930520**



**CEE receptacles**

1 CEE 16A, 5p, 400V

**CEE receptacles**

**Receptacles SCHUKO®**

4 SCHUKO® 16A, 230V

**Fusing**

**Connection**

For 1 cable up to 5 x 10 mm²

**Enclosure size**

650 x 112.5 mm (H x W)

**Part no.**

**960031**

**Standard made of AMAPLAST, protection type IP 67**

pre-wired for installation, enclosure front cover electric grey RAL 7035. Hinged to the side (except enclosure size 130 x 225 mm and 650 x 112.5 mm). Fusing behind a transparent cover.

For more combinations in various national standards, please contact us.

For drawings and dimensions see page 167.



| CEE receptacles | CEE receptacles | CEE receptacles | CEE receptacles |
|---|---|---|---|
| 2 CEE 16A, 4p, 400V switched, with mechanical DUO interlock | 1 CEE 32A, 5p, 400V<br>2 CEE 16A, 4p, 400V | 2 CEE 32A, 5p, 400V switched, with mechanical DUO interlock<br>2 CEE 16A, 5p, 400V | 3 CEE 32A, 4p, 400V, 3h For reefer container, switched with mechanical DUO interlock |
| **CEE receptacles** | **CEE receptacles** | **CEE receptacles** | **CEE receptacles** |
| 2 CEE 16A, 3p, 230V switched, with mechanical DUO interlock | 3 CEE 16A, 3p, 230V | | |
| **Receptacles SCHUKO®** | **Receptacles SCHUKO®** | **Receptacles SCHUKO®** | **Receptacles SCHUKO®** |
| | | | 3 SCHUKO® 16A, 230V |
| **Fusing** | **Fusing** | **Fusing** | **Fusing** |
| 2 MCB´s 16A, 3p, C<br>2 MCB´s 16A, 1p+N, C | 1 MCB 32A, 3p+N, C<br>1 MCB 16A, 3p, C<br>1 MCB 16A, 1p+N, C | 1 RCD 63A, 4p, 0.03A<br>2 MCB´s 32A, 3p, C<br>2 MCB´s 16A, 3p, C | 3 MCB´s 32A, 3p, C<br>3 Monitoring Sockets MS3102E 14S2S |
| **Connection** | **Connection** | **Connection** | **Connection** |
| For 2 cables up to 5 x 25 mm² | For 2 cables up to 5 x 25 mm² | For 1 cable up to 5 x 16 mm² | For 2 cables up to 4 x 25 mm² and for 3 monitoring sockets 4 x 4 mm² |
| **Enclosure size** | **Enclosure size** | **Enclosure size** | **Enclosure size** |
| 650 x 225 mm (H x W) | 520 x 225 mm (H x W) | 650 x 225 mm (H x W) | 520 x 225 mm (H x W) |
| **Part no.** | **Part no.** | **Part no.** | **Part no.** |
| **950034** | **940028** | **900946** | **940019** |

**Standard made of AMAPLAST, protection type IP 67**

pre-wired for installation, enclosure front cover electric grey RAL 7035. Hinged to the side (except enclosure size 130 x 225 mm and 650 x 112.5 mm). Fusing behind a transparent cover.

For more combinations in various national standards, please contact us.

For drawings and dimensions see page 167.



| CEE receptacles |
|---|
| 1 CEE 63A, 5p, 400V<br>1 CEE 32A, 5p, 400V<br>1 CEE 16A, 5p, 400V |
| **CEE receptacles** |
| |
| **Receptacles SCHUKO®** |
| 2 SCHUKO® 16A, 230V |
| **Fusing** |
| 1 RCD 63A, 4p, 0.03A<br>1 MCB 32A, 3p, C<br>1 MCB 16A, 3p, C<br>2 MCB´s 16A, 1p, C |
| **Connection** |
| For 2 cables up to<br>5 x 25 mm² |
| **Enclosure size** |
| 650 x 225 mm (H x W) |
| **Part no.** |
| **950031** |



| CEE receptacles |
|---|
| 1 CEE 63A, 5p, 400V<br>1 CEE 32A, 5p, 400V<br>1 CEE 16A, 5p, 400V |
| **CEE receptacles** |
| |
| **Receptacles NF** |
| 2 NF 16A, 2p+E, 230V |
| **Fusing** |
| 1 RCD 63A, 4p, 0.03A<br>1 MCB 32A, 3p+N, C<br>1 MCB 16A, 3p+N, C<br>2 MCB´s 16A, 1p+N, C |
| **Connection** |
| For 2 cables up to<br>5 x 25 mm² |
| **Enclosure size** |
| 650 x 225 mm (H x W) |
| **Part no.** |
| **950033** |

## Danger due to condensation in receptacles and combination enclosures

Temperature changes, direct sunlight or rapid changes in the weather can result in condensation in combinations and receptacles on the inside of the enclosure.

**What areas are in jeopardy?**

Washing facilities or open passages, but also interiors with high humidity are affected. Significant temperature fluctuations, drafts, e.g. in the vicinity of large gates and windows, agricultural areas or strong load changes can favour condensation. Undesired consequences (short circuit, corrosion, or even device failure) however, can be countered.
According to standard DIN VDE 0100-520, Chapter 52, Section 52 2.3.2, when setting up high-voltage units with rated voltages to 1000 V, measures must be taken for the draining of possible condensation.

**For which products does condensation occur?**

Basically in the areas cited above, condensation can occur for all in closed receptacles in combination enclosures. **The danger is even greater the higher the degree of protection.** Thus, for example, for watertight enclosures, IP 67, there is a greater danger than exists for IP 44, because due to the high degree of sealing, air exchange is prevented and thus there is no evaporation.

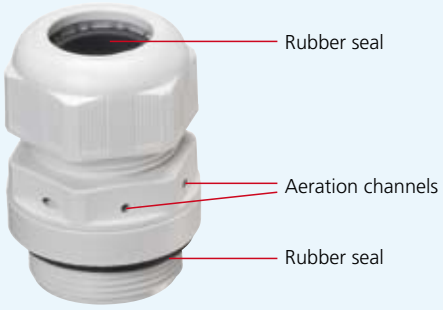
**Membrane cable glands are the solution.**

As a preventative measure, MENNEKES recommends the use of special membrane cable glands. An installed membrane prevents ingress of external humidity. Due to the simultaneous aeration of the enclosure there is continuous equalisation of ambient air and the enclosure interior air. Condensation thus can be continuously dissipated. The membrane cable gland allows insertion of supply cables without restricting aeration.
Important: The IP 67 protection rating remains intact!

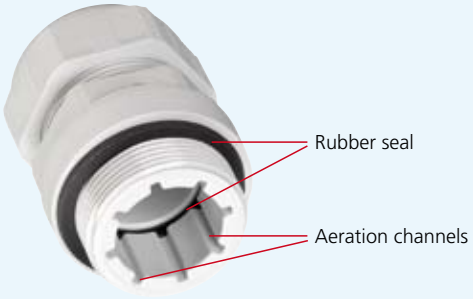
**What must be done?**

Our technical application recommendation is provided in the "Table" on the next page. Contact us if you have questions. We would be pleased to advise you.

**Note:** Only the membrane cable glands have aeration channels for avoidance of condensation. The standard cable glands are not suitable for applications where there is a danger of condensation.




The channels available in the gland ensure the required air exchange. Rubber seals prevent penetration of water.



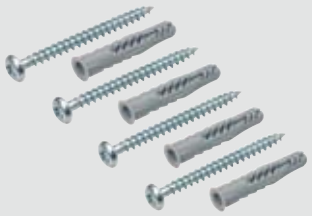

The humidity in the interior can escape through aeration channels. Membranes attached in the interior of the channels prevent penetration of exterior moisture. The IP degrees of protection remains intact.

## Accessories for AMAXX® receptacle combinations



**AMAXX®**
**standard cable glands**

black RAL 9005
**M 20** - for cable from 6-13 mm
IP 44: **Part no. 990607**
IP 67: **Part no. 990611**
**M 25** - for cable from 9-17 mm
IP 44: **Part no. 990610**
**M 32** - for cable from 13-21 mm
IP 44: **Part no. 990608**
IP 67: **Part no. 990612**
**M 40** - for cable from 14-28 mm
IP 67: **Part no. 990609**



**AMAXX®**
**screw set**

consisting of
4 screws 6 x 70 mm Pozidrive size 3, steel galvanized and
4 dowels 8 x 50 mm, for concrete, porous concrete, solid brick, perforated brick

**Part no. 990606**



**AMAXX®**
**attachment set**

for lateral installation of AMAXX® s combinations, for mounting either on the left or right hand side (set of 2 for 1 combination)

**Part no. 990620**



**AMAXX®**
**support/carrier frame**

yellow RAL 1003, suitable for AMAXX® receptacle combinations with the sizes:
260 x 225 mm,
390 x 225 mm and
520 x 225 mm
for wall mounting in protection type IP 67 or as mobile combinations with carrying handle and with feeder cable in protection type IP 44 and IP 67

**Part no. 15696**



**AMAXX® membrane cable glands**

black RAL 9005, incl. blanking plug

**M 25** - for cable from 9-17 mm
**Part no. 990623**

**M 32** - for cable from 13-21 mm
**Part no. 990625**

**M 40** - for cable from 16-28 mm
**Part no. 990627**

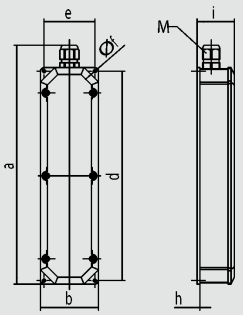
### Selection chart for membrane cable glands

| AMAXX® receptacle combination | Standard cable entries | Recommandation of usage membrane cable gland* | |
|---|---|---|---|
| with 1 segment<br>Enclosure:<br>130 x 225 mm (H x W) | top: 2 x M 25<br>2 x M 20<br>bottom: 2 x M 25<br>2 x M 20 | 1 x M 25 | alternative: 1 x M 20 |
| with 2 segments<br>Enclosure:<br>230 x 225 mm (H x W) | top: 2 x M 32<br>2 x M 20<br>bottom: 2 x M 32<br>2 x M 20 | 1 x M 32 | alternative: 2 x M 20 |
| with 3 segments<br>Enclosure:<br>390 x 225 mm (H x W) | top: 2 x M 40<br>2 x M 20<br>bottom: 2 x M 40<br>2 x M 20 | 1 x M 40 | alternative: 2 x M 20 |
| with 4 segments<br>Enclosure:<br>520 x 225 mm (H x W) | top: 2 x M 40<br>2 x M 20<br>bottom: 2 x M 40<br>2 x M 20 | 1 x M 40 and 1 x M 20 | alternative: 3 x M 20 |
| with 5 segments<br>Enclosure:<br>650 x 225 mm (H x W) | top: 2 x M 40<br>2 x M 20<br>bottom: 2 x M 40<br>2 x M 20 | 1 x M 40 and 2 x M 20 | alternative: 4 x M 20 |

*** At least required for the following ambient conditions:**
Reduction of the ambient temperature by 45° C through 10-minutes of heavy rain (enclosure, e.g heated to 60° C through sunlight, subsequent cloudburst with water temperature of 15° C).
If temperature differentials are greater/less, accordingly more or fewer membrane cable glands must be used.

**Receptacle strips, standard made of AMAPLAST, protection type IP 44[1)]**
pre-wired for installation, enclosure electric grey RAL 7035.
Hanging clip enclosed with each receptacle strip 401 x 97 mm. Therefore portable applicable as well.

[1)] See comment on page 45 to protection degree IP 44 for portable combination units.




| Drawing 1 MB 284/2 | | |
|---|---|---|
| Dim. in mm | a | 330 |
| | b | 80 |
| | d | 290 |
| | e | 70 |
| | f | 4,3 |
| | h | 3,8 |
| | i | 51 |
| | M | 20 |

Cable entry:
1 x M 20
with gland at the top.
The drawing applies to part no. 88678.



**Fitted with**
4 SCHUKO® 16A, 230V
tilted through 30°

**Fusing**

**Connection/feeder cable**
For 1 cable up to
3 x 2.5 mm²

**Part no.**
**88678**



**Fitted with**
8 SCHUKO® 16A, 230V
insert tilted through 30°

**Fusing**

**Connection/feeder cable**
For 1 cable up to
3 x 6 mm²

**Part no.**
**88677**

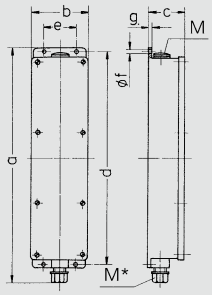


**Fitted with**
3 CEE 16A, 3p, 110V

**Fusing**

**Connection/feeder cable**
For 1 cable up to
3 x 10 mm²

**Part no.**
**96227**




| Drawing 5 MB 35 | | |
|---|---|---|
| Dim. in mm | a | 401 |
| | b | 97 |
| | c | 63 |
| | d | 364 |
| | e | 56 |
| | f | 5,5 |
| | g. | 4 |
| | M | 25 |
| | M* | 25 |

Cable entry:
1 x M 25 plugged at the top
1 x M 25 with gland at the bottom.
The drawing applies to all part no. except 88678.



**Fitted with**
3 CEE 16A, 3p, 230V

**Fusing**

**Connection/feeder cable**
For 1 cable up to
3 x 10 mm²

**Part no.**
**96489**



**Fitted with**
1 CEE 16A, 5p, 400V
2 SCHUKO® 16A, 230V

**Fusing**

**Connection/feeder cable**
For 1 cable up to
5 x 10 mm²

**Part no.**
**96438**



**Fitted with**
3 CEE 16A, 5p, 400V

**Fusing**

**Connection/feeder cable**
For 1 cable up to
5 x 10 mm²

**Part no.**
**96705**

**Highly resistant to chemicals made of AMELAN®, protection type IP 44**
with highly heat resistant contact carrier and nickel plated contacts.
Pre-wired for installation, enclosure front cover grey RAL 7000.
Hinged to the side (except enclosure size 130 x 225 mm and 650 x 112.5 mm).
Fusing behind a transparent cover. For more combinations in various national standards, please contact us. For drawings and dimensions see page 167.





| CEE receptacles | |
|---|---|
| 1 CEE 16A, 5p, 400V | |
| **CEE receptacles** | |
| **Receptacles SCHUKO®** | |
| 2 SCHUKO® 16A, 230V | |
| **Fusing** | |
| | |
| **Connection** | |
| For 1 cable up to 5 x 10 mm² | |
| **Enclosure size** | |
| 130 x 225 mm (H x W) | |
| **Part no.** | |
| **910020** | |



| CEE receptacles | |
|---|---|
| 1 CEE 16A, 5p, 400V | |
| **CEE receptacles** | |
| **Receptacles NF** | |
| 3 NF 16A, 2p+E, 230V | |
| **Fusing** | |
| 1 RCD 40A, 4p, 0.03A | |
| **Connection** | |
| For 1 cable up to 5 x 10 mm² | |
| **Enclosure size** | |
| 650 x 112.5 mm (H x W) | |
| **Part no.** | |
| **960042** | |



| CEE receptacles | |
|---|---|
| 1 CEE 32A, 5p, 400V<br>1 CEE 16A, 5p, 400V | |
| **CEE receptacles** | |
| **Receptacles British standard** | |
| 3 x 13A, 2p+E, 230V | |
| **Fusing** | |
| 1 RCD 63A, 4p, 0.03A<br>1 MCB 32A, 3p, C<br>1 MCB 16A, 3p, C<br>3 MCB´s 13A, 1p, C | |
| **Connection** | |
| For 1 cable up to 5 x 16 mm² | |
| **Enclosure size** | |
| 520 x 225 mm (H x W) | |
| **Part no.** | |
| **941142** | |



| CEE receptacles | |
|---|---|
| 1 CEE 63A, 5p, 400V<br>1 CEE 32A, 5p, 400V<br>1 CEE 16A, 5p, 400V | |
| **CEE receptacles** | |
| **Receptacles SCHUKO®** | |
| 4 SCHUKO® 16A, 230V | |
| **Fusing** | |
| 1 RCD 63A, 4p, 0.03A<br>1 MCB 32A, 3p, C<br>1 MCB 16A, 3p, C<br>4 MCB´s 16A, 1p, C | |
| **Connection** | |
| For 2 cables up to 5 x 25 mm² | |
| **Enclosure size** | |
| 650 x 225 mm (H x W) | |
| **Part no.** | |
| **950041** | |

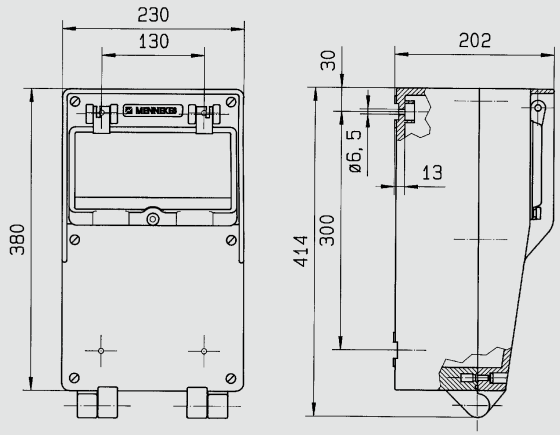
**Highly resistant to chemicals made of AMELAN®, protection type IP 67**
with highly heat resistant contact carrier and nickel plated contacts.
Pre-wired for installation, enclosure front cover grey RAL 7000.
Hinged to the side (except enclosure size 130 x 225 mm and 650 x 112.5 mm).
Fusing behind a transparent cover. For more combinations in various national standards, please contact us. For drawings and dimensions see page 167.





| CEE receptacles | CEE receptacles | CEE receptacles | CEE receptacles |
|---|---|---|---|
| | 1 CEE 16A, 5p, 400V | 1 CEE 32A, 5p, 400V | 1 CEE 32A, 5p, 400V<br>1 CEE 16A, 5p, 400V |
| **CEE receptacles** | **CEE receptacles** | **CEE receptacles** | **CEE receptacles** |
| 2 CEE 16A, 3p, 230V | | | |
| **Receptacles SCHUKO®** | **Receptacles SCHUKO®** | **Receptacles SCHUKO®** | **Receptacles SCHUKO®** |
| | 3 SCHUKO® 16A, 230V | 3 SCHUKO® 16A, 230V | 2 SCHUKO® 16A, 230V |
| **Fusing** | **Fusing** | **Fusing** | **Fusing** |
| 1 RCD 25A, 2p, 0.03A | 1 RCD 40A, 4p, 0.03A<br>1 MCB 16A, 3p, C<br>3 MCB´s 16A, 1p, C | 1 RCD 40A, 4p, 0.03A<br>1 MCB 32A, 3p, C<br>3 MCB´s 16A, 1p, C | 1 RCD 63A, 4p, 0.03A<br>1 MCB 32A, 3p, C<br>1 MCB 16A, 3p, C<br>2 MCB´s 16A, 1p, C |
| **Connection** | **Connection** | **Connection** | **Connection** |
| For 1 cable up to<br>3 x 10 mm² | For 2 cables up to<br>5 x 25 mm² | For 2 cables up to<br>5 x 25 mm² | For 2 cables up to<br>5 x 25 mm² |
| **Enclosure size** | **Enclosure size** | **Enclosure size** | **Enclosure size** |
| 260 x 225 mm (H x W) | 390 x 225 mm (H x W) | 390 x 225 mm (H x W) | 520 x 225 mm (H x W) |
| **Part no.** | **Part no.** | **Part no.** | **Part no.** |
| **920821** | **930027** | **930028** | **940016** |

**Solid rubber enclosure, signal yellow RAL 1003, protection type IP 44**
Pre-wired for installation
Other combinations on request




5 MB 42

**Enclosure size: 380 x 230 mm**
Cable entry:
1 x M 40 at the top with threaded cable gland
and 1 x M 40 plugged at the top
2 x M 40 plugged at the bottom
Space for 12 modules.



**CEE receptacles**
2 CEE 16A, 5p, 400V

**CEE receptacles**

**Receptacles SCHUKO®**
3 SCHUKO® 16A, 230V

**Fusing**
1 RCD 40A, 4p, 0.03A
2 MCB´s 16A, 3p, C
2 MCB´s 16A, 1p, B

**Connection/feeder cable**
For 1 cable up to
5 x 16 mm²

**Enclosure size**
380 x 230 mm (H x W)

**Part no.**
**70426**



**CEE receptacles**
1 CEE 32A, 5p, 400V
1 CEE 16A, 5p, 400V

**CEE receptacles**

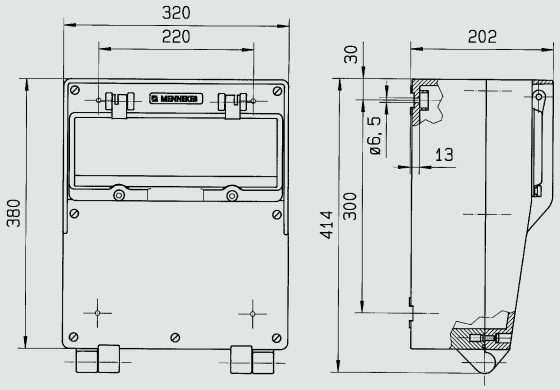
**Receptacles SCHUKO®**
2 NF 16A, 2p+E, 230V

**Fusing**
1 RCD 40A, 4p, 0.03A
1 MCB 16A, 3p+N, C
1 MCB 16A, 1p+N, B

**Connection/feeder cable**
For 1 cable up to
5 x 25 mm²

**Enclosure size**
380 x 230 mm (H x W)

**Part no.**
**7200727**




5 MB 41

**Enclosure size: 380 x 320 mm**
Cable entry:
1 x M 40 at the top with threaded cable gland
and 1 x M 40 plugged at the top
2 x M 40 plugged at the bottom
Space for 16 modules.

**Solid rubber enclosure, signal yellow RAL 1003, protection type IP 44**
Pre-wired for installation
Other combinations on request



| CEE receptacles | Receptacles SCHUKO® | Fusing | Connection/feeder cable | Enclosure size | Part no. |
|---|---|---|---|---|---|
| 1 CEE 32A, 5p, 400V<br>1 CEE 16A, 5p, 400V | 2 SCHUKO® 16A, 230V | 1 RCD 63A, 4p, 0.03A<br>1 MCB 32A, 3p, C<br>1 MCB 16A, 3p, C<br>1 MCB 16A, 1p, B | For 2 cables up to<br>5 x 25 mm² | 380 x 230 mm (H x W) | **70005** |



| CEE receptacles | Receptacles NF | Fusing | Connection/feeder cable | Enclosure size | Part no. |
|---|---|---|---|---|---|
| 1 CEE 32A, 5p, 400V<br>1 CEE 16A, 5p, 400V | 3 NF 16A, 230V | 1 MCB 32A, 3p+N, C<br>1 MCB 16A, 3p+N, C<br>3 MCB´s 16A, 1p+N, B | For 2 cables up to<br>5 x 25 mm² | 380 x 230 mm (H x W) | **70007NF** |



| CEE receptacles | Receptacles SCHUKO® | Fusing | Connection/feeder cable | Enclosure size | Part no. |
|---|---|---|---|---|---|
| 1 CEE 32A, 5p, 400V<br>2 CEE 16A, 5p, 400V | 4 SCHUKO® 16A, 230V | 1 RCD 63A, 4p, 0.03A<br>1 MCB 32A, 3p, C<br>2 MCB´s 16A, 3p, C<br>2 MCB´s 16A, 1p, B | For 2 cables up to<br>5 x 25 mm² | 380 x 320 mm (H x W) | **71064** |



| CEE receptacles | Receptacles NF | Fusing | Connection/feeder cable | Enclosure size | Part no. |
|---|---|---|---|---|---|
| 1 CEE 32A, 5p, 400V<br>2 CEE 16A, 5p, 400V | 4 NF 16A, 230V | 1 MCB 32A, 3p+N, C<br>2 MCB´s 16A, 3p+N, C<br>4 MCB´s 16A, 1p+N, B | For 2 cables up to<br>5 x 25 mm² | 380 x 320 mm (H x W) | **70009NF** |

**Solid rubber enclosure, signal yellow RAL 1003, protection type IP 44**
Pre-wired for installation
Other combinations on request





**CEE receptacles**
1 CEE 32A, 5p, 400V
2 CEE 16A, 5p, 400V

**CEE receptacles**

**Receptacles SCHUKO®**
4 SCHUKO® 16A, 230V

**Fusing**
1 MCB 32A, 3p, C
2 MCB´s 16A, 3p, C
4 MCB´s 16A, 1p, B

**Connection/feeder cable**
For 2 cables up to
5 x 25 mm²

**Enclosure size**
380 x 320 mm (H x W)

**Part no.**
**70009**



**CEE receptacles**
2 CEE 32A, 5p, 400V

**CEE receptacles**

**Receptacles SCHUKO®**
2 SCHUKO® 16A, 230V

**Fusing**
1 RCD 63A, 4p, 0.03A
2 MCB´s 32A, 3p, C
2 MCB´s 16A, 1p, B

**Connection/feeder cable**
For 1 cable up to
5 x 25 mm²

**Enclosure size**
380 x 230 mm (H x W)

**Part no.**
**70004**



**CEE receptacles**
1 CEE 63A, 5p, 400V
1 CEE 32A, 5p, 400V
1 CEE 16A, 5p, 400V

**CEE receptacles**

**Receptacles SCHUKO®**
4 SCHUKO® 16A, 230V

**Fusing**
1 RCD 63A, 4p, 0.03A
1 MCB 32A, 3p, C
1 MCB 16A, 3p, C
2 MCB´s 16A, 1p, B

**Connection/feeder cable**
For 2 cables up to
5 x 25 mm²

**Enclosure size**
380 x 320 mm (H x W)

**Part no.**
**71063**



**CEE receptacles**
1 CEE 63A, 5p, 400V
1 CEE 32A, 5p, 400V
1 CEE 16A, 5p, 400V

**CEE receptacles**

**Receptacles NF**
4 NF 16A, 2p+E, 230V

**Fusing**
1 RCD 63A, 4p, 0.03A
1 MCB 32A, 3p+N, C
1 MCB 16A, 3p+N, C
2 MCB´s 16A, 1p+N, B

**Connection/feeder cable**
For 2 cables up to
5 x 25 mm²

**Enclosure size**
380 x 320 mm (H x W)

**Part no.**
**71063NF**



**CEE receptacles**

1 CEE 63A, 5p, 400V
1 CEE 32A, 5p, 400V
1 CEE 16A, 5p, 400V

**CEE receptacles**

**Receptacles SCHUKO®**

4 SCHUKO® 16A, 230V

**Fusing**

1 MCB 63A, 3p, C
1 MCB 32A, 3p, C
1 MCB 16A, 3p, C
2 MCB´s 16A, 1p, B

**Connection/feeder cable**

For 2 cables up to
5 x 25 mm²

**Enclosure size**

380 x 320 mm (H x W)

**Part no.**

**71062**



**Fastening straps**

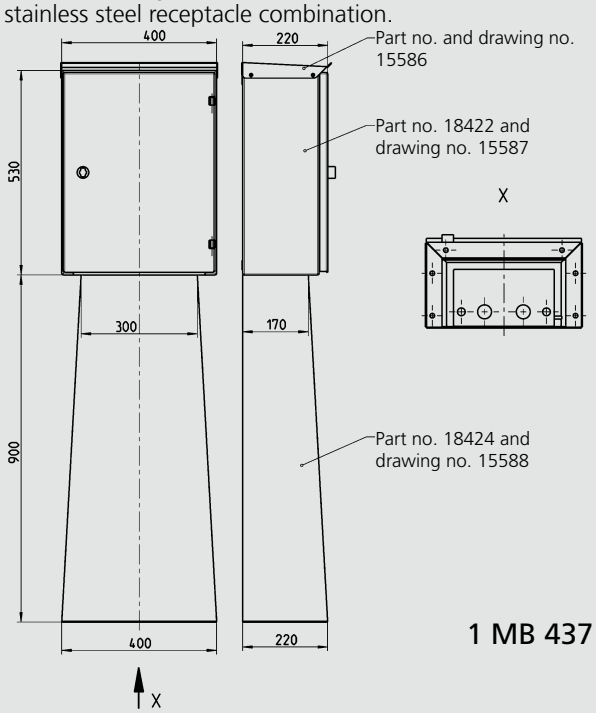
for external fastening of EverGUM combinations.
Set: 4 pieces with screws packed in a plastic bag.

**Part no. 41445**

**For wall fixing or with column. Stainless steel (material 1.4301)**
Protection type IP 44 with closed door
Surface with a flat finish (K240), material 1.4571 on request



**Surface mounted receptacle combinations from flat finished stainless steel**
Dimensions (H x W x D): 530 x 400 x 220 mm, standard door stop on the right, front door with swing handle and cylinder lock – lockable even when plugs are connected.
Cable entry / connection options:
2 entry nipples M 32 on bottom,
2 brass screw plugs M 16 on bottom,
terminal (shock hazard protected to BGV A3)
for cables up to 5 x 25 mm²
**1 set of fixing straps**
(4 pcs. - in a bag) are included with each surface mounted stainless steel receptacle combination.




1 MB 437



| CEE receptacles |
|---|
| 1 CEE 16A, 5p, 400V |
| **CEE receptacles** |
| **Receptacles SCHUKO®** |
| 4 SCHUKO® 16A, 230V |
| **Fusing** |
| 1 RCD 40A, 4p, 0.03A<br>1 MCB 16A, 3p, C<br>4 MCB´s 16A, 1p, B |
| **Connection/feeder cable** |
| For 2 cables up to 5 x 25 mm² |
| **Enclosure size** |
| 530 x 400 x 220 mm (H x W x D) |
| **Part no.** |
| **83725** |



| CEE receptacles |
|---|
| 1 CEE 32A, 5p, 400V<br>1 CEE 16A, 5p, 400V |
| **CEE receptacles** |
| **Receptacles SCHUKO®** |
| 2 SCHUKO® 16A, 230V |
| **Fusing** |
| 1 RCD 63A, 4p, 0.03A<br>1 MCB 32A, 3p, C<br>1 MCB 16A, 3p, C<br>2 MCB´s 16A, 1p, B |
| **Connection/feeder cable** |
| For 2 cables up to 5 x 25 mm² |
| **Enclosure size** |
| 530 x 400 x 220 mm (H x W x D) |
| **Part no.** |
| **83744** |



**Surface mounted enclosure**

from flat finished stainless steel,
dimensions (H x W x D):
530 x 400 x 220 mm

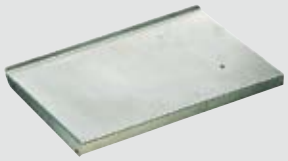
**Part no. 18422**



**Column**

from flat finished stainless steel, detachable back panel for easy assembly.
1 C-profile busbar on the inside for cord grip.
Cord grips not included in the scope of supply.
Dimensions (H x W):
900 x 400 mm

**Part no. 18424**



**Weather shield**

flat finished stainless steel, for surface mounted combinations,
dimensions (H x W x D):
530 x 400 x 220 mm

**Part no. 15586**



**Mounting plate**

galvanised,
dimensions:
470 x 295 x 2 mm

**Part no. 18416**

## Material properties stainless steel. Important information and recommendations.

Our high-quality stainless steel products are ideally suited for continuous use in buildings and outdoors.

There is a potential risk of corrosion in open air and indoor swimming pools, in coastal regions, offshore and in industrial areas with high air pollution. Subject to location and climatic conditions discoloration and corrosion can arise.

Through specific cleaning and maintenance procedures, impairments of the surface can be reduced or avoided.

In particularly aggressive ambient conditions we recommend the use of special stainless steels or coating the surfaces to further increase corrosion resistance.

Please contact our customer service department who will be pleased to provide exhaustive and expert advice.



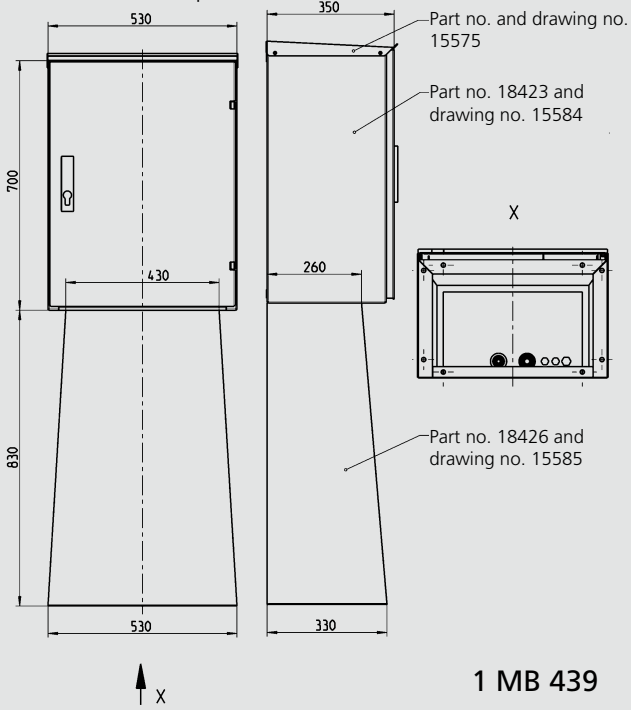
**For wall fixing or with column. Stainless steel (material 1.4301)**
Protection type IP 44 with closed door
Surface with a flat finish (K240), material 1.4571 on request





**Surface mounted receptacle combinations from flat finished stainless steel**
Dimensions (H x W x D): 700 x 530 x 350 mm, standard door stop on the right, front door with swing handle and cylinder lock – lockable even when plugs are connected.
2 cable entry bushes on bottom, suitable for cable diameters from 13 to 49 mm, 2 brass screw plugs M 16 on bottom, 1 brass screw plug M 20 on bottom, terminal (shock hazard protected to BGV A3). The combination units are equipped with pre-fuses.

**1 set of fixing straps**
(4 pcs. - in a bag) are included with each surface mounted stainless steel receptacle combination.




1 MB 439



| CEE receptacles |
|---|
| 1 CEE 63A, 5p, 400V<br>1 CEE 32A, 5p, 400V<br>1 CEE 16A, 5p, 400V |
| **CEE receptacles** |
| **Receptacles SCHUKO®** |
| 4 SCHUKO® 16A, 230V |
| **Fusing** |
| 2 RCD´s 63A, 4p, 0.03A<br>2 MCB´s 63A, 3p, C<br>1 MCB 32A, 3p, C<br>1 MCB 16A, 3p, C<br>4 MCB´s 16A, 1p, B |
| **Connection/feeder cable** |
| For 2 cables up to 5 x 50 mm² |
| **Enclosure size** |
| 700 x 530 x 350 mm (H x W x D) |
| **Part no.** |
| **83706** |



| CEE receptacles |
|---|
| 1 CEE 63A, 5p, 400V<br>2 CEE 32A, 5p, 400V<br>2 CEE 16A, 5p, 400V |
| **CEE receptacles** |
| **Receptacles SCHUKO®** |
| 3 SCHUKO® 16A, 230V |
| **Fusing** |
| 2 RCD´s 63A, 4p, 0.03A<br>2 MCB´s 63A, 3p, C<br>2 MCB´s 32A, 3p, C<br>2 MCB´s 16A, 3p, C<br>3 MCB´s 16A, 1p, B |
| **Connection/feeder cable** |
| For 2 cables up to 5 x 50 mm² |
| **Enclosure size** |
| 700 x 530 x 350 mm (H x W x D) |
| **Part no.** |
| **83705** |



**Surface mounted enclosure**

from flat finished stainless steel,
dimensions (H x W x D):
700 x 530 x 350 mm

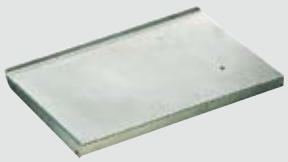
**Part no. 18423**



**Column**

from flat finished stainless steel, detachable back panel for easy assembly.
1 C-profile busbar on the inside for cord grip.
Cord grips not included in the scope of supply,
dimensions (H x W):
830 x 530 mm

**Part no. 18426**



**Weather shield**

from flat finished stainless steel,
for surface mounted combinations,
dimensions (H x W x D):
700 x 530 x 350 mm

**Part no. 15575**



**Mounting plate**

galvanised,
dimensions:
655 x 430 x 14 mm

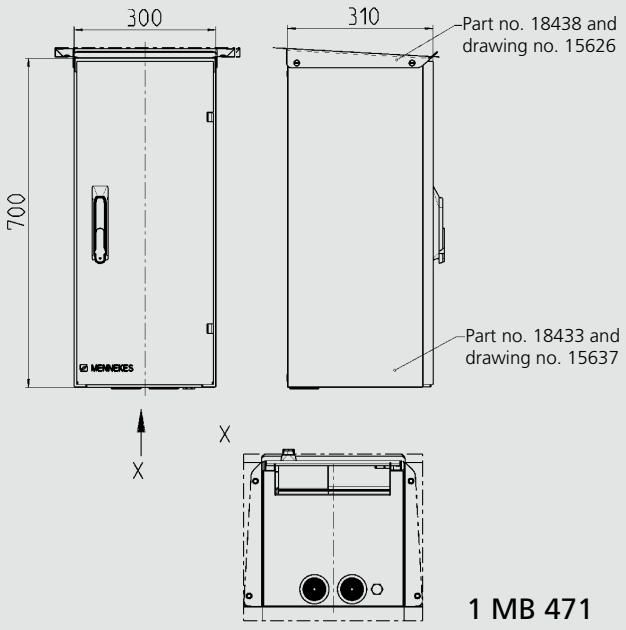
**Part no. 15577**

**Stainless steel (material 1.4301)**
Protection type IP 43 with closed door
Surface with a flat finish (K240), material 1.4571 on request



**Surface mounted receptacle combinations from flat finished stainless steel**
Dimensions (H x W x D): 700 x 300 x 310 mm, standard door stop on the right, front door with swing handle and cylinder lock – lockable even when plugs are connected.
2 cable entry bushes on bottom, suitable for cable diameters from 13 to 49 mm. 1 brass screw plug M 20 on bottom, terminal (shock hazard protected to BGV A3).

**1 set of fixing straps**
(4 pcs. - in a bag) are included with each surface mounted stainless steel receptacle combination.




1 MB 471



**CEE receptacles**
1 CEE 63A, 5p, 400V
1 CEE 32A, 5p, 400V
1 CEE 16A, 5p, 400V

**CEE receptacles**

**Receptacles SCHUKO®**
4 SCHUKO® 16A, 230V

**Fusing**
1 RCD 63A, 4p, 0.03A
1 MCB 32A, 3p, C
1 MCB 16A, 3p, C
2 MCB´s 16A, 1p, B

**Connection/feeder cable**
For 2 cables up to 5 x 25 mm²

**Enclosure size**
700 x 300 x 310 mm (H x W x D)

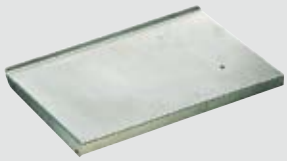
**Part no.**
**83698**



**Surface mounted enclosure**

from flat finished stainless steel,
dimensions (H x W x D):
700 x 300 x 310 mm

**Part no. 18433**



**Weather shield**

from flat finished stainless steel, for surface mounted combinations
700 x 300 x 310 mm
**Part no. 18438**

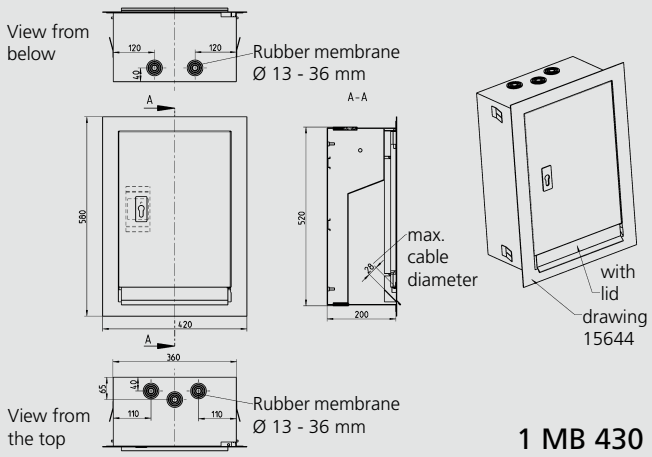


**Mounting plate**

galvanised, dimensions:
655 x 280 x 14 mm
**Part no. 18442**

**Stainless steel (material 1.4301)**
Protection type IP 43 with closed door
Front door and trim frame flat finished stainless steel (K240), flush mounted stainless steel enclosure
Material 1.4571 on request

**Flush mounted combinations,** consisting of:
**Front door and trim frame flat finished stainless steel**
Dimensions (H x W): 580 x 420 mm, front door, lockable with cylinder, lockable even when plugs are connected, door stop on the right
**Flush mounted stainless steel enclosure**
Dimensions (H x W x D): 520 x 360 x 200 mm
cable entry bush 3 x top and 2 x bottom,
suitable for cable diameters from 13 to 49 mm




1 MB 430







**Flush mounted enclosure**

Front door and trim frame from flat finished stainless steel,
dimensions (H x W):
580 x 420 mm;
Flush mounted combination
bright finish,
dimensions (H x W x D):
520 x 360 x 200 mm

**Part no. 18427**



**Mounting plate**

galvanised,
for flush mounted combinations,
dimensions:
580 x 420 mm (trim frame)

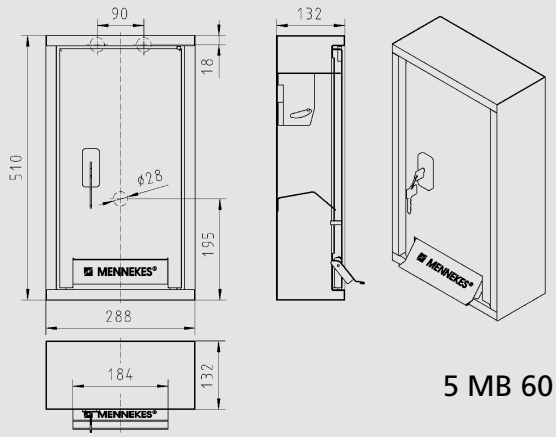
**Part no. 18416**

| CEE receptacles | CEE receptacles |
|---|---|
| 1 CEE 16A, 5p, 400V | 1 CEE 32A, 5p, 400V<br>1 CEE 16A, 5p, 400V |
| **CEE receptacles** | **CEE receptacles** |
| | |
| **Receptacles SCHUKO®** | **Receptacles SCHUKO®** |
| 4 SCHUKO® 16A, 230V | 2 SCHUKO® 16A, 230V |
| **Fusing** | **Fusing** |
| 1 RCD 40A, 4p, 0.03A<br>1 MCB 16A, 3p, C<br>4 MCB´s 16A, 1p, B | 1 RCD 63A, 4p, 0.03A<br>1 MCB 32A, 3p, C<br>1 MCB 16A, 3p, C<br>2 MCB´s 16A, 1p, B |
| **Connection/feeder cable** | **Connection/feeder cable** |
| For 2 cables up to 5 x 25 mm² | For 2 cables up to 5 x 25 mm² |
| **Enclosure size** | **Enclosure size** |
| 580 x 420 mm (H x W / trim frame) | 580 x 420 mm (H x W / trim frame) |
| **Part no.** | **Part no.** |
| **84373** | **84374** |

**Stainless steel (material 1.4301)**
**Protection type IP 44 with closed door**
Surface with a flat finish (K240)



**Surface mounted combination for water and power connections,** consisting of:
**Front door and enclosure**
**from stainless steel (material 1.4571), flat finished**
Dimensions (H x W x D): 510 x 290 x 130 mm
front door, lockable with cylinder (3 keys) lockable even when plugs or hoses are connected, door stop on the right




5 MB 60

**Important note:**
According to VDE regulations the shown stainless steel combinations for power and water connection must be protected by an RCD (0.03A).



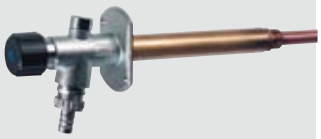
## Surface mounted enclosure

cable entry bush (boreholes to be cut out):
2 x 28 mm on the backside at top, each for cable diameter up to 25 mm;
1 x 28 mm for the frost-proof outdoor tap

**Comprises of:**

1 splash guard
1 pivoting mounting angle, pre-drilled to accommodate optionally:
1 double Cepex receptacle, product group 1027 (CEE 16A or SCHUKO®) or
2 single wall mounted Cepex receptacles (CEE receptacle 16A or SCHUKO®) or
1 combination enclosure 170 x 118 mm

**Part no. 18449**



## Frost-proof outdoor tap

for wall mounted and flush mounted enclosures, automatic emptying function, angled gland for ½" hoses, rated pressure: PN 16, flexible DN 15 connection with gland, all metal parts which come into contact with liquids are made from red brass, with black plastic handle and blue marking plate, outlet with connected collar and EPDM seal with DIN/ DVGW sound insulation approval including pipe air-release valve and check valve as safety devices to IEC 1717 and DIN 1988 (part 4), water taps preassembled by others.
2 hexagon head screws to fasten the water tap are enclosed as detached parts.

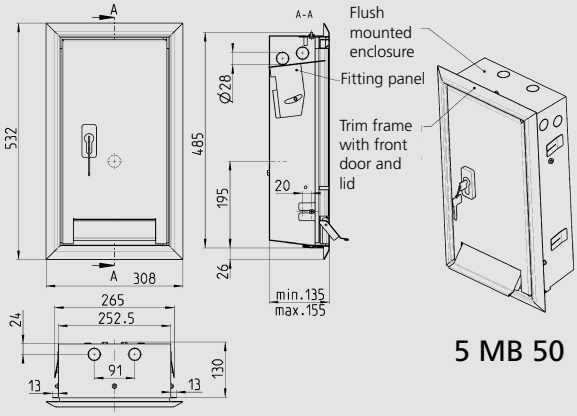
**Part no. 18440**

**Stainless steel**
Protection type IP 44 with closed door
Surface with a flat finish (K240)



**Flush mounted combination for water and power connections,** consisting of:
**Front door and trim frame**
**from stainless steel (material 1.4571), flat finished**
Dimensions (H x W): 532 x 308 mm
front door, lockable with cylinder, (3 keys) lockable even when plugs or hoses are connected, door stop on the right

**Back box and U-profile from stainless steel (material 1.4301) bright finish, material 1.4571 on request.**
Dimensions (H x W x D): 485 x 265 x 130 mm




5 MB 50

**ATTENTION:**
Some countries may not allow the use of a distribution combination for water and power. Please check the local regulations if you intend to use these outside of Germany!



**Flush mounted enclosure**

cable entry bush (boreholes to be cut out): 2 x 28 mm on the top and 4 x 28 mm on the top (2 of each on the right and on the left), each for cable diameter up to 25 mm;
1 x 28 mm on the backside for the frost-proof outdoor tap

**Comprises of:**

1 splash guard
1 pivoting mounting angle, pre-drilled to accommodate optionally:
1 double Cepex receptacle, product group 1027 (CEE 16A or SCHUKO®) or
2 single wall mounted Cepex receptacles (CEE receptacle 16A or SCHUKO®) or
1 combination enclosure 170 x 118 mm

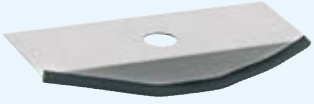
**Part no. 18432**



Variations of stainless steel flush mounted combinations for power and water connection.



Mounting angle



Splash guard

**Stainless steel (material 1.4301)**
Material 1.4571 on request.







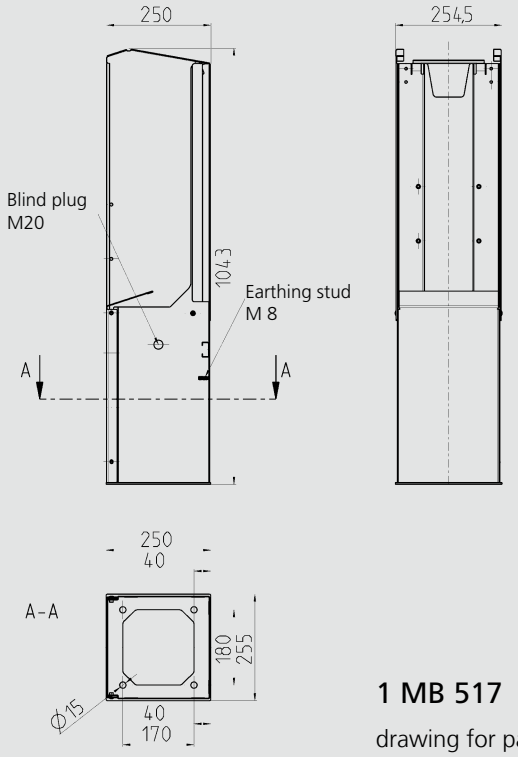
**CombiTOWER® – short routes to your energy source.**
The ideal tap for industry, workshops, assembly shops, loading platforms, etc. Suitable for combination with receptacles from 16A to 63A. Special RAL colours available upon request.

**Practical handling.**
Enclosure size
1043 x 254.5 x 250 mm:
Due to removable hood easy assembly.
The hinged covers of the AMAXX® combinations can be opened smoothly.

CombiTOWER® on request with lockable door.
Using 63A receptacles with inserted plug does not allow to close the door.

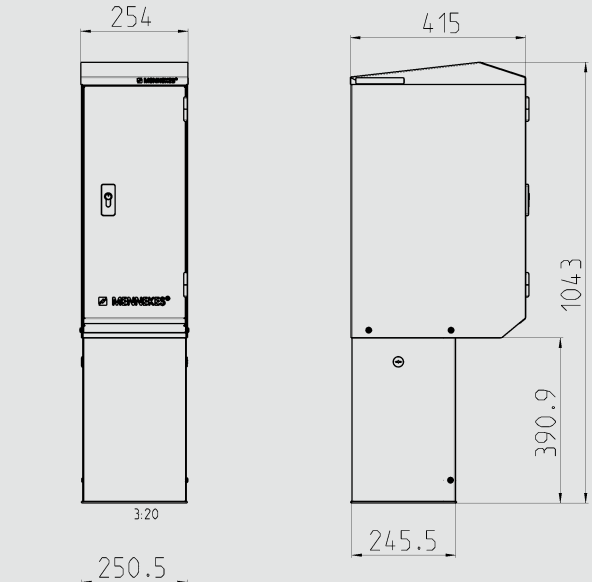
**Electrical outdoor installation easily made.**

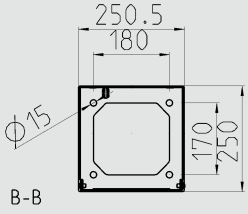
**Short distance:**
All the required supply connections (power, compressed air and water) are directly accessible at the workstation.
**Easy installation:**
Built-in standard rails for strain relief of feeder cable and M 20 for pneumatic connection included. M 8 ground stud integrated in the enclosure. Front plate may be staggered up or down, depending on the enclosure size.
**Easy to order:** select the required combination size with the necessary components or receptacles,
select the CombiTOWER® type for required enclosure size and quote both catalogue numbers.




**1 MB 517**
drawing for part no. 15678 and 15679

For part no. 15738 and 15739 just the sizes of the front plate differ




**1 MB 518**
drawing for part no. 15680 and 15681

For part no. 15740 and 15741 the dimensions of the combination enclosures and frontdoors differ



**CombiTOWER®**

made from stainless steel (material 1.4301), material 1.4571 on request

with removable cover, dimensions (H x W x D): 1043 x 254.5 x 250 mm

for AMAXX® enclosures with 2, 3 or 4 segments

painted signal yellow (RAL 1003)
**Part no. 15679**

bright finish
**Part no. 15678**



**CombiTOWER®**

with lockable door

made from stainless steel (material 1.4301), material 1.4571 on request

with removable cover, dimensions (H x W x D): 1043 x 254 x 415 mm

for AMAXX® enclosures with 2, 3 oder 4 segments

painted signal yellow (RAL 1003)
**Part no. 15681**

bright finish
**Part no. 15680**



**CombiTOWER®**

made from stainless steel (material 1.4301), material 1.4571 on request

with removable cover, dimensions (H x W x D): 1043 x 254.5 x 250 mm

for AMAXX® enclosures with 5 segments

painted signal yellow (RAL 1003)
**Part no. 15739**

bright finish
**Part no. 15738**



**CombiTOWER®**

with lockable door

made from stainless steel (material 1.4301), material 1.4571 on request

with removable cover, dimensions (H x W x D): 1043 x 254 x 415 mm

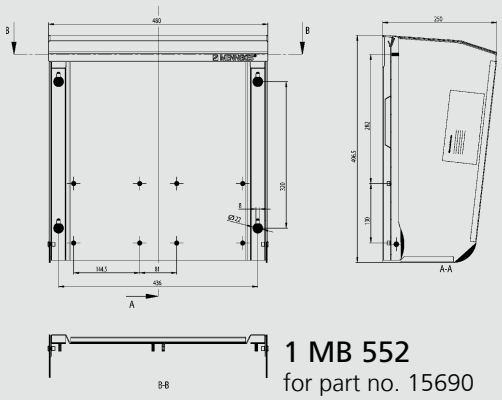
for AMAXX® enclosures with 5 segments

painted signal yellow (RAL 1003)
**Part no. 15741**

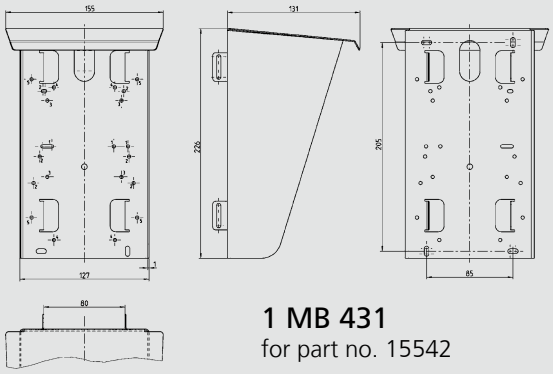
bright finish
**Part no. 15740**

**Stainless steel (material 1.4301).**

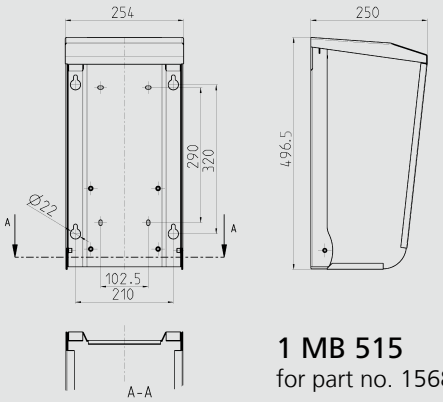




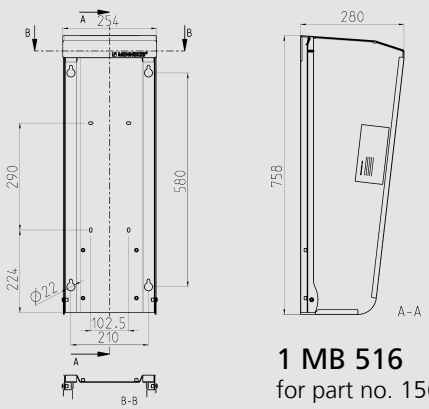
1 MB 552
for part no. 15690



1 MB 431
for part no. 15542



1 MB 515
for part no. 15682



1 MB 516
for part no. 15683



**Weather shield**

made from stainless steel (material 1.4301),
with side blinds,
cover can be removed from the back,
for wall mounting

dimensions (H x W x D):
496.5 x 480 x 250 mm,
surface: bright finish

for 2 AMAXX® enclosures with 2 or 3 segments

**Part no. 15690**



**Weather shield**

made from stainless steel (material 1.4301),
with side blinds,
for wall mounting or on a column

dimensions (H x W x D):
226 x 155 x 131/52 mm,
surface: bright finish

suitable to accommodate receptacles, switches etc.

**Part no. 15542**



**Attention!**
**When mounting on a column, please order separately:**
Stainless steel mounting clips (2 pcs. in a set)

Ø 70 - 90 mm
**Part no. 22986**

Ø 90 - 110 mm
**Part no. 22987**

Ø 110 - 130 mm
**Part no. 22988**

**Options of equipment weather shield 15542:**





**Column**

made from stainless steel (material 1.4301),
surface: stainless steel
(basic column for shields 15682 and 15683)
height approx. 1300 mm

**Part no. 15530**



**Weather shield**

made from stainless steel (material 1.4301),
with side blinds,
cover can be removed from the back,
for wall mounting or on a column 15530

dimensions (H x W x D):
496.5 x 254 x 250 mm,
surface: bright finish

for AMAXX® enclosures with 2 or 3 segments

**Part no. 15682**



**Weather shield**

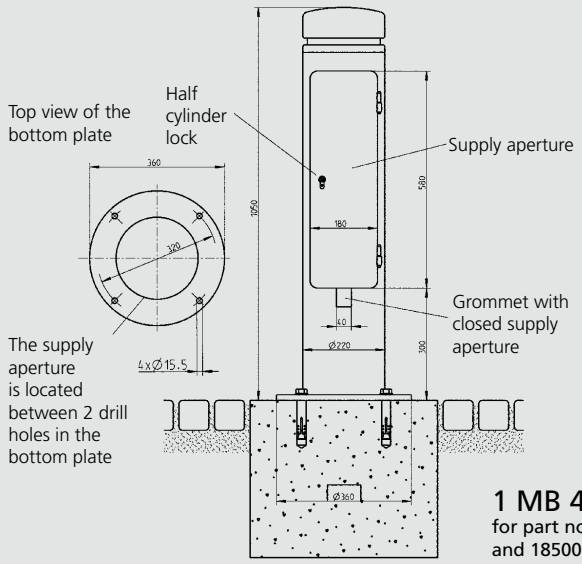
made from stainless steel (material 1.4301),
cover can be removed from the back,
for wall mounting or on a column 15530

dimensions (H x W x D):
758 x 254 x 250 mm,
surface: bright finish

for AMAXX® enclosures with 4 or 5 segments

**Part no. 15683**

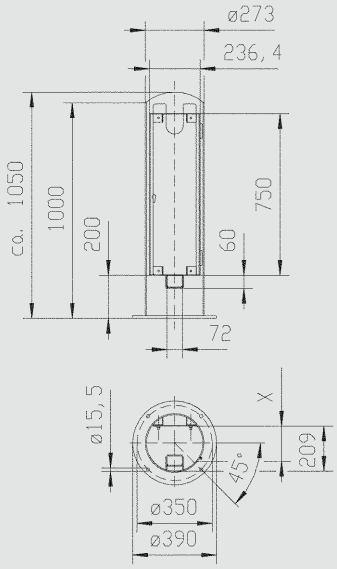
**From steel tube.**



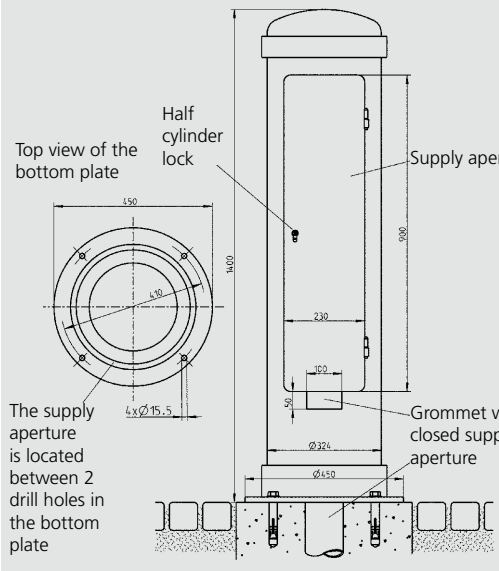

**1 MB 443**
for part no. 84335 and 18500RO








**1 MB 473**
for part no. 83685 and 18503AG




**1 MB 445**
for part no. 83722 and 18502AZ

**CEE receptacles**
1 CEE 16A, 5p, 400V

**CEE receptacles**

**Receptacles SCHUKO®**
2 SCHUKO® 16A, 230V

**Fusing**
1 MCB 16A, 3p, C
1 MCB 16A, 1p, B

**Connection/feeder cable**
For 1 cable up to 5 x 6 mm²

**Enclosure size**
1050 x 220 mm (H x Ø)

**Part no.**
**84335**

**Power post enclosure**

from steel tube,
wall thickness 4.0 mm,
hot-dip galvanised,
powder-coated,
colour: red,
hinged supply aperture with safety lock,
dimensions (H x Ø):
1050 x 220 mm (inside),
weight: approx. 45 kg,
aperture at bottom:
(H x W) 50 x 40 mm,
fixing flange:
Ø 360 mm,
with 4 fixing holes 15.5 mm,
for fixing to an existing fundament

Enclosure
**Part no. 18500RO**

Mounting plate
**Part no. 15561000**



**CEE receptacles**

1 CEE 32A, 5p, 400V
1 CEE 16A, 5p, 400V

**CEE receptacles**

**Receptacles SCHUKO®**

2 SCHUKO® 16A, 230V

**Fusing**

1 RCD 40A, 4p, 0.03A
1 MCB 32A, 3p, C
1 MCB 16A, 3p, C
2 MCB´s 16A, 1p, B

**Connection/feeder cable**

For 1 cable up to
5 x 10 mm²

**Enclosure size**

1050 x 273 mm (H x Ø)

**Part no.**

**83685**



**Power post enclosure**

from steel tube,
wall thickness 4.5 mm,
galvanised, yellow
chromated and
powder-coated,
colour: anthracite
(RAL 7016),
hinged supply aperture
with safety lock,
dimensions (H x Ø):
1050 x 273 mm (inside),
weight: approx. 60 kg,
aperture at bottom:
(H x W) 60 x 70 mm
fixing flange: Ø 390 mm,
with 4 fixing holes
15.5 mm,
for fixing to an existing
fundament

Enclosure
**Part no. 18503AG**

Mounting plate
**Part no. 15617**



**CEE receptacles**

1 CEE 63A, 5p, 400V
1 CEE 32A, 5p, 400V
1 CEE 16A, 5p, 400V

**CEE receptacles**

**Receptacles SCHUKO®**

2 SCHUKO® 16A, 230V

**Fusing**

1 RCD 63A, 4p, 0.03A
1 MCB 32A, 3p, C
1 MCB 16A, 3p, C
2 MCB´s 16A, 1p, B

**Connection/feeder cable**

for 2 cables
up to 5 x 25 mm²

**Enclosure size**

1400 x 325 mm (H x Ø)

**Part no.**

**83722**



**Power post enclosure**

from steel tube,
wall thickness 4.5 mm,
hot-dip galvanised,
wet painted,
colour: anthracite
iron glitter DB703,
hinged supply aperture
with safety lock,
dimensions (H x Ø):
1400 x 325 mm (inside),
weight: approx. 100 kg,
aperture at bottom:
(H x W) 50 x 100 mm
fixing flange: Ø 450 mm,
with 4 fixing holes
15.5 mm,
for fixing to an existing
fundament

Enclosure
**Part no. 18502AZ**

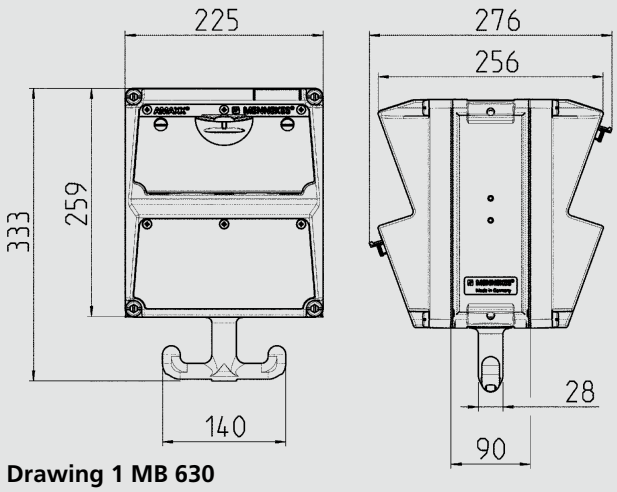
Mounting plate
**Part no. 15566**

**Standard made of AMAPLAST, protection type IP 44[1)]**
pre-wired for installation, enclosure front cover electric grey, yellow or silver, hinged to the side. Fusing behind a transparent cover. With suspension eyes on top, grip hooks on the bottom and chain set provided.
The receptacle combinations can be ordered in electric grey RAL 7035, yellow RAL 1021 or silver RAL 9006. To order in yellow or silver, please add the appropriate colour code to the order number (yellow = GE, silver = SI).
[1)] See comment on page 45 to protection degree IP 44 for portable combinations.










**Drawing 1 MB 630**
Depth dimensions for identical configuration on both sides.

| Receptacles | Protection type | Depth |
|---|---|---|
| SCHUKO® 16A, 230V | IP 44 | 282 mm |
| | IP 67 | 326 mm |
| CEE 16A, 3p, 230V | IP 44 | 342 mm |
| | IP 67 | 350 mm |
| CEE 16A, 5p, 400V | IP 44 | 354 mm |
| | IP 67 | 362 mm |
| CEE 32A, 5p, 400V | IP 44 | 372 mm |
| | IP 67 | 382 mm |

**CEE receptacles**
2 CEE 16A, 5p, 400V

**CEE receptacles**

**Receptacles SCHUKO®**
4 SCHUKO® 16A, 230V

**Fusing**
1 RCD 40A, 4p, 0.03A
2 MCB´s 16A, 3p, C
4 MCB´s 16A, 1p, C

**Connection/feeder cable**
For 1 cable up to
5 x 10 mm²

**Enclosure size**
260 x 225 mm (H x W)

**Part no.**
**970004***

**CEE receptacles**
1 CEE 32A, 5p, 400V
1 CEE 16A, 5p, 400V

**CEE receptacles**

**Receptacles SCHUKO®**
3 SCHUKO® 16A, 230V

**Fusing**
1 RCD 40A, 4p, 0.03A
1 MCB 16A, 3p, C
3 MCB´s 16A, 1p, C

**Connection/feeder cable**
For 1 cable up to
5 x 10 mm²

**Enclosure size**
260 x 225 mm (H x W)

**Part no.**
**970002***

**Standard made of AMAPLAST, protection type IP 44[1)]**
pre-wired for installation, enclosure front cover electric grey, yellow or silver, hinged to the side. Fusing behind a transparent cover. With suspension eyes on top, grip hooks on the bottom and chain set provided.
The receptacle combinations can be ordered in electric grey RAL 7035, yellow RAL 1021 or silver RAL 9006. To order in yellow or silver, please add the appropriate colour code to the order number (yellow = GE, silver = SI).
[1)] See comment on page 45 to protection degree IP 44 for portable combinations.



**CEE receptacles**
1 CEE 32A, 5p, 400V
1 CEE 16A, 5p, 400V

**Data port sockets**
1 Cepex RJ45, 2 fold Cat.6

**Receptacles SCHUKO®**
3 SCHUKO® 16A, 230V

**Fusing**
1 RCD 40A, 4p, 0.03A
1 MCB 16A, 3p, C
3 MCB´s 16A, 1p, C

**Connection/feeder cable**
For 1 cable up to 5 x 10 mm²

**Enclosure size**
260 x 225 mm (H x W)

**Part no.**
**970005***



**CEE receptacles**
1 CEE 32A, 5p, 400V
1 CEE 16A, 5p, 400V

**CEE receptacles**

**Receptacles SCHUKO®**
4 SCHUKO® 16A, 230V

**Fusing**
1 RCD 40A, 4p, 0.03A
1 MCB 32A, 3p, C
1 MCB 16A, 3p, C
4 MCB´s 16A, 1p, C

**Connection/feeder cable**
For 1 cable up to 5 x 10 mm²

**Enclosure size**
260 x 225 mm (H x W)

**Part no.**
**970001***



**CEE receptacles**
1 CEE 32A, 5p, 400V
1 CEE 16A, 5p, 400V

**CEE receptacles**

**Receptacles SCHUKO®**
4 SCHUKO® 16A, 230V

**Fusing**
1 LS 32A, 3p, C
1 MCB 16A, 3p, C
4 MCB´s 16A, 1p, C

**Connection/feeder cable**
For 1 cable up to 5 x 10 mm²

**Enclosure size**
260 x 225 mm (H x W)

**Part no.**
**970003***



**Pneumatic connection**

for AMAXX® hanging

for tube NW 9 mm,
Part no. 997001

for tube NW 13 mm,
Part no. 997000

**Part no. 997001**
**Part no. 997000**

**Set of chains**
are provided with each suspendable AMAXX® receptacle combination.



**Standard made of AMAPLAST, protection type IP 44[1)]**
pre-wired for installation, back box in black, cover available in red (RO), yellow (GE) or silver (SI).
Other combinations on request.
[1)] See comment on page 45 to protection degree IP 44 for portable combinations and RJ45 data sockets.





**Fitted with**
1 CEE 16A, 5p, 400V
3 SCHUKO® 16A, 230V

**Fusing**

**Connection/feeder cable**
For 1 cable up to
5 x 10 mm²

**Part no.**
**94550SI**

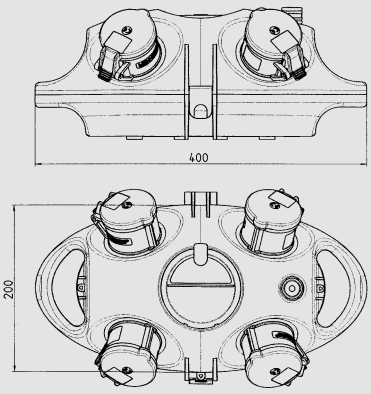


**Fitted with**
4 SCHUKO® 16A, 230V

**Fusing**

**Connection/feeder cable**
For 1 cable up to
5 x 10 mm²

**Part no.**
**94551RO**




1 MB 441

DIN rail / fusing for 4 modules beneath transparent operating lid.
Cable entry: at the top: 1 x M 32, 1 x M 25, 2 x M 20 (blind, to be cut out), 1 x cut out for quick pneumatic connection; from the side (for wall fixing or portable version):
1 x M 25 (blind, to be cut out).
When ordering AirKRAFT® please add to the part no. the colour code of the cover, i. e.
red = RO, yellow = GE, silver = SI.



**Fitted with**
3 SCHUKO® 16A, 230V
1 RJ45 double data port cat.6, 8/8

**Fusing**

**Connection/feeder cable**
For 1 cable up to
5 x 10 mm²

**Part no.**
**94554GE**



**Fitted with**
1 CEE 16A, 5p, 400V
2 SCHUKO® 16A, 230V
1 RJ45 double data port cat.6, 8/8

**Fusing**

**Connection/feeder cable**
For 1 cable up to
5 x 10 mm²

**Part no.**
**94555GE**

**Standard made of AMAPLAST, protection type IP 44[1)]**
pre-wired for installation, back box in black, cover available in red (RO), yellow (GE) or silver (SI).
Other combinations on request.
[1)] See comment on page 45 to protection degree IP 44 for portable combinations and RJ45 data sockets.



**Fitted with**
1 CEE 16A, 5p, 400V
2 NF 16A, 2p+E, 230V
1 RJ45 double data port cat.6, 8/8

**Fusing**

**Connection/feeder cable**
For 1 cable up to 5 x 10 mm²

**Part no.**
**94555FG**

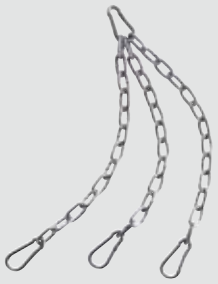


**Fitted with**
1 CEE 16A, 5p, 400V
3 NF 16A, 2p+E, 230V

**Fusing**

**Connection/feeder cable**
For 1 cable up to 5 x 10 mm²

**Part no.**
**94550FS**



**Set of chains**

for fixing AirKRAFT® to the ceiling

**Part no. 106060**



**Pneumatic connection**

for 3KRAFT® and AirKRAFT®

for tube dia. 9 mm
**Part no. 208620**

for tube dia. 13 mm
**Part no. 208621**

duplex
When used in 3KRAFT® and AirKRAFT® an additional one-way pneumatic quick connect part no. 208620 or 208621) is still needed!
**Part no. 41442**

**Standard made of AMAPLAST, protection type IP 44[1)]**
pre-wired for installation, back box in black, cover available in red (RO), yellow (GE) or silver (SI).
Other combinations on request.
[1)] See comment on page 45 to protection degree IP 44 for portable combinations and RJ45 data sockets.







**Fitted with**
3 SCHUKO® 16A, 230V

**Fusing**

**Connection/feeder cable**
For 1 cable up to
3 x 6 mm²

**Part no.**
**94351GE**

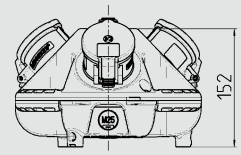


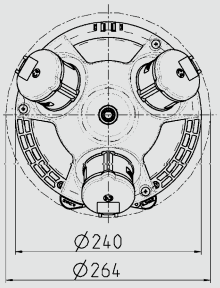
**Fitted with**
1 CEE 16A, 5p, 400V
2 SCHUKO® 16A, 230V

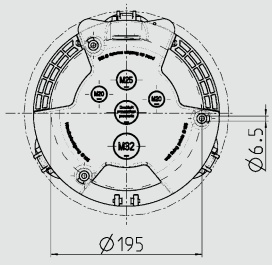
**Fusing**

**Connection/feeder cable**
For 1 cable up to
5 x 10 mm²

**Part no.**
**94350SI**




1 MB 442

Cable entry:
at the top: 1 x M 32, 1 x M 25, 2 x M 20 (blind, to be cut out), 1 x cut out for quick pneumatic connection;
from the side (for wall fixing or portable version):
1 x M 25 (blind, to be cut out).
When ordering 3KRAFT® please add to the part no. the colour code of the cover, i. e.
red = RO, yellow = GE, silver = SI.



**Fitted with**
1 CEE 16A, 5p, 400V
1 SCHUKO® 16A, 230V
1 RJ45 double data port cat.6, 8/8

**Fusing**

**Connection/feeder cable**
For 1 cable up to
5 x 10 mm²

**Part no.**
**94355GE**



**Fitted with**
2 SCHUKO® 16A, 230V
1 RJ45 double data port cat.6, 8/8

**Fusing**

**Connection/feeder cable**
For 1 cable up to
3 x 6 mm²

**Part no.**
**94354SI**

**Standard made of AMAPLAST, protection type IP 44[1)]**
pre-wired for installation, back box in black, cover available in red (RO), yellow (GE) or silver (SI).
Other combinations on request.
[1)] See comment on page 45 to protection degree IP 44 for portable combinations and RJ45 data sockets.



**Fitted with**
3 NF 16A, 2p+E, 230V

**Fusing**

**Connection/feeder cable**
For 1 cable up to
3 x 6 mm²

**Part no.**
**94351FR**



**Fitted with**
1 CEE 16A, 4p, 400V
1 NF 16A, 2p+E, 230V
1 RJ45 double data port cat.6, 8/8

**Fusing**

**Connection/feeder cable**
For 1 cable up to
5 x 10 mm²

**Part no.**
**94355FG**



**Set of chains**

for fixing 3KRAFT® to the ceiling

**Part no. 106123**



**Pneumatic connection**

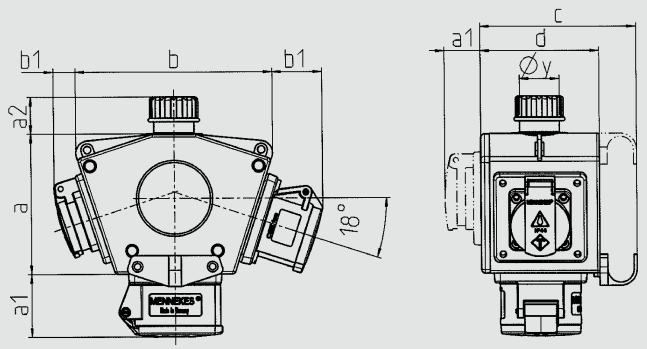
for 3KRAFT® and AirKRAFT®

for tube dia. 9 mm
**Part no. 208620**

for tube dia. 13 mm
**Part no. 208621**

duplex
When used in 3KRAFT® and AirKRAFT® an additional one-way pneumatic quick connect part no. 208620 or 208621) is still needed!
**Part no. 41442**

**Standard made of AMAPLAST, high resistant to chemicals AMELAN®, protection type IP 44[1] / IP 67 / IP 68**
pre-wired for installation, with cable grip and installed hanging hook.
Other combinations on request.
[1] See comment on page 45 to protection degree IP 44 for portable combinations.




| 3 MB 44 | | | |
|---|---|---|---|
| **Pos.** | **Receptacles** | **IP-degrees** | **Dim.** |
| a | | | 114.0 mm |
| a1 | SCHUKO®, 16A, 230V | IP 44 | max. 30.0 mm |
| a1 | CEE 16A, 3p, 230V | IP 44 | 52.7 mm |
| a1 | CEE 16A, 5p, 400V | IP 44 | 50.5 mm |
| a1 | CEE 32A, 5p, 400V | IP 44 | 64.0 mm |
| a2 | | | 30.0 mm |
| b | | | 160.0 mm |
| b1 | SCHUKO®, 16A, 230V | IP 44 | max. 18.0 mm |
| b1 | CEE 16A, 3p, 230V | IP 44 | 42.0 mm |
| b1 | CEE 16A, 5p, 400V | IP 44 | 40.0 mm |
| b1 | CEE 32A, 5p, 400V | IP 44 | 53.2 mm |
| c | | | 133.0 mm |
| d | | | 97.0 mm |
| y | | | 17.0 mm |



**Fitted with**
3 SCHUKO® 16A, 230V hinged bayonet lock lid

**Protection type**
IP 68

**Connection/feeder cable**
For 1 cable up to 3 x 10 mm²

**Part no.**
**10860**

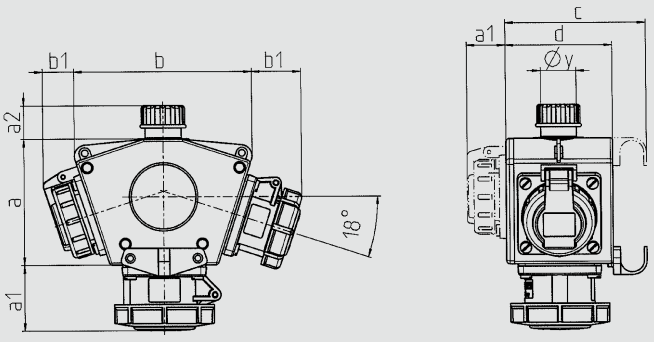


**Fitted with**
3 SCHUKO® 16A, 230V hinged bayonet lock lid attached by a strap

**Protection type**
IP 68

**Connection/feeder cable**
For 1 cable up to 3 x 10 mm²

**Part no.**
**10859**




| 3 MB 45 | | | |
|---|---|---|---|
| **Pos.** | **Receptacles** | **IP-degrees** | **Dim.** |
| a | | | 114.0 mm |
| a1 | SCHUKO®, 16A, 230V | IP 68 | 35.0 mm |
| a1 | CEE 16A, 3p, 230V | IP 67 | 56.3 mm |
| a1 | CEE 16A, 5p, 400V | IP 67 | 59.0 mm |
| a2 | | | 30.0 mm |
| b | | | 160.0 mm |
| b1 | SCHUKO®, 16A, 230V | IP 44 | 24.0 mm |
| b1 | CEE 16A, 3p, 230V | IP 44 | 44.3 mm |
| b1 | CEE 16A, 5p, 400V | IP 44 | 47.0 mm |
| c | | | 133.0 mm |
| d | | | 97.0 mm |
| y | | | 17.0 mm |



**Fitted with**
3 CEE 16A, 3p, 230V

**Protection type**
IP 44

**Connection/feeder cable**
For 1 cable up to 5 x 10 mm²

**Part no.**
**92898**



**Fitted with**
3 CEE 16A, 3p, 230V

**Protection type**
IP 67

**Connection/feeder cable**
For 1 cable up to 5 x 10 mm²

**Part no.**
**92895**

**Standard made of AMAPLAST, high resistant to chemicals AMELAN®, protection type IP 44[1] / IP 67 / IP 68**
pre-wired for installation, with cable grip and installed hanging hook.
Other combinations on request.
[1] See comment on page 45 to protection degree IP 44 for portable combinations.



**Fitted with**
1 CEE 16A, 5p, 400V
2 SCHUKO® 16A, 230V

**Protection type**
IP 44

**Connection/feeder cable**
For 1 cable up to 5 x 10 mm²

**Part no.**
**92915**



**Fitted with**
1 CEE 16A, 5p, 400V
2 SCHUKO® 16A, 230V

**Protection type**
IP 67

**Connection/feeder cable**
For 1 cable up to 5 x 10 mm²

**Part no.**
**92910**



**Fitted with**
1 CEE 16A, 5p, 400V
2 SCHUKO® 16A, 230V

**Protection type**
IP 67

**Connection/feeder cable**
For 1 cable up to 5 x 10 mm²

**Part no.**
**83699**



**Pneumatic connection**

for DELTA-BOX and mobile receptacle combinations

for tube dia. 9 mm,
Part no. 41440

for tube dia. 13 mm,
Part no. 41441

**Part no. 41440**
**Part no. 41441**



**Fitted with**
3 CEE 16A, 5p, 400V

**Protection type**
IP 44

**Connection/feeder cable**
For 1 cable up to 5 x 10 mm²

**Part no.**
**92917**



**Fitted with**
3 CEE 16A, 5p, 400V

**Protection type**
IP 67

**Connection/feeder cable**
For 1 cable up to 5 x 10 mm²

**Part no.**
**92912**

**Hanging clip**
supplied with every DELTA-BOX.



**Standard made of AMAPLAST, protection type IP 44[1)], IP 67**

pre-wired for installation, enclosure front cover electric grey RAL 7035. Hinged to the side (except enclosure size 130 x 225 mm and 650 x 112.5 mm). Fusing behind a transparent cover. For more combinations in various national standards, please contact us. For drawings and dimensions see page 167.

[1)] See comment on page 45 to protection degree IP 44 for portable combinations.





| CEE receptacles | CEE receptacles | CEE receptacles | CEE receptacles |
|---|---|---|---|
| | | 1 CEE 32A, 5p, 400V<br>1 CEE 16A, 5p, 400V | |
| **CEE receptacles** | **CEE receptacles** | **CEE receptacles** | **CEE receptacles** |
| | | | 3 CEE 16A, 3p, 230V switched, with mechanical DUO interlock |
| **Receptacles NF** | **Receptacles Danish standard** | **Receptacles British standard** | **Receptacles SCHUKO®** |
| 5 NF 16A, 2p+E, 230V | 6 x 13A, 2p+E, 230V | 3 x 13A, 2p+E | |
| **Fusing** | **Fusing** | **Fusing** | **Fusing** |
| 1 RCD 25A, 2p, 0.03A | 1 RCD 40A, 4p, 0.03A<br>6 MCB´s 13A, 1p, C | 1 RCD 40A, 4p, 0.03A<br>1 MCB 16A, 3p, C<br>3 MCB´s 13A, 1p, C | 1 RCD 40A, 4p, 0.03A<br>1 MCB 16A, 3p+N, C |
| **Connection** | **Connection** | **Connection** | **Connection** |
| 2 m H07RN-F3G2.5 with NF-plug 16A, 2p+E, 230V | 2 m H07RN-F5G4 with CEE-plug 32A, 5p, 400V | 2 m H07RN-F5G4 with CEE-plug 32A, 5p, 400V | 4 m H07RN-F5G2.5 with CEE-plug 16A, 5p, 400V |
| **Enclosure size** | **Enclosure size** | **Enclosure size** | **Enclosure size** |
| 260 x 225 mm (H x W) | 390 x 225 mm (H x W) | 390 x 225 mm (H x W) | 520 x 225 mm (H x W) |
| **Part no.** | **Part no.** | **Part no.** | **Part no.** |
| **920046** | **931451** | **931237** | **940030** |



Overview Index

**Standard made of AMAPLAST, protection type IP 44[1)]**
pre-wired for installation, back box in black, cover available in red (RO), yellow (GE) or silver (SI).
Other combinations on request.
[1)] See comment on page 45 to protection degree IP 44 for portable combinations.



**Fitted with**
4 NF 16A, 2p+E, 230V

**Fusing**
1 RCD 25A, 2p, 0.03A
1 MCB 16A, 1p+N, C

**Connection/feeder cable**
2 m H07RN-F5G2,5 with NF-plug 16A, 2p+E, 230V

**Part no.**
**9401291GE**



**Fitted with**
1 CEE 16A, 4p, 400V
3 NF 16A, 2p+E, 230V

**Fusing**

**Connection/feeder cable**
3 m H07RN-F5G2.5 with CEE-plug 16A, 5p, 400V

**Part no.**
**9400571GE**



**Fitted with**
1 CEE 16A, 5p, 400V
3 SCHUKO® 16A, 2p+E, 230V

**Fusing**
1 MCB 16A, 3p, C
1 MCB 16A, 1p, B

**Connection/feeder cable**
3 m H07RN-F5G4 with CEE-plug 32A, 5p, 400V

**Part no.**
**94559RO**



**Set of chains**

for fixing AirKRAFT® to the ceiling

**Part no. 106060**



**Pneumatic connection**

for 3KRAFT® and AirKRAFT®

for tube dia. 9 mm
**Part no. 208620**

for tube dia. 13 mm
**Part no. 208621**

duplex
When used in 3KRAFT® and AirKRAFT® an additional one-way pneumatic quick connect part no. 208620 or 208621) is still needed!
**Part no. 41442**

**Standard made of AMAPLAST, protection type IP 44[1)]**
pre-wired for installation, back box in black, cover available in red (RO), yellow (GE) or silver (SI).
Other combinations on request.
[1)] See comment on page 45 to protection degree IP 44 for portable combinations.

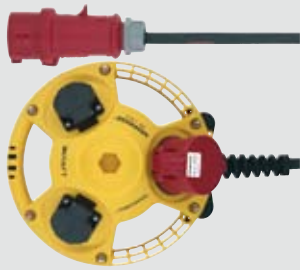


**Fitted with**
3 SCHUKO® 16A, 230V

**Fusing**

**Connection/feeder cable**
3 m H07RN-F3G1,5 with plug SCHUKO® 16A, 230V

**Part no.**
**94357RO**



**Fitted with**
1 CEE 16A, 5p, 400V
2 NF 16A, 2p+E, 230V

**Fusing**

**Connection/feeder cable**
3 m H07RN-F5G2.5 with CEE-plug 16A, 5p, 400V

**Part no.**
**94356FG**



**Set of chains**

for fixing 3KRAFT® to the ceiling

**Part no. 106123**



**Pneumatic connection**

for 3KRAFT® and AirKRAFT®

for tube dia. 9 mm
**Part no. 208620**

for tube dia. 13 mm
**Part no. 208621**

duplex
When used in 3KRAFT® and AirKRAFT® an additional one-way pneumatic quick connect part no. 208620 or 208621) is still needed!
**Part no. 41442**

**Standard made of AMAPLAST, protection type IP 44[1] / IP 67 / IP 68**
pre-wired for installation, with cable grip and installed hanging hook.
Other combinations on request.
[1] See comment on page 45 to protection degree IP 44 for portable combinations.



**Fitted with**
3 CEE 16A, 5p, 400V

**Protection type**
IP 44

**Connection/feeder cable**
2 m H07RN-F5G2.5 with CEE-plug 16A, 5p, 400V

**Part no.**
**92914**



**Fitted with**
3 CEE 16A, 5p, 400V

**Protection type**
IP 67

**Connection/feeder cable**
2 m H07RN-F5G2.5 with CEE-plug 16A, 5p, 400V

**Part no.**
**92909**



**Fitted with**
3 SCHUKO® 16A, 230V bayonet lock lid attached

**Protection type**
IP 68

**Connection/feeder cable**
1.5 m H07RN-F3G2.5 with plug SCHUKO® 16A, 230V

**Part no.**
**92386**



**Pneumatic connection**

for DELTA-BOX and mobile receptacle combinations

for tube dia. 9 mm,
Part no. 41440

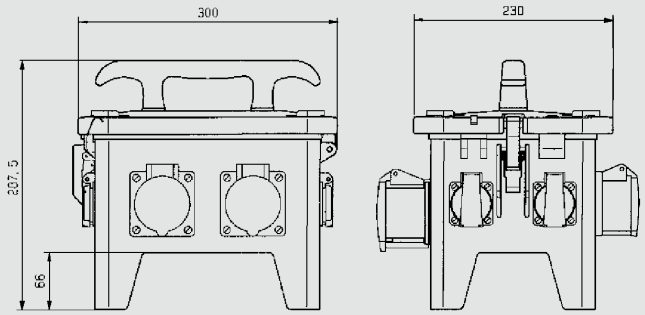
for tube dia. 13 mm,
Part no. 41441

**Part no. 41440**
**Part no. 41441**

**Hanging clip**
supplied with every DELTA-BOX.



**Solid rubber enclosure, signal yellow, protection type IP 44[1)]**
pre-wired for installation
Other combinations on request
[1)] See comment on page 45 to protection degree IP 44 for portable combinations.




5 MB 48a

**Enclosure size: 300 x 230 x 287,5 mm**



**Fitted with**
2 CEE 16A, 5p, 400V
4 SCHUKO® 16A, 230V

**Fusing**
1 RCD 40A, 4p, 0.03A
2 MCB´s 16A, 3p, C
2 MCB´s 16A, 1p, B

**Connection/feeder cable**
2 m H07RN-F5G4 with
CEE-plug 32A, 5p, 400V

**Part no.**
**70436**

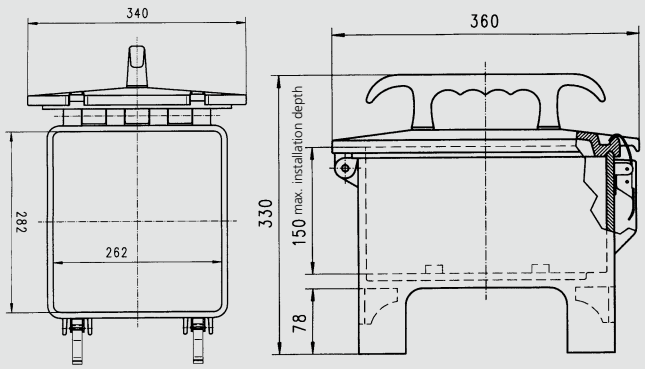


**Fitted with**
2 CEE 16A, 5p, 400V
4 SCHUKO® 16A, 230V

**Fusing**
1 RCD 40A, 4p, 0.03A
2 MCB´s 16A, 3p, C
2 MCB´s 16A, 1p, B

**Connection/feeder cable**
1 inlet 32A, 5p, 400V

**Part no.**
**70437**




5 MB 43

**Enclosure size: 360 x 340 x 330 mm**



**Fitted with**
2 CEE 16A, 5p, 400V
4 SCHUKO® 16A, 230V

**Fusing**
1 RCD 40A, 4p, 0.03A
2 MCB´s 16A, 1p, B

**Connection/feeder cable**
2 m H07RN-F5G2.5 with
CEE-plug 16A, 5p, 400V

**Part no.**
**70412**



**Fitted with**
2 CEE 16A, 5p, 400V
4 SCHUKO® 16A, 230V

**Fusing**
1 RCD 40A, 4p, 0.03A
2 MCB´s 16A, 1p, B

**Connection/feeder cable**
1 inlet 16A, 5p, 400V

**Part no.**
**70410**

**Solid rubber enclosure, signal yellow, protection type IP 44[1)]**
pre-wired for installation
Other combinations on request
[1)] See comment on page 45 to protection degree IP 44 for portable combinations.



**Fitted with**
2 CEE 16A, 5p, 400V
4 SCHUKO® 16A, 230V

**Fusing**
1 RCD 40A, 4p, 0.03A

**Connection/feeder cable**
2 m H07RN-F5G2.5 with CEE-plug 16A, 5p, 400V

**Part no.**
**70352**



**Fitted with**
2 CEE 16A, 5p, 400V
4 SCHUKO® 16A, 230V

**Fusing**
1 RCD 40A, 4p, 0.03A

**Connection/feeder cable**
1 inlet 16A, 5p, 400V

**Part no.**
**70350**



**Fitted with**
2 CEE 16A, 5p, 400V
4 SCHUKO® 16A, 230V

**Fusing**

**Connection/feeder cable**
2 m H07RN-F5G2.5 with CEE-plug 16A, 5p, 400V

**Part no.**
**70434**



**Fitted with**
2 CEE 16A, 5p, 400V
4 SCHUKO® 16A, 230V

**Fusing**

**Connection/feeder cable**
1 inlet 16A, 5p, 400V

**Part no.**
**70435**



**Fitted with**
1 CEE 32A, 5p, 400V
1 CEE 16A, 5p, 400V
4 SCHUKO® 16A, 230V

**Fusing**
1 RCD 40A, 4p, 0.03A
1 MCB 16A, 3p, C
2 MCB´s 16A, 1p, B

**Connection/feeder cable**
2 m H07RN-F5G4 with CEE-plug 32A, 5p, 400V

**Part no.**
**70351**



**Fitted with**
1 CEE 32A, 5p, 400V
1 CEE 16A, 5p, 400V
4 SCHUKO® 16A, 230V

**Fusing**
1 RCD 40A, 4p, 0.03A
1 MCB 16A, 3p, C
2 MCB´s 16A, 1p, B

**Connection/feeder cable**
1 inlet 32A, 5p, 400V

**Part no.**
**70349**



**Fitted with**
1 CEE 32A, 5p, 400V
2 CEE 16A, 5p, 400V
4 SCHUKO® 16A, 230V

**Fusing**
1 RCD 40A, 4p, 0.03A
2 MCB´s 16A, 3p, C
2 MCB´s 16A, 1p, B

**Connection/feeder cable**
3 m H07RN-F5G4 with CEE-plug 32A, 5p, 400V

**Part no.**
**70734**



**Fitted with**
1 CEE 32A, 5p, 400V
2 CEE 16A, 5p, 400V
4 SCHUKO® 16A, 230V

**Fusing**
1 RCD 40A, 4p, 0.03A
2 MCB´s 16A, 3p, C
2 MCB´s 16A, 1p, B

**Connection/feeder cable**
1 inlet 32A, 5p, 400V

**Part no.**
**70531**

**Solid rubber enclosure, signal yellow, protection type IP 44[1)]**
pre-wired for installation
Other combinations on request
[1)] See comment on page 45 to protection degree IP 44 for portable combinations.



**Fitted with**
1 CEE 32A, 5p, 400V
1 CEE 16A, 5p, 400V
8 SCHUKO® 16A, 230V

**Fusing**
1 RCD 40A, 4p, 0.03A
1 MCB 16A, 3p, C
4 MCB´s 16A, 1p, B

**Connection/feeder cable**
3 m H07RN-F5G4 with
CEE-plug 32A, 5p, 400V

**Part no.**
**70448**



**Fitted with**
1 CEE 32A, 5p, 400V
1 CEE 16A, 5p, 400V
8 SCHUKO® 16A, 230V

**Fusing**
1 RCD 40A, 4p, 0.03A
1 MCB 16A, 3p, C
4 MCB´s 16A, 1p, B

**Connection/feeder cable**
1 inlet 32A, 5p, 400V

**Part no.**
**70449**



**Fitted with**
2 CEE 32A, 5p, 400V
2 CEE 16A, 5p, 400V
4 SCHUKO® 16A, 230V

**Fusing**
1 RCD 63A, 4p, 0.03A
2 MCB´s 32A, 3p, C
2 MCB´s 16A, 3p, C
2 MCB´s 16A, 1p, B

**Connection/feeder cable**
3 m H07RN-F5G10 with
CEE-plug 63A, 5p, 400V

**Part no.**
**70442**



**Fitted with**
2 CEE 32A, 5p, 400V
2 CEE 16A, 5p, 400V
4 SCHUKO® 16A, 230V

**Fusing**
1 RCD 63A, 4p, 0.03A
2 MCB´s 32A, 3p, C
2 MCB´s 16A, 3p, C
2 MCB´s 16A, 1p, B

**Connection/feeder cable**
1 inlet 63A, 5p, 400V

**Part no.**
**70443**



**Fitted with**
2 CEE 32A, 5p, 400V
2 CEE 16A, 5p, 400V
4 SCHUKO® 16A, 230V

**Fusing**
1 RCD 40A, 4p, 0.03A
2 MCB´s 16A, 3p, C
2 MCB´s 16A, 1p, B

**Connection/feeder cable**
3 m H07RN-F5G4 with
CEE-plug 32A, 5p, 400V

**Part no.**
**70444**



**Fitted with**
2 CEE 32A, 5p, 400V
2 CEE 16A, 5p, 400V
4 SCHUKO® 16A, 230V

**Fusing**
1 RCD 40A, 4p, 0.03A
2 MCB´s 16A, 3p, C
2 MCB´s 16A, 1p, B

**Connection/feeder cable**
1 inlet 32A, 5p, 400V

**Part no.**
**70445**



**Fitted with**
6 NF 16A, 2p+E, 230V

**Fusing**
1 RCD 40A, 4p, 0.03A
3 MCB´s 16A, 1p, C
1 off button
1 indicator light green

**Connection/feeder cable**
1 gland M 25 with
anti-kink device

**Part no.**
**7403921**



**Fitted with**
1 CEE 32A, 4p, 400V
4 NF 16A, 2p+E, 230V

**Fusing**
1 RCD 40A, 4p, 0.03A
1 MCB 32A, 3p, C
2 MCB´s 16A, 1p+N, C
1 off button
1 indicator light green

**Connection/feeder cable**
1 gland M 25 with
anti-kink device

**Part no.**
**7402417**



**Solid rubber enclosure, signal yellow, protection type IP 44[1)]**
pre-wired for installation
Other combinations on request
[1)] See comment on page 45 to protection degree IP 44 for portable combinations.







**Fitted with**
6 SCHUKO® 16A, 230V

**Fusing**

**Connection/feeder cable**
2 m H07RN-F3G1.5 with plug SCHUKO® 16A, 230V

**Part no.**
**70026**

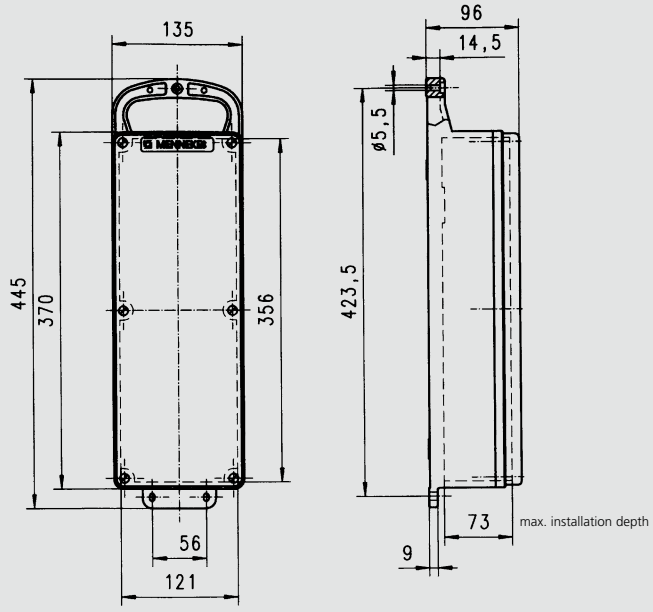


**Fitted with**
6 SCHUKO® 16A, 230V

**Fusing**

**Connection/feeder cable**
2 m H07RN-F5G2.5 with CEE-plug 16A, 5p, 400V

**Part no.**
**70031**




5 MB 44
**Enclosure size: 445 x 135 mm**



**Fitted with**
1 CEE 16A, 5p, 400V
4 SCHUKO® 16A, 230V

**Fusing**

**Connection/feeder cable**
2 m H07RN-F5G2.5 with CEE-plug 16A, 5p, 400V

**Part no.**
**70028**



**Fitted with**
3 CEE 16A, 5p, 400V

**Fusing**

**Connection/feeder cable**
2 m H07RN-F5G2.5 with CEE-plug 16A, 5p, 400V

**Part no.**
**70029**

**Solid rubber enclosure, signal yellow, protection type IP 44[1)]**
pre-wired for installation
Other combinations on request
[1)] See comment on page 45 to protection degree IP 44 for portable combinations.



**Fitted with**
3 CEE 32A, 5p, 400V

**Fusing**

**Connection/feeder cable**
2 m H07RN-F5G4 with CEE-plug 32A, 5p, 400V

**Part no.**
**70034**



**Fitted with**
4 SCHUKO® 16A, 230V

**Fusing**
1 RCD 25A, 2p, 0.03A

**Connection/feeder cable**
2 m H07RN-F3G1.5 with plug SCHUKO® 16A, 230V

**Part no.**
**70027**



**Fitted with**
4 SCHUKO® 16A, 230V

**Fusing**
1 RCD 40A, 4p, 0.03A

**Connection/feeder cable**
2 m H07RN-F3G2.5 with CEE-plug 16A, 5p, 400V

**Part no.**
**70032**



**Fitted with**
1 CEE 16A, 5p, 400V
2 SCHUKO® 16A, 230V

**Fusing**
1 RCD 40A, 4p, 0.03A
2 MCB´s 16A, 1p, B

**Connection/feeder cable**
2 m H07RN-F5G2.5 with CEE-plug 16A, 5p, 400V

**Part no.**
**70033**



**Fitted with**
1 CEE 32A, 5p, 400V
2 SCHUKO® 16A, 230V

**Fusing**
1 RCD 40A, 4p, 0.03A
2 MCB´s 16A, 1p, B

**Connection/feeder cable**
2 m H07RN-F5G4 with CEE-plug 32A, 5p, 400V

**Part no.**
**70030**



**Fitted with**
1 CEE 32A, 5p, 400V
6 SCHUKO® 16A, 230V

**Fusing**
1 RCD 40A, 4p, 0.03A
3 MCB´s 16A, 1p, B

**Connection/feeder cable**
2 m H07RN-F5G4 with CEE-plug 32A, 5p, 400V

**Part no.**
**70106**



**Fitted with**
4 NF 16A, 2p+E, 230V

**Fusing**
1 RCD 25A, 2p, 0.03A
2 MCB´s 16A, 1p+N, C
1 off button
1 indicator light green

**Connection/feeder cable**
1 gland M 20 with anti-kink device

**Part no.**
**7101836**



**Fitted with**
6 NF 16A, 2p+E, 230V

**Fusing**
1 RCD 25A, 2p, 0.03A

**Connection/feeder cable**
2 m H07RN-F5G2.5 with NF-plug 16A, 2p+E, 230V

**Part no.**
**70571**

# Grounding-type plugs and sockets

## SCHUKO®

### Panel mounted receptacles



**With hinged lid**
IP 44, IP 54, IP 68

Pages 220 - 223
**Product information**
Page 218 - 219



**Without hinged lid**
IP 20

Pages 220 - 221
**Product information**
Page 218 - 219



**Cepex Design**
IP 44

Pages 224 - 225

### Wall mounted receptacles



**With hinged lid**
IP 44, IP 68

Pages 226 - 227



**Cepex Design**
IP 44

Pages 228 - 229

### Plugs



**With or without protective cap**
IP 44, IP 66, IP 68

Pages 230 - 231

### Inlets



**Wall mounted**
IP 68

Pages 230 - 231
**Product information**
Page 219



**Panel mounted**
IP 68

Pages 230 - 231
**Product information**
Page 219

### Connectors



**With or without lid**
IP 20, IP 44, IP 68

Pages 232 - 233

# Grounding-type according to various national standards

## Panel mounted receptacles



**With hinged lid for F, B, DK, CH, GB, USA, CDN**
IP 44 and IP 54

Pages 234 - 239

**Product information**
Page 218 - 219



**For F, B, DK**
IP 20

Pages 234 - 235, 238 - 239

**Product information**
Page 218 - 219

## Plugs



**With or without protective cap**
IP 44, IP 66, IP 68

Pages 230 - 231

## Inlets



**Wall mounted**
IP 68

Pages 230 - 231

**Product information**
Page 219



**Panel mounted**
IP 68

Pages 230 - 231

**Product information**
Page 219

# Accessories

## For SCHUKO® / grounding-type



- **Fixing racks for snap-in receptacles**
- **Blanking flanges**
- **Fixing frames for panel mounted receptacles**
- **Protective covers**

Page 241



- **Masking frames and protection plates for Cepex flush and panel mounted receptacles**
- **Spacer frames for Cepex surface mounted receptacles**

Page 121

## Plugs and sockets for harsh conditions.



**SCHUKO® by MENNEKES with the hammer symbol.**
Acc. to VDE 0105 part 115. Made of high-grade AMAPLAST. Acc. to VDE 0620 for harsh conditions. Application amongst others in agriculture or at construction sites. Resistant against oil, grease and fuel. Long lasting due to high resistance against abrasion and breaking strenght. Durable due to resistance against embrittlement.

**Professional plugs and sockets for Europe in the same design.**

| SCHUKO® | 2p + E (Earthing pin) | DEMKO | Types 13, 23 a. 15, 25 | BS | NEMA |
|---|---|---|---|---|---|
| D, NL, A, L | F, B | DK | CH | GB | USA, CDN |

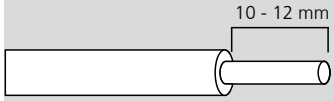
**Degree of protection of plugs and sockets SCHUKO®. Standard change of DIN VDE 620.** For use in mobile devices, in accordance with the current specifications, attachment receptacles that satisfy the IP X4 degree of protection requirements with closed hinged lid cover and with a plugged-in plug in every operating position. Before the standard change in February 2010, the IP X4 degree of protection was considered as fulfilled if the conditions are satisfied with vertical install position of the receptacles. For receptacles for stationary implementation, this also continues to be the case.

**Important application instructions concerning the change in the standard.**
- The latest amendment of IEC 620 (March 2013) makes a distinction in the case of IP X4 SCHUKO® receptacles, between stationary and mobile implementation conditions.
- SCHUKO® IP X4 receptacles for stationary and mobile implementation conditions differ in their design (mobile with additional sealing collar, stationary unchanged).
- SCHUKO® IP X4 couplings, like mobile SCHUKO® IP X4 receptacles likewise have a supplemental sealing collar.

**Attention!**
- SCHUKO® plugs > IP X4 (in accordance with DIN 49442, resistant to pressurised water) when plugged into mobile IP X4 SCHUKO® receptacles or couplings do not achieve adequate contacting due to the design And thus they must not be operated with such receptacles!
- The same applies for AC adapters and angled right angle plugs < IP X4!
- On the appropriate receptacles SCHUKO® or couplings this circumstance is presented with an engraved right angle plug SCHUKO® with IP X4 mark.

**Before processing, ensure that the SCHUKO® articles at hand correspond to the implementation conditions for which they are intended.**

**Preparation of conductors for screwless terminals.**




Length to be stripped: 10 – 12 mm.



Solid conductors 1.5 to 2.5 mm² cores. Strip them and you're done.



Flexible conductors 1.5 to 2.5 mm² cores with terminal pins, pin length 10 – 12 mm.



Flexible conductors 1.5 to 2.5 mm² cores with end sleeve for strands, crimped so as to be gas-tight; in the case of insulating jackets the stripped length must be longer.



Flexible conductors with 1.5 to 2.5 mm² cores, ultrasonically welded.

The optional available plug-in and screw terminals are designed as connecting terminals for through-wiring.



To release the conductors, press on the plug-in terminal using a screw driver.



## Panel mounted receptacles SCHUKO® with front gasket for portable units.

The attachment receptacles SCHUKO® with sealing collars, from MENNEKES comply with the requirements in the new standard, IEC 620-1.

With the hinged lid closed, they satisfy the requirements for the IP 54 degree of protection in every position.

Even with the compatible IP 44 plug, plugged-in, the IP 44 protection rating is ensured regardless of the operating position



**Product advantages:**

- retention of the installation dimensions and -conditions
- conversion without problems
- flange sealing made of thermoplastic elastomer (TPE)
- captive due to two components technology
- safe against accidental actuation with a finger or the back of the hand according to IEC 60529
- optionally screw or plug-in terminals
- with hammer symbol for toughest conditions
- also available with flange dimensions 75 x 75 mm for cable ducts and flush mounted boxes

## Receptacles per running meter. Get ready – get set – go.



Although the European designs for Germany, Denmark and France/Belgium differ, they have



one thing in common: space-saving installation in a channel.



**The snap-in technique.**
A simple but highly efficient method for swift installation. Snap-in receptacles can also be fastened to DIN rails



using a mounting rack. They are suitable for convenient installation in channel systems of adequate size.

## SCHUKO®. Pressure watertight.



**Pressure watertight.**
Whether fixed or mobile: in the event of flooding or water jets, pressure watertight plugs and receptacles are the first choice.
Protection type IP 68.



# Grounding-type plugs and sockets ■ Panel mounted and snap-in

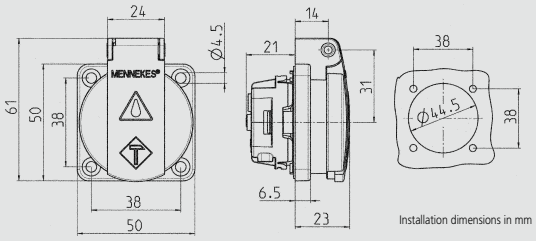
to DIN 49440-1, VDE 0105 part 115 (receptacles with the hammer symbol), DIN VDE 0620-1 (receptacles for portable use).

| Image | Title | Description |
|---|---|---|
|  | **Panel mounted receptacle SCHUKO®**<br><br>**IP 54**<br><br>Std. Pack. Qty: 100/20<br><br>Product group 1930/1936.<br>Image 11011. | ■ for **stationary** use<br>■ with hinged lid<br>■ 3 plug-in terminals or 3 screw terminals as connecting terminals for 1.5 – 2.5 mm²<br>■ other colours on request |
|  | **Panel mounted receptacle SCHUKO®**<br><br>**IP 20**<br><br>Std. Pack. Qty: 100<br><br>Product group 1937/1938.<br>Image 11512. | ■ without hinged lid<br>■ 3 plug-in terminals or 3 screw terminals as connecting terminals for 1.5 – 2.5 mm²<br>■ other colours on request |
|  | **Snap-in receptacle SCHUKO®**<br><br>**IP 20**<br><br>Std. Pack. Qty: 10<br><br>Product group 1939.<br>Image 11510K. | ■ without hinged lid<br>■ 3 plug-in terminals for connection of 1.5 – 2.5 mm²<br>■ for easy installation in a cable duct or an enclosure<br>■ for fixing on DIN rail with fixing rack 11254 |
|  | **Panel mounted receptacle SCHUKO®**<br><br>**IP 54**<br><br>Std. Pack. Qty: 20/100<br><br>Product group 1950/1951.<br>Image 11311. | ■ for **portable** use<br>■ with front gasket<br>■ with hinged lid<br>■ 3 plug-in terminals or 3 screw terminals as connecting terminals for 1.5 – 2.5 mm² |
|  | **Panel mounted receptacle SCHUKO®**<br><br>**IP 54**<br><br>Std. Pack. Qty: 50<br><br>Product group 1955/1956.<br>Image 11311F. | ■ for **portable** use<br>■ with front gasket<br>■ with hinged lid<br>■ 3 plug-in terminals or 3 screw terminals as connecting terminals for 1.5 – 2.5 mm² |

# receptacles SCHUKO®, IP 20 and IP 54

Enclosure and contact carrier made of AMAPLAST. 16A, 2p + E, 230V.

| Colour | Ampere | Voltage | Shutter | Part number: plug-in terminals | Part number: screw terminals | Drawing |
|---|---|---|---|---|---|---|
| grey | 16 | 230 | | 11010 | 11030 | Drawing 1 MB 410<br>Dim. in mm |
| blue | 16 | 230 | | 11011 | 11031 | |
| black | 16 | 230 | | 11012 | 11032 | |
| red | 16 | 230 | | 11013 | 11033 | |
| grey | 16 | 230 | ✓ | 11060 | | |
| blue | 16 | 230 | ✓ | 11061 | 11081 | |
| blue | 16 | 230 | | 11511 | 11531 | Drawing 1 MB 450<br>Drawing in mm |
| black | 16 | 230 | | 11512 | 11532 | |
| blue | 16 | 230 | ✓ | 11561 | 11581 | |
| grey | 16 | 230 | | 11510K | | Drawing 1 MB 457<br>Dim. in mm |
| red | 16 | 230 | | 11513K | | |
| white | 16 | 230 | | 11515K | | |
| grey | 16 | 230 | | 11310 | 11330 | Drawing 1 MB 5861<br>Dim. in mm |
| blue | 16 | 230 | | 11311 | 11331 | |
| black | 16 | 230 | | 11312 | 11332 | |
| red | 16 | 230 | | 11313 | 11333 | |
| blue | 16 | 230 | | 11311F | 11331F | Drawing 1 MB 592<br>Dim. in mm |
| black | 16 | 230 | | 11312F | | |




| Drawing 1 MB 450<br>Drawing in mm | Dim. A |
|---|---|
| SCHUKO | 18,3 |
| French/Belgian standards | 15,8 |
| Danish standards | 15,8 |

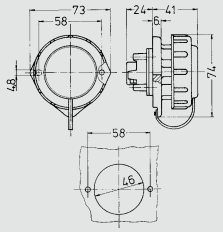
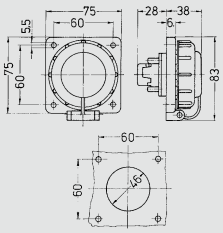
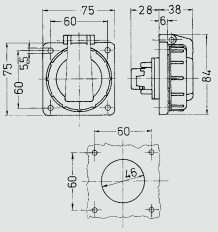
# Grounding-type plugs and sockets ■ Panel mounted receptacles

to DIN 49442/43 and DIN VDE 0620. Enclosure and contact carrier made of AMAPLAST.

| Image | Title | Description |
|---|---|---|
|  | **Panel mounted receptacle SCHUKO®**<br><br>**IP 68**<br><br>Std. Pack. Qty: 10<br><br>Product group 1931.<br>Image 10805. | ■ screw terminals<br>■ bayonet lock lid attached by a strap<br>■ oval flange<br>■ two fixing holes<br>■ connecting protective caps, part no. 19027706, available on request |
|  | **Panel mounted receptacle SCHUKO®**<br><br>**IP 68**<br><br>Std. Pack. Qty: 10<br><br>Product group 1933.<br>Image 10810. | ■ screw terminals<br>■ bayonet lock lid attached by a strap<br>■ rectangular flange<br>■ four fixing holes<br>■ connecting protective caps, part no. 19027706, available on request |
|  | **Panel mounted receptacle SCHUKO®**<br><br>**IP 68**<br><br>Std. Pack. Qty: 10<br><br>Product group 1932.<br>Image 10808. | ■ screw terminals<br>■ hinged bayonet lock lid<br>■ rectangular flange<br>■ four fixing holes<br>■ connecting protective caps, part no. 19027706, available on request |

# SCHUKO®, pressure watertight, IP 68

16A, 2p + E, 230V

| Colour | Ampere | Voltage | Part number plug-in terminals | Part number screw terminals | Drawing |
|---|---|---|---|---|---|
| blue/grey | 16 | 230 | | 10805 |  Drawing 1 MB 301 Dim. in mm |
| blue/grey | 16 | 230 | | 10810 |  Drawing 1 MB 300 Dim. in mm |
| blue/grey | 16 | 230 | | 10808 |  Drawing 1 MB 299 Dim. in mm |

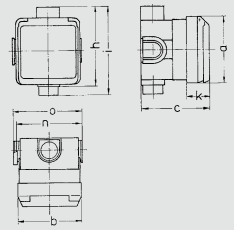
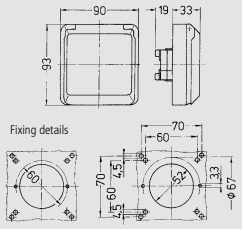
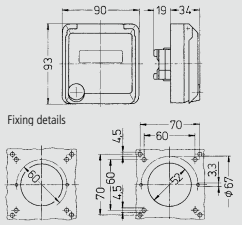
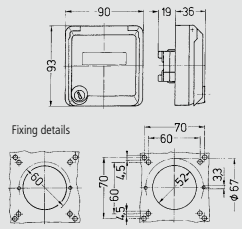
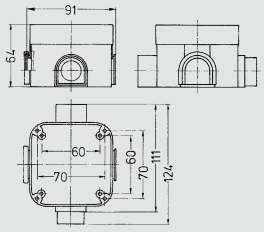
# Grounding-type plugs and sockets ■ Cepex panel mounted and

to DIN 49440. Colours: pearl white (RAL 1013), alpine white (RAL 9010), grey (RAL 7035) and silver (RAL 9006).

| Image | Title | Description |
|---|---|---|
|  | **Cepex flush mounted receptacle SCHUKO®**<br><br>**IP 44**<br><br>Std. Pack. Qty: 5<br><br>Product group 1026.<br>Image 4972. | ■ screw terminals<br>■ with flush mounted installation box<br>■ ⚽ meeting DIN 18032 standards for ball rebound |
|  | **Cepex panel mounted receptacle SCHUKO®**<br><br>**IP 44**<br><br>Std. Pack. Qty: 5<br><br>Product group 1028.<br>Image 4984. | ■ screw terminals<br>■ suitable for installation in cable ducts and columns<br>■ ⚽ meeting DIN 18032 standards for ball rebound |
|  | **Cepex panel mounted receptacle SCHUKO®**<br><br>**IP 44**<br><br>Std. Pack. Qty: 5<br><br>Product group 1028.<br>Image 4974. | ■ screw terminals<br>■ with labelling field<br>■ suitable for installation in cable ducts and columns |
|  | **Cepex panel mounted receptacle SCHUKO®**<br><br>**IP 44**<br><br>Std. Pack. Qty: 5<br><br>Product group 1028.<br>Image 4981. | ■ screw terminals<br>■ with labelling field<br>■ with safety lock<br>■ two keys<br>■ cannot be dismantled when locked<br>■ on request with identical locks<br>■ suitable for installation in cable ducts and columns<br>■ with identical lock: part no + index G |
|  | **Flush mounted installation box**<br><br>Std. Pack. Qty: 5<br><br>Product group 8236.<br>Image 41404. | ■ for Cepex CEE receptacles 16A and 32A and Cepex receptacles SCHUKO®<br>■ can be combined with all Cepex panel mounted receptacles |

# flush mounted receptacles SCHUKO®, IP 44

Enclosure and insert made of AMAPLAST. 16A, 2p + E, 230V

| Colour | Ampere | Voltage | Part number | Drawing |
|---|---|---|---|---|
| pearl white | 16 | 230 | 4972 |  |
| pearl white | 16 | 230 | 4971 |  |
| alpine white | 16 | 230 | 4979 | |
| grey | 16 | 230 | 4982 | |
| silver | 16 | 230 | 4984 | |
| pearl white | 16 | 230 | 4974 |  |
| alpine white | 16 | 230 | 4980 | |
| silver | 16 | 230 | 4974ME | |
| pearl white | 16 | 230 | 4977 |  |
| alpine white | 16 | 230 | 4981 | |
| | | | 41404 |  |

Drawing 1 MB 336

| Dim. in mm | Amp. | 16 |
|---|---|---|
| | a | 93 |
| | b | 90 |
| | c | 95 |
| | h | 111 |
| | i | 124 |
| | k | 33 |
| | n | 91 |
| | o | 95 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 |

Drawing 1 MB 304

Dim. in mm

Drawing 1 MB 325

Dim. in mm

Drawing 1 MB 305

Dim. in mm

Drawing 1 MB 334

Dim. in mm

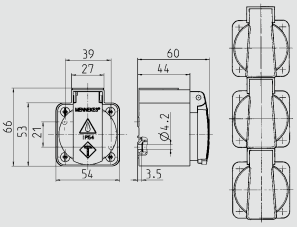
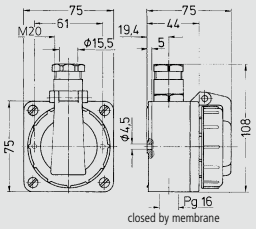
# Grounding-type plugs and sockets ■ Wall mounted receptacles

IP 44 to DIN 49440-1 and IP 68 to DIN 49442/43 and DIN VDE 0620. Enclosure and insert made of AMAPLAST.

| Image | Title | Description |
|---|---|---|
|  | **Wall mounted receptacle SCHUKO®**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1935.<br>Image 10082. | ■ with hinged lid<br>■ 3 plug-in terminals for connection of 1.5 – 2.5 mm²<br>■ cable entry M 20 x 1.5 at top and blind entry (for cut out) M 20 x 1.5 at bottom<br>■ can be arranged in a row using slot and slide |
|  | **Wall mounted receptacle SCHUKO®**<br><br>**IP 68**<br><br>Std. Pack. Qty: 10<br><br>Product group 1934.<br>Image 10863. | ■ screw terminals<br>■ hinged bayonet lock lid<br>■ one threaded M 20 cable entry at top and one blind M 20 cable entry (can be cut out) at bottom |

# SCHUKO®, IP 44 and pressure watertight IP 68

16A, 2p + E, 230V

| Colour | Ampere | Voltage | Part number plug-in terminals | Part number screw terminals | Drawing |
|---|---|---|---|---|---|
| grey | 16 | 230 | 10081 | |  Drawing 1 MB 27/30 Dim. in mm |
| blue | 16 | 230 | 10082 | | |
| black | 16 | 230 | 10083 | | |
| blue/grey | 16 | 230 | | 10863 |  Drawing 1 MB 347 Dim. in mm |

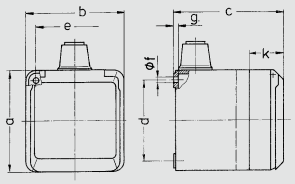
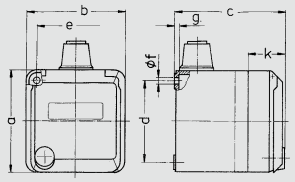
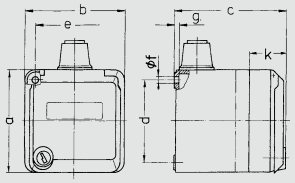
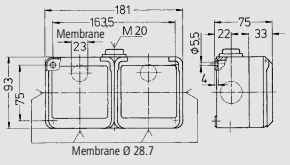
# Grounding-type plugs and sockets ■ Cepex wall mounted

to DIN 49440. Colour: grey (RAL 7035). Enclosure and insert made of AMAPLAST.

| Image | Title | Description |
|---|---|---|
|  | **Cepex wall mounted receptacle SCHUKO®, grey**<br><br>**IP 44**<br><br>Std. Pack. Qty: 5<br><br>Product group 1025.<br>Image 4970. | ■ screw terminals<br>■ cable entry: 1 x M 25 with cable gland at top, 1 x M 25 to be cut out at the bottom, 1 x M 20 to be cut out at the back side, for cables 7 up to 13 mm Ø<br>■ ⚽ meeting DIN 18032 standards for ball rebound |
|  | **Cepex wall mounted receptacle SCHUKO®, grey**<br><br>**IP 44**<br><br>Std. Pack. Qty: 5<br><br>Product group 1025.<br>Image 4973. | ■ screw terminals<br>■ with labelling field<br>■ cable entry: 1 x M 25 with cable gland at top, 1 x M 25 to be cut out at the bottom, 1 x M 20 to be cut out at the back side, for cables 7 up to 13 mm Ø |
|  | **Cepex wall mounted receptacle SCHUKO®, grey**<br><br>**IP 44**<br><br>Std. Pack. Qty: 5<br><br>Product group 1025.<br>Image 4976. | ■ screw terminals<br>■ with labelling field<br>■ with safety lock<br>■ two keys<br>■ cannot be dismantled when locked<br>■ on request with identical locks<br>■ cable entry: 1 x M 25 with cable gland at top, 1 x M 25 to be cut out at the bottom, 1 x M 20 to be cut out at the back side, for cables 7 up to 13 mm Ø<br>■ with identical locks: part no + index G |
|  | **Cepex double receptacle SCHUKO®, grey**<br><br>**IP 44**<br><br>Std. Pack. Qty: 5<br><br>Product group 1027.<br>Image 4235. | ■ screw terminals<br>■ cable entry: 1 x M 20 plugged at top, 2 x M 25 to be cut out at the bottom, 2 x M 20 to be cut out at the back side, for cables 7 up to 13 mm Ø |

# receptacles SCHUKO®, IP 44

16A, 2p + E, 230V

| Colour | Ampere | Voltage | Part number | Drawing |
|---|---|---|---|---|
| grey | 16 | 230 | 4970 |  |
| grey | 16 | 230 | 4973 |  |
| grey | 16 | 230 | 4976 |  |
| grey | 16 | 230 | 4235 |  |

Other installation types on request.

| Drawing 1 MB 312 | Amp. / Poles | 16 |
|---|---|---|
| Dim. in mm | a | 93 |
| | b | 90 |
| | c | 87 |
| | d | 75 |
| | e | 73 |
| | f | 5,5 |
| | g. | 4,2 |
| | k | 33 |
| Max. cable diam. (mm) | | 18 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 |

| Drawing 1 MB 317 | Amp. | 16 |
|---|---|---|
| Dim. in mm | a | 93 |
| | b | 90 |
| | c | 88 |
| | d | 75 |
| | e | 73 |
| | f | 5,5 |
| | g. | 4,2 |
| | k | 34 |
| Max. cable diam. (mm) | | 18 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 |

| Drawing 1 MB 313 | Amp. | 16 |
|---|---|---|
| Dim. in mm | a | 93 |
| | b | 90 |
| | c | 90 |
| | d | 75 |
| | e | 73 |
| | f | 5,5 |
| | g. | 4,2 |
| | k | 36 |
| Max. cable diam. (mm) | | 18 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 |

| Drawing 1 MB 350 | Amp. | 16 |
|---|---|---|
| Dim. in mm | | |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 |

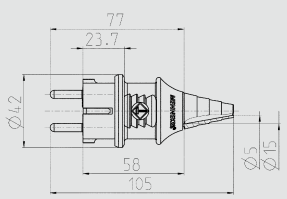
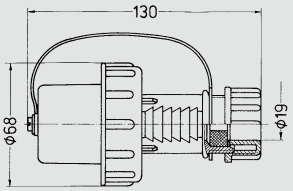
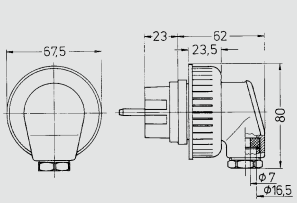
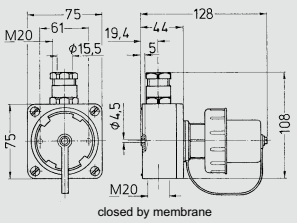
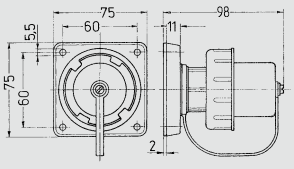
# Grounding-type plugs and sockets ■ Plugs and inlets SCHUKO®,

IP 44 to DIN 49440-2 / 49440-3 / 49441 and DIN VDE 0620 and IP 68 to DIN 49442 / 43 and DIN VDE 0620.

| Image | Title | Description |
|---|---|---|
|  | **Plug SCHUKO®**<br><br>**IP 44**<br>Std. Pack. Qty: 20<br><br>Product group 2927.<br>Image 10839. | ■ screw terminals<br>■ with combined PE-conductor acc. to german and french-belgian standard<br>■ with grommet<br>■ for cables up to 3 x 2.5 mm², up to H07RN-F |
|  | **Plug SCHUKO®**<br><br>**IP 68**<br>Std. Pack. Qty: 5<br><br>Product group 2930.<br>Image 10828. | ■ screw terminals<br>■ with combined PE-conductor acc. to german and french-belgian standard<br>■ with bayonet ring<br>■ protective cap attached by a strap<br>■ for cables up to 3 x 2.5 mm², up to H07RN-F<br><br>Design-Innovationen Auszeichnung für hohe Design-Qualität Haus Industrieform Essen HiF |
|  | **Angled plug SCHUKO®**<br><br>**IP 66**<br><br>Std. Pack. Qty: 10<br><br>Product group 2928.<br>Image 10818. | ■ screw terminals<br>■ with cable gland<br>■ for cables up to 3 x 2.5 mm², up to H07RN-F |
|  | **Inlet SCHUKO®**<br><br>**IP 68**<br>Std. Pack. Qty: 10<br><br>Product group 2934.<br>Image 10864. | ■ screw terminals<br>■ with combined PE-conductor acc. to german and french-belgian standard<br>■ with bayonet ring<br>■ protective cap attached by a strap<br>■ one threaded M 20 cable entry at top and one blind M 20 cable entry (can be cut out) at bottom |
|  | **Panel mounted inlet SCHUKO®**<br><br>**IP 68**<br>Std. Pack. Qty: 10<br><br>Product group 2931.<br>Image 10852. | ■ screw terminals<br>■ with combined PE-conductor acc. to german and french-belgian standard<br>■ with bayonet ring<br>■ protective cap attached by a strap |

# IP 44 to pressure watertight IP 68

Enclosure and contact carrier made of AMAPLAST. 16A, 2p + E, 230V

| Colour | Ampere | Voltage | Part number | Drawing |
|---|---|---|---|---|
| grey | 16 | 230 | 10749 |  Drawing 2 MB 139 Dim. in mm |
| black | 16 | 230 | 10754 | |
| orange | 16 | 230 | 10837 | |
| blue | 16 | 230 | 10838 | |
| red | 16 | 230 | 10839 | |
| yellow | 16 | 230 | 10840 | |
| green | 16 | 230 | 10841 | |
| blue/grey | 16 | 230 | 10828 |  Drawing 2 MB 163 Dim. in mm |
| blue | 16 | 230 | 10818 |  Drawing 2 MB 161 Dim. in mm |
| blue/grey | 16 | 230 | 10864 |  Drawing 2 MB 167 Dim. in mm |
| blue/grey | 16 | 230 | 10852 |  Drawing 2 MB 164 Dim. in mm |

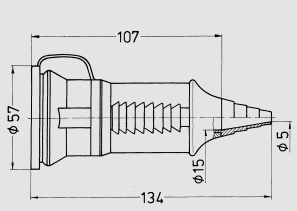
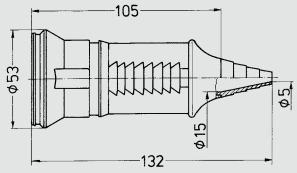
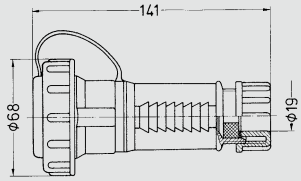
# Grounding-type plugs and sockets ■ Connectors SCHUKO®, IP 20

IP 20 and IP 44 to DIN 49440-2 / 49440-3 / 49441 and DIN VDE 620 and IP 68 to DIN 49442 / 43 and DIN VDE 0620.

| Image | Title | Description |
|---|---|---|
|  | **Connector SCHUKO®**<br><br>**IP 44**<br>Std. Pack. Qty: 10<br><br>Product group 3927.<br>Image 10843. | ■ screw terminals<br>■ with grommet and lid<br>■ for cables up to 3 x 2.5 mm², up to H07RN-F |
|  | **Connector SCHUKO®**<br><br>**IP 20**<br><br>Std. Pack. Qty: 10<br><br>Product group 3927.<br>Image 10752. | ■ screw terminals<br>■ with grommet<br>■ for cables up to 3 x 2.5 mm², up to H07RN-F |
|  | **Connector SCHUKO®**<br><br>**IP 68**<br>Std. Pack. Qty: 5<br><br>Product group 3929.<br>Image 10833. | ■ screw terminals<br>■ bayonet lock lid attached by a strap<br>■ for cables up to 3 x 2.5 mm², up to H07RN-F<br><br>Design-Innovationen Auszeichnung für hohe Design-Qualität Haus Industrieform Essen HiF |

# to pressure watertight IP 68

Enclosure and contact carrier made of AMAPLAST. 16A, 2p + E, 230V

| Colour | Ampere | Voltage | Part number | Drawing |
|---|---|---|---|---|
| grey | 16 | 230 | 10751 |  Drawing 3 MB 39 Dim. in mm |
| black | 16 | 230 | 10755 | |
| orange | 16 | 230 | 10842 | |
| blue | 16 | 230 | 10843 | |
| red | 16 | 230 | 10844 | |
| yellow | 16 | 230 | 10845 | |
| green | 16 | 230 | 10846 | |
| grey | 16 | 230 | 10752 |  Drawing 3 MB 26 Dim. in mm |
| black | 16 | 230 | 10756 | |
| blue/grey | 16 | 230 | 10833 |  Drawing 3 MB 41 Dim. in mm |

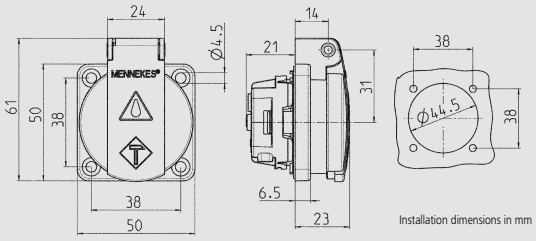
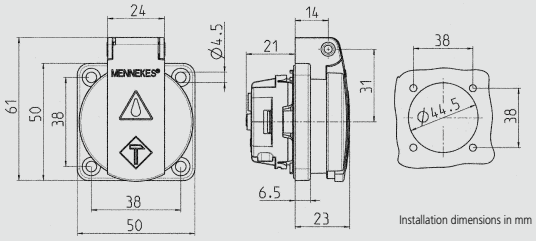
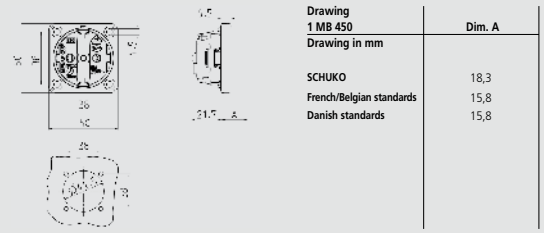
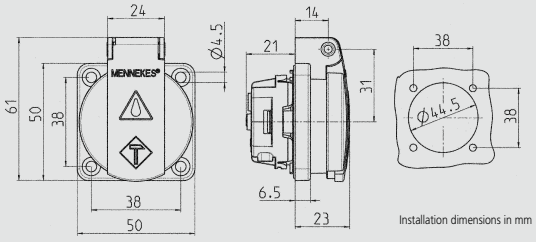
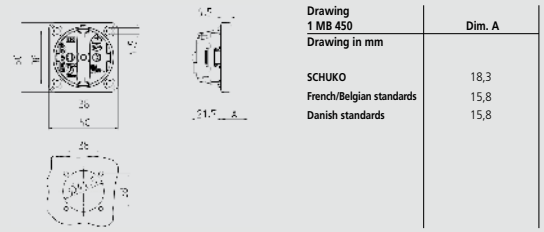
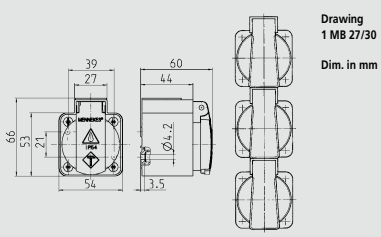
# Grounding-type plugs and sockets ■ Panel mounted receptacles,

Enclosure and contact carrier made of AMAPLAST.

| Image | Title | Description |
|---|---|---|
|  | **Grounding-type panel mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 100/20<br><br>Product group 1930/1936.<br>Image 11161. | ■ french-belgian standard<br>■ with hinged lid<br>■ 3 plug-in terminals or 3 screw terminals as connecting terminals for 1.5 - 2.5 mm²<br>■ other colours on request |
|  | **Grounding-type panel mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 100<br><br>Product group 1930.<br>Image 11111. | ■ french-belgian standard<br>■ with hinged lid<br>■ 3 plug-in terminals or 3 screw terminals as connecting terminals for 1.5 - 2.5 mm²<br>■ other colours on request |
|  | **Grounding-type panel mounted receptacle**<br><br>**IP 20**<br><br>Std. Pack. Qty: 100<br><br>Product group 1937/1938.<br>Image 11661. | ■ french-belgian standard<br>■ without hinged lid<br>■ 3 plug-in terminals or 3 screw terminals as connecting terminals for 1.5 - 2.5 mm²<br>■ other colours on request |
|  | **Grounding-type panel mounted receptacle**<br><br>**IP 54**<br><br>Std. Pack. Qty: 100<br><br>Product group 1930.<br>Image 11200. | ■ danish standard<br>■ with hinged lid<br>■ 3 plug-in terminals as connecting terminals for 1.5 - 2.5 mm² |
|  | **Grounding-type panel mounted receptacle**<br><br>**IP 20**<br><br>Std. Pack. Qty: 100<br><br>Product group 1938.<br>Image 11750. | ■ danish standard<br>■ without hinged lid<br>■ 3 plug-in terminals as connecting terminals for 1.5 - 2.5 mm² |
|  | **Base for wall mounted receptacle**<br><br>Std. Pack. Qty: 10<br><br>Product group 8313.<br>Image 10714. | ■ with cable entry and screws<br>■ suitable for all panel mounted receptacles SCHUKO®/ grounding type receptacles, flange: 50 x 50 mm |

# french-belgian and danish standard, IP 20, IP 44 and IP 54

16A, 2p + E, 230V or 13A, 2p + E, 230V

| Colour | Ampere | Voltage | Shutter | Part number plug-in terminals | Part number screw terminals | Drawing |
|---|---|---|---|---|---|---|
| grey | 16 | 230 | ✓ | 11160 | 11180 |  Drawing 1 MB 410 Dim. in mm |
| blue | 16 | 230 | ✓ | 11161 | 11181 | |
| black | 16 | 230 | ✓ | 11162 | | |
| blue | 16 | 230 | | 11111 | |  Drawing 1 MB 410 Dim. in mm |
| blue | 16 | 230 | ✓ | 11661 | 11681 |  Drawing 1 MB 450 Drawing in mm Dim. A: SCHUKO 18,3; French/Belgian standards 15,8; Danish standards 15,8 |
| blue | 16 | 230 | | 11611 | | |
| grey | 13 | 230 | ✓ | 11250 | |  Drawing 1 MB 410 Dim. in mm |
| grey | 13 | 230 | | 11200 | | |
| grey | 13 | 230 | ✓ | 11750 | |  Drawing 1 MB 450 Drawing in mm Dim. A: SCHUKO 18,3; French/Belgian standards 15,8; Danish standards 15,8 |
| grey | | | | 10714 | |  Drawing 1 MB 27/30 Dim. in mm |
| blue | | | | 10715 | | |
| black | | | | 10716 | | |

# Grounding-type plugs and sockets ■ Panel mounted receptacles,

Enclosure and contact carrier made of AMAPLAST.

| Image | Title | Description |
|---|---|---|
|  | **Grounding-type panel mounted receptacle**<br><br>**IP 54**<br><br>Std. Pack. Qty: 20<br><br>Product group 1944.<br>Image 10711. | ■ swiss standard<br>■ type 23<br>■ with hinged lid<br>■ 3 screw terminals<br>■ receptacle cannot be combined with enclosure base part no. 10714, 10715 or 10716 |
|  | **Grounding-type panel mounted receptacle**<br><br>**IP 54**<br><br>Std. Pack. Qty: 20<br><br>Product group 1944.<br>Image 10085. | ■ swiss standard<br>■ type 13<br>■ with hinged lid<br>■ 3 screw terminals<br>■ receptacle cannot be combined with enclosure base part no. 10714, 10715 or 10716 |
|  | **Grounding-type panel mounted receptacle**<br><br>**IP 54**<br><br>Std. Pack. Qty: 20<br><br>Product group 1945.<br>Image 10712. | ■ swiss standard<br>■ type 25<br>■ with hinged lid<br>■ 5 screw terminals<br>■ receptacle cannot be combined with enclosure base part no. 10714, 10715 or 10716 |
|  | **Grounding-type panel mounted receptacle**<br><br>**IP 54**<br><br>Std. Pack. Qty: 20<br><br>Product group 1945.<br>Image 10086. | ■ swiss standard<br>■ type 15<br>■ with hinged lid<br>■ 5 screw terminals<br>■ receptacle cannot be combined with enclosure base part no. 10714, 10715 or 10716 |
|  | **Grounding-type panel mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 20<br><br>Product group 1943.<br>Image 10713. | ■ british standard<br>■ with hinged lid<br>■ 3 screw terminals<br>■ with matching frame and seal<br>■ receptacles cannot be combined with enclosure base part no. 10714, 10715 or 10716 |
|  | **Grounding-type panel mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 20<br><br>Product group 1943.<br>Image 10718. | ■ british standard<br>■ with hinged lid<br>■ 3 screw terminals<br>■ with seal<br>■ receptacle cannot be combined with enclosure base part no. 10714, 10715 or 10716 |

# swiss and british standard, IP 44 and IP 54

Swiss standard 10 and 16A, 2p + E, 230V or 10A and 16A, 5p, 400V; british standard 13A, 2p + E, 230V

| Colour | Ampere | Voltage | Shutter | Part number plug-in terminals | Part number screw terminals | Drawing |
|---|---|---|---|---|---|---|
| blue/grey | 16 | 230 | | | 10711 | Drawing 1 MB 423<br>Dim. in mm |
| grey | 10 | 230 | | | 10085 | Drawing 1 MB 423<br>Dim. in mm |
| grey/red | 16 | 400 | | | 10712 | Drawing 1 MB 424<br>Dim. in mm |
| grey | 10 | 400 | | | 10086 | Drawing 1 MB 424<br>Dim. in mm |
| black | 13 | 230 | ✓ | | 10713 | Drawing 1 MB 422<br>Dim. in mm |
| blue | 13 | 230 | ✓ | | 10718 | Drawing 1 MB 584<br>Dim. in mm |

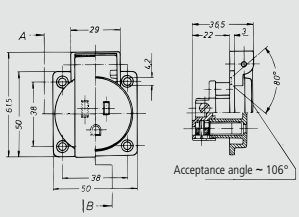
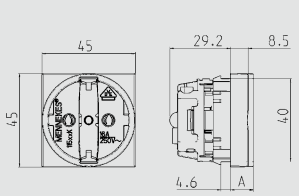
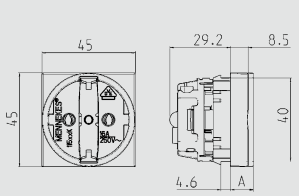
# Grounding-type plugs and sockets ■ Panel mounted and snap-in

Enclosure and contact carrier made of AMAPLAST.

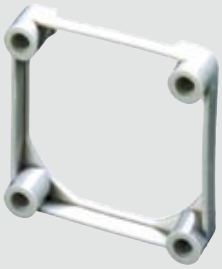
| Image | Title | Description |
|---|---|---|
|  | **Grounding type panel mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 20<br><br>Product group 1946.<br>Image 10087. | ■ NEMA for the USA and Canada<br>■ with hinged lid<br>■ 3 srew terminals<br>■ receptacle cannot be combined with enclosure base part no. 10714, 10715 or 10716 |
|  | **Grounding-type snap-in receptacle**<br><br>**IP 20**<br><br>Std. Pack. Qty: 10<br><br>Product group 1939.<br>Image 11665K. | ■ french-belgien standard<br>■ without hinged lid<br>■ 3 plug-in terminals as connecting terminals for 1.5 - 2.5 mm²<br>■ for easy installation in a cable duct or an enclosure<br>■ for fixing on DIN rails with fixing rack 11254 |
|  | **Grounding-type snap-in receptacle**<br><br>**IP 20**<br><br>Std. Pack. Qty: 10<br><br>Product group 1939.<br>Image 11750K. | ■ danish standard<br>■ without hinged lid<br>■ 3 plug-in terminals as connecting terminals for 1.5 - 2.5 mm²<br>■ for easy installation in a cable duct or an enclosure<br>■ for fixing on DIN rails with fixing rack 11254 |

# receptacles, various national standards, IP 20 and IP 44

NEMA standard 15A, 2p + E, 125A; french-belgien standard 16A, 2p + E, 230V; danish standard 13A, 2p + E, 230V

| Colour | Ampere | Voltage | Shutter | Part number: plug-in terminals | Part number: screw terminals | Drawing |
|---|---|---|---|---|---|---|
| blue | 15 | 125 | | | 10087 |  Drawing 1 MB 421 Dim. in mm |
| white | 16 | 230 | ✓ | 11665K | |  Drawing 1 MB 457 Dim. in mm |
| grey | 13 | 230 | ✓ | 11750K | |  Drawing 1 MB 457 Dim. in mm |


MENNEKES
MENNEKES
IP 54

| Image | Title | Description |
|---|---|---|
|  | **Fixing rack**<br><br>Std. Pack. Qty: 100<br><br>Product group 8300.<br>Image 11254. | ■ for fixing of snap-in receptacles on DIN rails<br><br>**Part no. 11254** |
|  | **Blanking flange**<br><br>Std. Pack. Qty: 100/150<br><br>Product group 8234.<br>Image 41418/41419. | ■ to close unused apertures<br>■ grey<br>■ for product groups 1930/1936 and 1950/1951 (50 x 50 mm) respectively product group 1134, 1136, 1955/1956 and 1957/1958 (75 x 75 mm)<br><br>50 x 50 mm **Part no. 41418**<br>75 x 75 mm **Part no. 41419** |
|  | **Fixing frame**<br><br>Std. Pack. Qty: 500<br><br>Product group 8300.<br>Image 19266106. | ■ for swift and safe fastening of panel mounted receptacles<br>for panel mounted receptacles with flange size 50 x 50 mm/ fixing hole spacing 38 x 38 (product groups 1930/1936 and 1950/1959) **Part no. 19266106**<br>for panel mounted receptacles with flange size 75 x 75 mm/ fixing hole spacing 60 x 60 mm (product group 1928, 1955/1956 and 1957/1958) **Part no. 19267000** |
|  | **Flange**<br><br>Std. Pack. Qty: 20<br><br>Product group 8234.<br>Image 41341. | ■ for panel mounted receptacles of product groups 1932 and 1933. Using the flange, the receptacles can be fitted on flush mounted installation boxes<br>■ flange: 106 x 106 mm/ fixing hole spacing: 61 x 61 mm<br><br>**Part no. 41341** |

# Special plugs and sockets

## Extended versions



**7 pole**
16A - 32A,
IP 44 and IP 67

Pages 260 - 267

**Product information**
Page 244



**600V to 690V**
16A - 125A,
IP 44 and IP 67

Pages 268 - 273

**Product information**
Page 244



**Special 1h earth position**
16A - 63A,
IP 44 and IP 67

Pages 274 - 277

**Product information**
Page 244



**Low voltages**
16A - 63A,
IP 44

Pages 278 - 281

**Product information**
Page 245



**Isolating transformer**
16A - 32A,
IP 44 and IP 67

Pages 282 - 285

**Product information**
Page 245



**DC**
16A - 63A,
IP 44 and IP 67

Pages 286 - 291

**Product information**
Page 245



**Ex zone 22 - for hazardous areas**
IP 66

Pages 292 - 293

**Product information**
Page 246 - 247



**200A to 400A**
IP 55 and IP 67

Pages 294 - 299

**Product information**
Page 248 - 249



**CEEplus®**
16A,
IP 44

Pages 300 - 303

**Product information**
Page 249

## Industrial Ethernet



**Compact network distributors and network enclosures AMAXX®**

Pages 304 - 305

**Product information**
Page 250



**Data modules**

Pages 306 - 307



**Cepex enclosures for installation of connection module couplings**
IP 44

Page 309

**Product information**
Page 251



**Accessories**
for Cepex enclosures and network enclosures

Page 308

## Automation



**AMAXX® automation enclosure**

Pages 310 - 311

**Product information**
Page 252

## Custom-designed



**Reefer containers**
380V - 440V,
32A, 3h,
IP 67

Pages 312 - 317

**Product information**
Page 256 - 257



**Camping**
230V, 16A, IP 44

Pages 318 - 323

**Product information**
Page 258 - 259



**TM for military purpose**
16A - 125A,
IP 67 and IP 68

Pages 324 - 331

**Product information**
Page 254



**Event and entertainment technology**
16A - 125A,
IP 44 and IP 67

Pages 332 - 337

**Product information**
Page 253



**Fire brigade and civil protection**
16A - 32A,
IP 66, IP 67, IP 68

Pages 338 - 341

**Product information**
Page 254



**Emergency power supply**

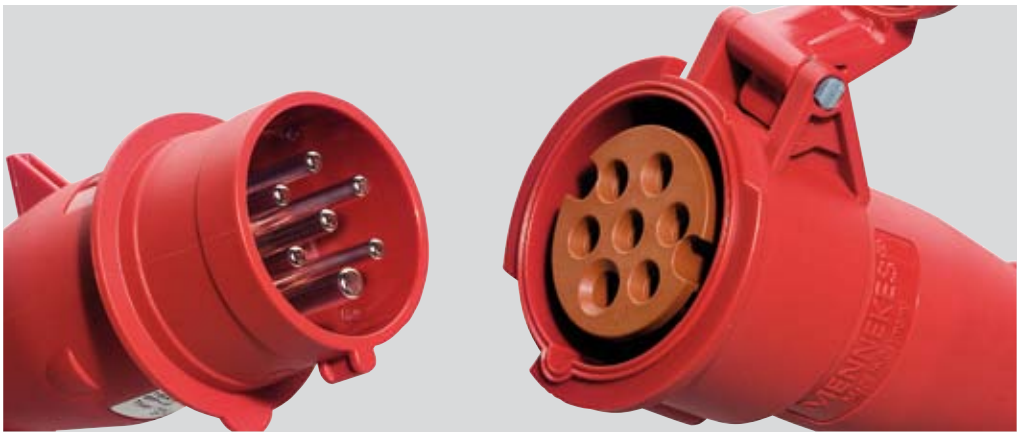
Pages 342 - 343

**Product information**
Page 255

## Plugs and sockets 7 pole for multifunctional applications.

These 7 pole plugs and sockets provide solutions where there are multifunctional requirements in industry, farming and commerce.
This number of poles provides solutions in the following fields:

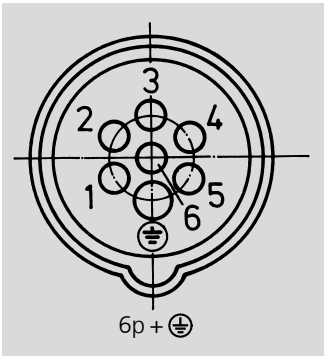
- Star-delta start-up
- Closed loop control
- Open loop control
- Monitoring
- Detection and alarms
- Clearing alarms
- Electrical interlocking



Position of ground contact tube with respect to polarisation keyway, designated by clockface position for 6p + ⏚, 16A and 32A.

| Frequency Hz | Rated operating voltage V | Position of ground contact |
|---|---|---|
| 50 | 42 | 1 |
| 100 to 300 | above 50 | 10 |
| above 300 to 500 | above 50 | 2 |
| DC | above 50 to 250 | 3 |
| | above 250 | 8 |
| 50 | 110 | 4 |
| | 230 | 9 |
| | 400 | 6 |
| | 500 | 7 |
| | above 500 to 690 | 5 |
| 50 | 220 to 240 downstream from isolating transformer | 12 |

**6p + ⏚**




## 600V to 690V.

In these supply mains acc. to EN 60309 plugs and receptacles in 5h earth position have to be used. Due to the high electro technical and technically safty requirements for use at 690V, 63A and 125A receptacles have to be operated with an interlocking facility only.




**5h**
**3p + ⏚**
**3p + N + ⏚**

600-690V 50 a. 60 Hz

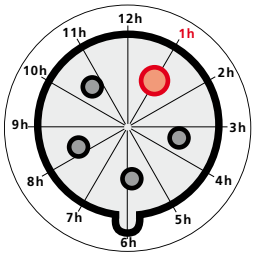
Plugs and sockets 16A and 32A, 4- and 5-pole must not be locked when used as surface or panel mounted receptacles in accordance with the applicable provisions.

## Special "1h earth" position.





Ground contact position "1h earth" (Viewed from the front of the receptacles)




**Unique with "1h earth" position.**
The table on page 36 gives details on the arrangement of the socket outlet with ground contact identifying various voltages and frequencies with clock position according to EN 60309-2:1997.

## Low voltages.



When portable electric appliances are used in environments where conductive materials are present and where movement is restricted, they must be operated at low voltage or they must be electrically isolated, e.g. in or on boilers, containers, pipework systems, steel scaffolding or similar installations. The same applies to rooms containing exposed conductive materials. Portable lamps must be operated at low voltage.

Stationary appliances may be operated at a safe low voltage or they may be electrically isolated, e.g. lamps installed temporarily for maintenance purposes, cleaning or other types of work, which are connected to the power supply by means of movable cables. Only use tools of protection class II or III. Also, lamps for barrels and movable lamps for ovens must be operated at low voltage.

Furthermore, low voltage 25V AC should be used for all mobile appliances without insulation which are used on animals, e.g. shears, milking machines, etc.

**Requirements on plugs and sockets for low voltages.**
Plugs and sockets must be different from those used at other voltages and must not be provided with an earth contact (VDE 0100 part 410:1997-01).

## Isolating transformer.



Electrical isolation (VDE 0100 part 410) is used to operate isolated electric tools in areas where conductive materials are present and where movement is restricted, e.g. in or on boilers, containers, pipework systems, steel scaffolding or similar installations. The same applies to rooms containing exposed conductive materials.
Further information.

VDE regulations
VDE 0100 part 410
VDE 0100 part 704
VDE 0100 part 705
VDE 0100 part 706
VDE 0105 part 15

Information provided by the Employers' Liability I Insurance Association
BGI 594
BGI 608

## DC.

Plugs and sockets for DC are used for example for maintenance of rail vehicles and in electroplating shops, laboratories and test stations. We offer a large range of plugs and sockets up to 63A.



**◀ DUO mechanical.**
After insertion and switching on, the plug is locked in the ON position. After switching off and withdrawing the plug, the switch is locked in the OFF position.

**DODSCH mechanical. ▶**
(Plug in and twist switch). Insert the plug and turn clockwise (= switch ON). Turn counter-clockwise (= switch OFF) and withdraw the plug.



## Plugs and sockets for hazardous areas. Ex Zone 22.

**A dust explosion needs three things: air, flammable dust and an ignition source!**

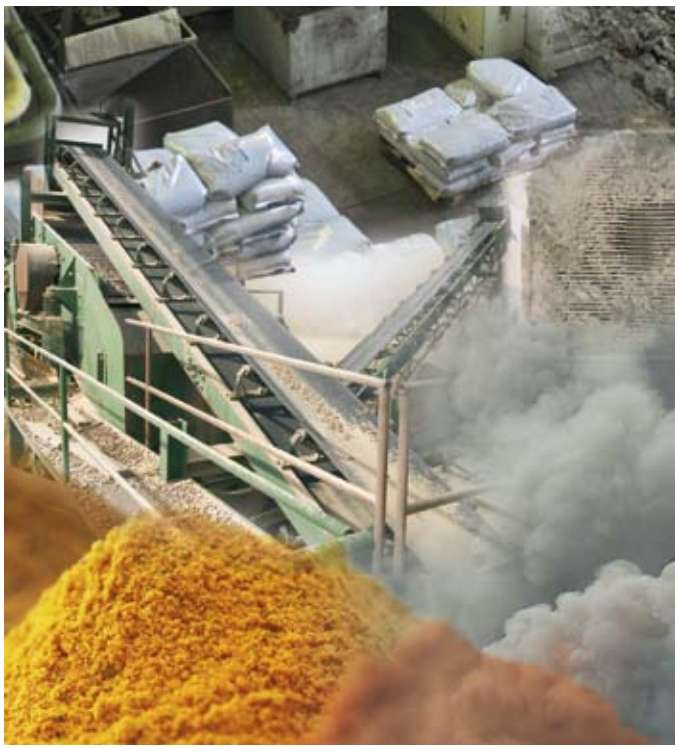
Flammable and explosive materials occur more frequently than you think. For example when processing
- Wood and fibers
- Foods, luxury foods and fodder
- Coal
- Metals and metal alloys

But also chemical-technical products made of plastic, resin and rubber may produce flammable dusts and explosive atmospheres.

If flammable dusts deposit on hot surfaces like e.g. overheated electric engines, smoldering fires may occur that may trigger an explosion when dust is dispersed, e.g. by opening a window. Such an explosion is especially hazardous because its shockwave disperses more dust and thus triggers a chain reaction. Often the consequences are dramatic destruction and loss of human life.

Dust is almost everywhere - air is, too!
Ignition sources you can avoid!

In connection with construction and organizational measures and by selecting suitable operating materials approved for use in dust explosion zones, the risk of an explosion can be minimized. We offer you a selection of electrical plugs and sockets for safe application in dust explosion areas.



**New dust standard valid from 07/01/2007**

Since 01.07.2007, the new standard EN 61241- pp. replaces the dust standard EN 50281 valid until then.

This new standard, EN 61241 ff. must be strictly complied with because areas that are subject to dust explosion hazard have a high hazard potential in which people can be harmed.

The standard prescribes that in areas subject to dust explosion hazard the requirements imposed on electrical equipment must be significantly higher as compared to the requirements specified in the industry standard, and in the preceding standard EN 50281.

Thus the obligation arises for the owner, in the case of new installations, to only use products that correspond to this new state of the technology and that are in conformance with the standard EN 61241.

Which requirements specifically have changed?
- Impact resistance of the enclosure
- Electrostatic conductance of the enclosure
- Resistance to aging of the plastics used

To ensure that you are always on the safe side in the future as well, the dust explosion plugs and sockets from MENNEKES fulfil the requirements specified in the standard EN 61241-0 and EN 61241-1 + A1 for dust ignition degree of protection "Protection through enclosure" (tD) and are appropriately approved.

Through the harmonisation of the international standards for explosion protection, in the meantime the European standard for dust explosion protection, EN 61241 ff. has been carried over into the standard series EN 60079 ff. almost completely.

Thus for the general regulations for dust explosion protection, EN 60079-0 also applies, and for the described degree of ignition protection "Protection through the enclosure" EN 60079-31 will apply in the future.

Our dust Ex plugs and sockets fulfil the requirements of the current standards and have all important national and international approvals. This means that for use in dust Ex areas our products run through a conformity assessment procedure in which they are tested for technical suitability for use in the Ex area of zone 22 (device category 3-D) by an appointed independent expert. With the EC type test certificate or type test certificate/declaration of conformity, the testing authority certifies the appropriate suitability and issues the approval.

## When does dust explode?

Flammable dust-air mixtures have different ignition temperatures. The surface temperature of the equipment in dust explosion hazardous areas are allowed to reach a maximum of 2/3 of the minimum ignition temperature of the ambient dust-air mixture and at a dust layer thickness of 5 mm must be at least 75°K under the minimum ignition temperature of the dust (glow temperature). Consequently, it is the owner's obligation to set up the cleaning and maintenance intervals of facilities exposed to explosion hazards in such a manner that dust deposits of more than 5 mm thickness cannot form. With thicker dust deposits, the minimum ignition temperature (glow temperature) of the dust is drastically reduced. Examples of ignition temperatures and the glow temperatures of different types of dust are provided in the table below.

| Type of dust (designation of the solid material) | Minimum ignition temperature of a layer of dust (glow temperature) in accordance with IEC 61241-2-1 status A | Minimum ignition temperature of a cloud of dust in accordance with IEC 61241-2-1 process B |
|---|---|---|
| **Natural products (examples)** | | |
| Cotton | 350 | 560 |
| Cellulose | 370 | 500 |
| Grain | 290 | 420 |
| Sawdust 3 | 300 | 400 |
| Cocoa | 460 | 580 |
| Cork | 300 | 470 |
| Concentrated feed | 295 | 520 |
| Powdered milk (fully dried, spray dried) | 330 | 520 |
| Paper | 335 | 570 |
| Starch | 530 | 380 |
| Coal | 270 | 590 |
| Tobacco | 300 | 450 |
| Tea | 300 | 510 |
| Peat | 320 | 410 |
| Wheat flour | 470 | 410 |
| Sugar | 360 | 450 |
| **Chemical products (examples)** | | |
| Rubber | 220 | 460 |
| Petroleum coke | 280 | 690 |
| Polyvinyl acetate | 340 | 500 |
| Polyvinyl chloride | 430 | 680 |
| Soot | 385 | 620 |
| Laminated material (abrasive dust) | 330 | 510 |
| Sulphur | 280 | 280 |
| **Metals (examples)** | | |
| Aluminium | 280 | 530 |
| Bronze | 260 | 390 |
| Iron | 300 | 310 |
| Magnesium | 410 | 610 |
| Manganese | 285 | 330 |
| Zinc | 440 | 570 |

Source: BIA - Report (excerpt) characteristic combustion and explosion values
Publisher: HVBG

## Electrical equipment for your safety.

Mills, mixers or conveyor systems in areas subject to a dust explosion hazard require electrical energy – reliable, safe and protected against explosion.
With plugs and sockets protected against dust explosion, we ensure the safe power supply of your drives . And not only that: With plugs and sockets your drives can be conveniently and also clearly visibly disconnected from the power grid. This also makes maintenance of your equipment particularly easy and convenient.





## Heavy duty versions 200A to 400A for industry.

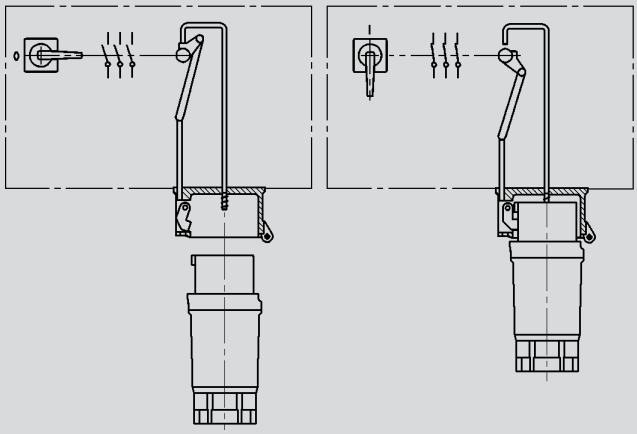
The heavy duty range supplements the plugs and sockets currently covered by EN 60309-2, making available rated currents of 200A, 250A and 400A and rated voltages of up to 1000V.
Their design is based on the following standards: IEC 309-1, EN 60309-1, DIN VDE 0623, part 1.



**Shock hazard protected using contact covers.**
Contact bushings on receptacles and connectors are fitted with covers which positively prevent getting into contact with live bushings. Shockhazard protected in accordance with IEC 309-1/ EN 60309-1.



**Mechanical lock**



**Mechanical lock.**
For mobile consumers of rated current > 125A we have included a heavy duty range with 200A, 250A and 400A in our programme. This can be supplied for rated voltages of 230V to 1000V and seawater resistant.

The heavy duty range is suitable for use in very harsh conditions, e.g. building sites:

- drilling rigs
- tunnel construction
- quarries
- gravel pits
- strip mining
- airports
- container terminals and crane connections in harbours
- for versatile power supply at large-scale indoor and outdoor events
- power supply to market places

**Permissible rated current depending on the conductor cross section.**

| Rated dimension | Rated current $I_{th}$ | Flexible conductors with single or multiple strands |
|---|---|---|
| 200A | 200A | 70 mm² |
| | 250A | 150 mm² |
| 250A | 250A | 120 mm² |
| | 315A | 150 mm² |
| 400A | 400A | 185 mm² |
| | 450A | 240 mm² |

Testing of these combinations demonstrated that these plugs, connectors and receptacles may be operated in mines at a rated voltage of 1000V.



Connection terminals in plugs and sockets 200A for conductor cross sections of 70 to 150 mm², 250A and 400A for conductor cross sections of 70 to 185 mm² or with flexible conductors, and 70 to 240 mm² with single or multiple strand conductors.



Plugs, connectors, inlets and wall mounted receptacles are supplied with flared bushings for cables of diameter 45 to 65 mm. The outside cable grip facilitates connection.

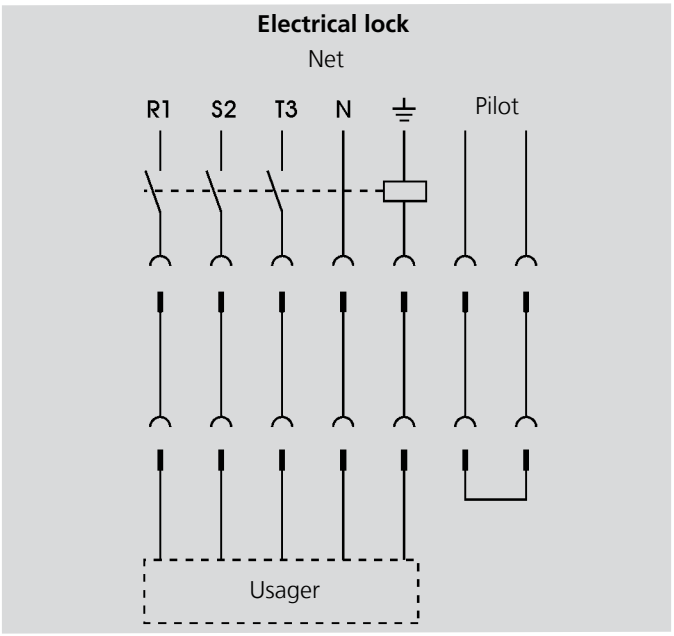


Two pilot contacts are a standard fitting in all plugs and sockets. The pilot contacts lag when the plug is inserted and lead when it is withdrawn. If required, plugs and sockets can be electrically interlocked.

**Surface protection for contacts.**
Contacts 200A up to 400A are protected against corrosive atmosphere by silver plating. Contacts (250A and 400A) are accessible from the front side so that there is no need to undo the connection cable when exchanging damaged parts.



**Electrical lock**




## CEEplus® plugs and sockets with additional contacts.

**Energy and data.**
- Your benefit: just one socket for electrical power and signals.
- Perfect compatibility: CEEplus® plugs, connectors and receptacles may be combined with any traditional CEE products 16A, 3p, 230V or 16A, 5p, 400V.



**For the industry.**
Just one installation to connect additional systems to manufacturing equipment or monitored consumers via a control-station.

**For filling stations.**
CEEplus® is ideally suited for filling stations, e.g. for electric cars, or for camping sites and marinas.

## Industrial Ethernet. Data transfer.

You are familiar with MENNEKES as competent provider of high-quality industrial plugs and sockets. One current example are our AMAXX® receptacle combinations. Based on this competence and the close cooperation with our customers, we have developed a new compact solution for energy and data on the basis of AMAXX®. The result: a modular system that combines energy and data technology.

**Easily planned, calculated and ordered**
- All energy and data components from one source.
- Complete solution instead of individual installations.

**Modular structure**
- Equipped with standard network components.
- Easy retrofitting or expansion.

**Clearly arranged and appealing**
- Elegant and robust AMAXX® enclosure system.
- Also available in yellow.
- Compact design.

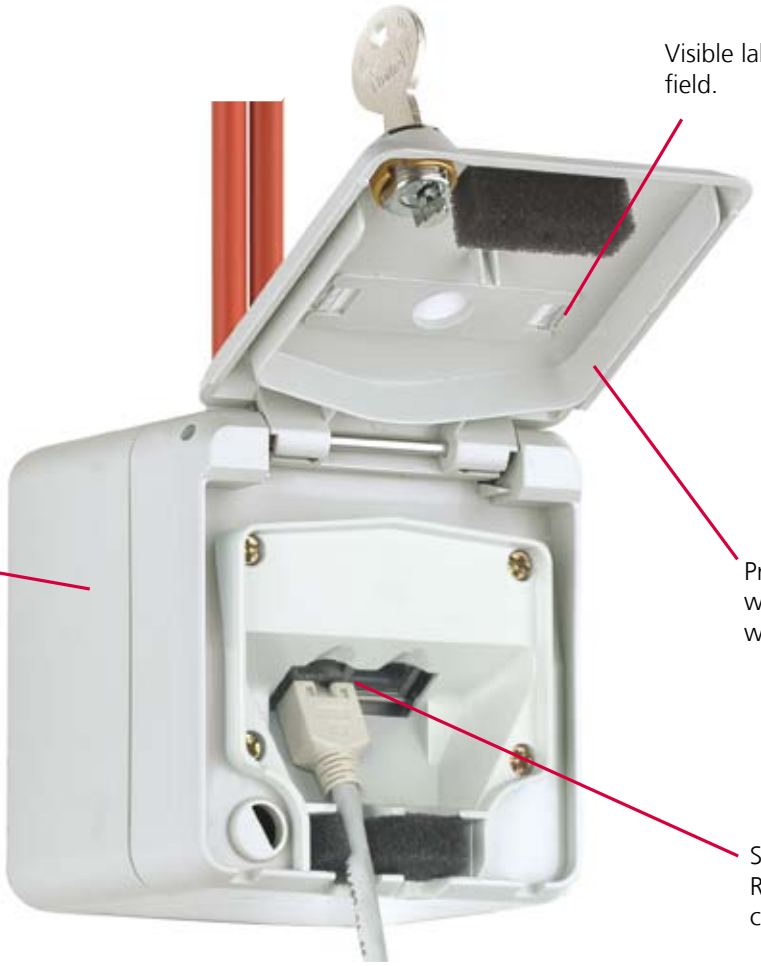


**Clear installation advantages**
- Shorter installation times.
- Less material required.
- Fast installation of the enclosures.

**Suitable and safe for industrial needs**
- Protected against dust, moisture and other environmental influences.
- Protection type IP 44 and IP 67.
- Physical separation of network and energy enclosure.

## Cepex data port receptacles.

The right choice for control stations, storage areas, laboratories, airports, production lines, etc. Cepex data port receptacles are operated with standard patch cables and can be combined with Cepex receptacles CEE and/or SCHUKO®.
For wall-/panel mounting or installation in cable ducts.






**Simple:**
All types are equipped with a membrane gland fitting M 25 for two cables 3-9 mm. Simply push in the cable – done!



**Extra:**
A metric cable gland M 25 / 2 x 8 is optionally available.




**Safe:**
Lockable even with connected cables. The safety lock prevents unauthorized access. Identical locks are available on request.

## AMAXX® Automation.

AMAXX® Automation offers new perspectives for up to date industrial installations.
This extended enclosure programme also covers the industrial sectors in automation. Energy, industrial ethernet and automation can be installed jointly, space-saving and professionally in the productive sector with its high mechanical demands.



**Components for energy and automation in one enclosure**



**Simply planned**

- Enclosure solutions ready for the installation of small controls (SPS), actuators, contactors, relays, KNX/EIB, or other electronic and pneumatic components.

**Clearly defined and appealing**

- Elegant and robust AMAXX® enclosure system.
- Also available in yellow.
- Compact design.

**Clear installation advantages**

- Shorter installation times.
- Less material required.
- Fast installation of the enclosures.

**Suitable for industrial application and safe**

- Protection type IP 44 and IP 67.
- Protected against dust, moisture and other environmental influences.

**Physical separation of network and energy enclosure with seperating membrane plate.**

- Power supply also possible from the top through an empty tube.

## Event and entertainment technology. Plugs and sockets for stage, TV, radio and open air.





The MENNEKES product range for event technology extends from empty enclsoures, receptacles, plugs and couplings to assembled receptacle combinations; a comprehensive assortment. The products have been developed for harsh continuous use and guarantee the highest level of safety under the highest load.





You will find SCHUKO® and grounding-type plugs and sockets in black in the tab, grounding-type plugs and sockets.

## Defence Equipment Standard 96919 and 96926.



MENNEKES TM plugs and sockets, colour bronze-green RAL 60301, have been designed to stand up to especially tough conditions. TM plugs and sockets in accordance with VG 96919 or VG 96926 are suitable for use at ambient temperatures from -35 °C to +60 °C. At ambient temperatures over +40°C the rated current must be reduced.

## Fire brigade and civil protection.



**Plugs and sockets SCHUKO® with the hammer symbol, pressure watertight. Made of AMAPLAST.**

Pressurised water resistant plugs and sockets SCHUKO® from MENNEKES in accordance with IEC 49442/443 also satisfy the VDE 0620 requirements for difficult conditions.



Mobile and flexible, the MENNEKES DELTA BOX. Designed for harsh mechanical conditions and flooding. Ideal for use in disaster control applications.

**CEE-receptacles, -plugs and -connectors, watertight**

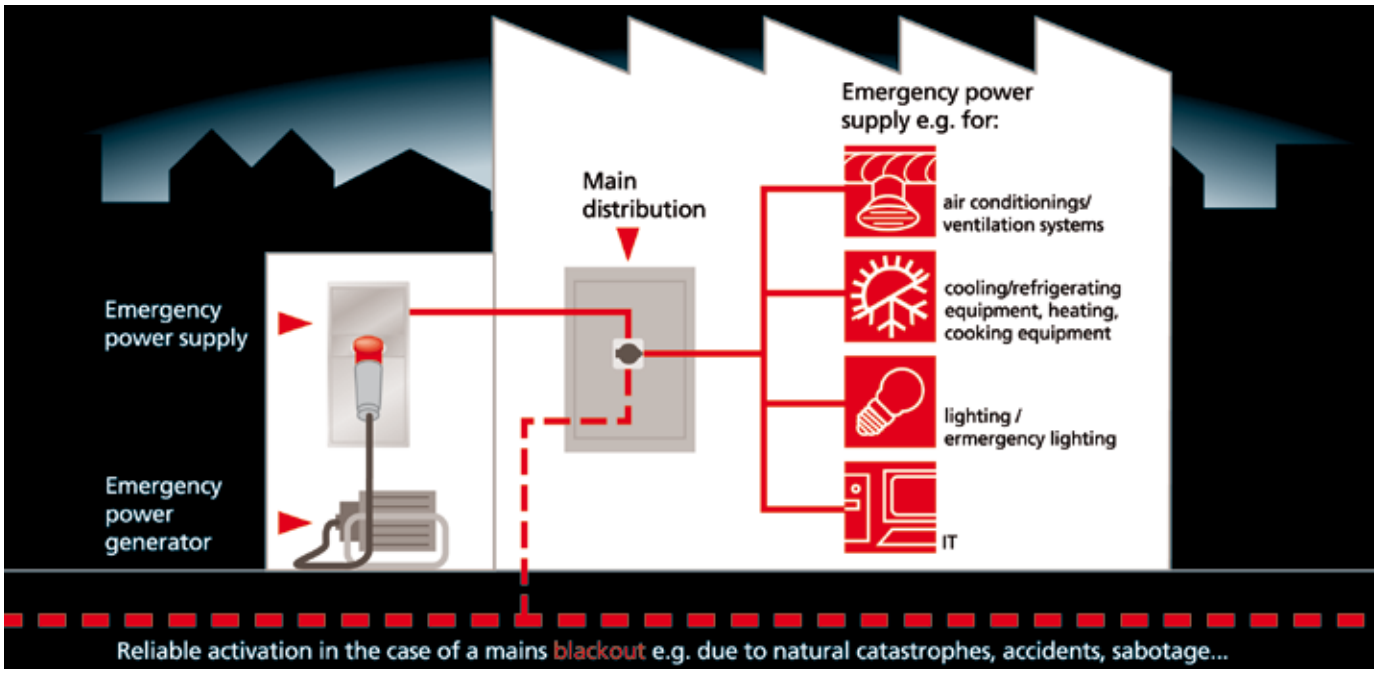


**Panel mounted receptacles TwinCONTACT:** with screwless spring terminal technology are suitable for through-wiring. Contacts are marked for safe and easy installation.
Degree of protection: IP 67 watertight



**PowerTOP® plugs and connectors:** highly-heat resistant contact holders, box terminals and external strain relief, in addition, plugs with nickel-plated contacts.
Degree of protection: IP 67 watertight

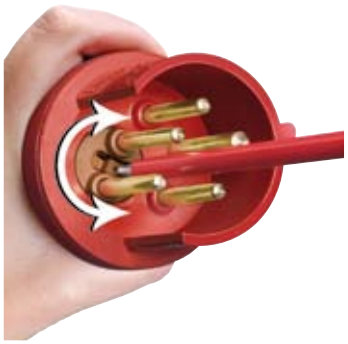
## Emergency power supply.




- Combinations for emergency power supply from 16A to 32A and from 63A to 125A.
- Ideal for agriculture, craft, industry and private households.
- Plastic and stainless steel enclosure for locations with aggressive atmosphere or tough mechanical conditions. Indoor and outdoor application.
- Operational interruptions are reduced to the minimum.




**Change-over switch mains/ off/emergency power.**
Available in 16A and 32A design. Mechanical change-over switch, breaking capacity 63A.



**Phase inverter.**
Change the direction of rotation on the inlet for 16A and 32A. No need to open the device, swift and easy.

## Reefer containers and terminals.





**AM-TOP® plugs and connectors.**
Stable enclosure consisting of one part. The teeth on the cable gland secure a safe grip and protect against loosening.
The cable gland serves as an anti-bend protection for the cables at the same time.

**Secure contact.**
Nickel plated contacts and highly heat resistant contact carriers provide optimum protection against corrosion and overheating.

**380-440V**

**32A**

**3h**

**3p+⏚**

**Proven a million times over on ships and at container terminals.**
MENNEKES plugs and sockets have proven themselves a million times over in everyday application even under extreme conditions. Users throughout the world appreciate the reliability and durability of MENNEKES products.

**Tested safety.**
Internationally standardised refrigerated containers: earthing contact in the 3 o' clock position to IEC 60309-2 / EN 60309-2, protection type IP 67.

Lloyd's Register

## Switched and interlocked receptacles.

Receptacles with the patented, mechanical DUO interlocking ensure that the receptacle can only be switched when inserting a plug:













**The switch is locked in the OFF position.**
The plug can only be inserted and withdrawn if the switch is in the OFF position. The switch can only be turned to ON when a plug is inserted in the receptacle.

**The plug is locked in the ON position.**
To remove the plug with the switch in ON position is not possible.

Switched and interlocked DUO receptacles, with or without fusing are also available with monitoring receptacles. Generously dimensioned connection space for all prescribed cable cross-sections or line cross-sections.



**Tight and durable.**
Safety for all enclosures thanks to foamed seals: silicone, CFC and halogen-free. The permanently elastic seals ensure protection type IP 67 even after years of use.

## Receptacle combinations for reefer containers made of high quality plastic AMAPLAST.





**AMAXX® receptacle combinations** consist of robust enclosures made of the special plastic AMAPLAST used by MENNEKES. Available from a single DUO interlocked receptacle up to combinations with four modules which can be fitted with three DUO receptacles and fusing. They are expandable by flanging the combinations vertically or horizontally.

## Camping.



**Plugs and sockets for camp sites and caravans, docksides and boats, trailers and mobile homes.**

**Built-in plug CaraCONTACT.**
A smart concept produced by the MENNEKES development division.
The horizontal fit of the CaraCONTACT plug relieves strain on the cable and protects it from damage.
Smooth insertion of lid and connector.



**Combinations and receptacles made of AMAPLAST.**



Example of a typical combination for camp site and dockside use:
4 receptacles, 4 over-current and 4 residual current protection devices.

**Stainless steel weather shields and CombiTOWER®.**







Panel mounted receptacles with eye for a lock. Protects against unauthorised access in plugged-in status and in unplugged status.

The modular system of weather shields and columns enables wall mounted and ground fixed installations to be combined.

MENNEKES CombiTOWER® suitable for fitting with combinations 260 x 225 mm, 390 x 225 mm, 520 x 225 mm and 650 x 225 mm.
MENNEKES CombiTOWER® is availlable with a bright stainless steel or a signal yellow finish. All CombiTOWER® are fitted with two apertures which may be used for compressed air pipes or water hoses at your discretion.
CombiTOWER® on request with lockable door.



This inlet with the compact enclosure is ideal for the camping area. Type 844 does not have a hinged lid. A hinged lid can be easily retrofitted. Type 847 with hinged lid is particularly well-suited for outdoor areas.



Information on material properties stainless steel see page 165.

# CEE plugs and sockets

for electrical installations
for camp sites and
for power supply of water sports vehicles and houseboats

## Construction regulations and standards

### Electrical installations on camp sites and in caravans

DIN VDE 0100 part 708:2006/02 applies to construction. This regulation applies to the power supply to parking spaces allotted in camp sites and the connection of caravans.
If a caravan/tent campsite has an electrical supply, at least one receptacle that satisfies the IEC 60309-2 (VDE 0623-20) requirements must be provided as close as possible adjacent to the campsite.

It must be protected with its own overvoltage protection in accordance with the requirements specified in DIN VDE 0100-430 (VDE 0-100-430) and its own residual current protection device (RCD) with a rated differential current that is not greater than 30 mA. It must have at least the IP 44 protection rating.

The lower edge of each receptacle must be arranged at a height of between 0.5 m and 1.5 m above the ground. To avoid dangers due to long extension cords, a maximum of 4 receptacles may be combined in one enclosure.

In general, single-pole receptacles must be provided with a rated supply voltage of 230V and a rated current of 16A. If higher requirements are planned, receptacles with higher values must be provided. The rated supply voltage must not exceed the single alternating current 230V or for three-phase alternating current, (three-phase current, 400V).

Extension cables must be fitted with earthed connectors and plugs conforming to EN 60309-2. (see VDE 0100-721:2010-02).

### Electrical equipment for supplying power to water sport craft and houseboats

DIN VDE 0100 part 709:2010-02 applies to construction. All receptacles with a rated current up to and including 63A must comply with the requirements specified in DIN EN 60309-2 (VDE 0623-2). All receptacles with a rated current over 63A must comply with the specifications in DIN EN 60309-1 (VDE 0623-1). Each individual receptacle must be protected against overcurrent with its own residual current protective device (RCD) with a rated differential current not greater than 30mA and via its own protective device. One receptacle must only supply one water sport craft or houseboat. They must be arranged as close as possible to the anchorage that must be supplied with power. The minimum protection rating is IP 44. A maximum of 4 receptacles may be combined in one distributor.

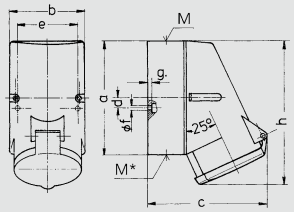
In general, single-pole receptacles must be provided with a rated supply current of 200V to 250V and a rated current of 16A. If higher requirements are planned, receptacles with higher values must be provided. The rated supply voltage must not exceed 230V for single-phase alternating current, or 400V for three-phase alternating current (alternating current).

# Special plugs and sockets ■ 7 pole, 16A - 32A, IP 44 and IP 67

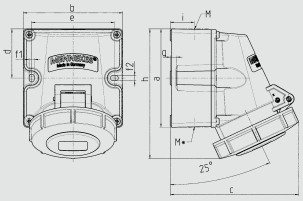
to DIN VDE 0623-1, EN 60309-1. Colour: electric grey and/or colour code. Enclosure and insert made of AMAPLAST.

| Image | Title | Description |
|---|---|---|
|  | **Wall mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1041.<br>Image 734. | ■ screw terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ internal fixing<br>■ one cable entry at top, two blind entries (can be cut out) at bottom<br>■ enclosure base can be turned 180°<br>■ receptacles are designed for adding an auxiliary contact switch |
|  | **Wall mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10<br><br>Product group 1349.<br>Image 9591. | ■ screw terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ two external fixing holes<br>■ one cable entry at top and two blind cable entries (can be cut out) at bottom<br>■ enclosure base can be turned 180°<br>■ receptacles are designed for adding an auxiliary contact switch |
|  | **Wall mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 1<br><br>Product group 1075.<br>Image 5536. | ■ screw terminals<br>■ switched<br>■ mechanical DUO-interlock<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ 3 pole switch<br>■ receptacles can be padlocked |
|  | **Wall mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 1<br><br>Product group 1075.<br>Image 7304. | ■ screw terminals<br>■ switched<br>■ mechanical DUO-interlock<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ 6 pole switch with 2 auxiliary contacts (1 NO and 1 NC)<br>■ receptacles can be padlocked |
|  | **Wall mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 1<br><br>Product group 1074.<br>Image 5785. | ■ screw terminals<br>■ switched<br>■ mechanical DUO-interlock<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ 3 pole switch<br>■ receptacles can be padlocked |
|  | **Wall mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 1<br><br>Product group 1074.<br>Image 7306. | ■ screw terminals<br>■ switched<br>■ mechanical DUO-interlock<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ 6 pole switch with 2 auxiliary contacts (1 NO and 1 NC)<br>■ receptacles can be padlocked |

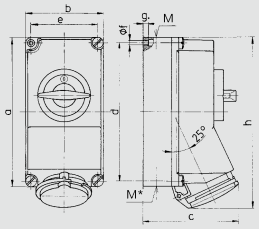
Other voltages and frequencies available on request.

| Ampere | Poles | 230V 50 a. 60 Hz 7p 9h | 400V 50 a. 60 Hz 7p 6h | 500V 50 a. 60 Hz 7p 7h | Drawing |
|---|---|---|---|---|---|
| | | Part number | | | |
| 16 | 7 | 733 | 734 | 1035 |  |
| 32 | 7 | 735 | 736 | 1040 | |

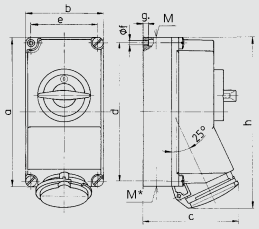
| Drawing | Amp. | 16 | 32 |
|---|---|---|---|
| 1 MB 257 | Poles | 7 | 7 |
| Dim. in mm | a | 128 | 128 |
| | b | 84 | 84 |
| | c | 124 | 138 |
| | d | 11 | 11 |
| | e | 68 | 68 |
| | f | 5,3 | 5,3 |
| | g. | 4 | 4 |
| | h | 145 | 160 |
| | M | 25 | 32 |
| | M* | (blind) to be cut out 2x25 | (blind) to be cut out 2x25 |
| Max. cable diam. (mm) | | 18 | 25 |
| Terminal for cond. cross section (mm²) min.-max. | | —4 | —10 |

| Ampere | Poles | 230V 50 a. 60 Hz 7p 9h | 400V 50 a. 60 Hz 7p 6h | 500V 50 a. 60 Hz 7p 7h | Drawing |
|---|---|---|---|---|---|
| 16 | 7 | 9530 | 9531 | 9532 |  |
| 32 | 7 | 9590 | 9591 | 9592 | |

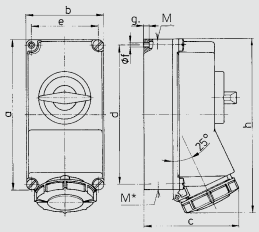
| Drawing | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| 1 MB 622 | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 100 | 100 | 100 | 100 | 100 | 100 |
| | b | 101 | 101 | 101 | 109 | 109 | 109 |
| | c | 117 | 125 | 131 | 157 | 157 | 160 |
| | d | 50 | 50 | 50 | 50 | 50 | 50 |
| | e | 84 | 84 | 84 | 92 | 92 | 92 |
| | f1 | 5,3 | 5,3 | 5,3 | 5,3 | 5,3 | 5,3 |
| | f2 | 5,3 | 5,3 | 5,3 | 5,3 | 5,3 | 5,3 |
| | g | 6,5 | 6,5 | 6,5 | 6,5 | 6,5 | 6,5 |
| | h | 131 | 131 | 132 | 148 | 148 | 148 |
| | i | 24,7 | 24,7 | 24,7 | 27,5 | 27,5 | 27,5 |
| | M | 25 (optional M20) | | | 32 (optional M25) | | |
| | M* | 2x25 (blind) to be cut out 18 (M25) and 15 (M20) | | | 2x25 (blind) to be cut out 25 (M32) and 18 (M25) | | |
| Max. cable diam. (mm) | | | | | | | |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —6 | 2,5 —6 | 2,5 —6 |

| Ampere | Poles | 230V 50 a. 60 Hz 7p 9h | 400V 50 a. 60 Hz 7p 6h | 500V 50 a. 60 Hz 7p 7h | Drawing |
|---|---|---|---|---|---|
| 16 | 7 | | 5536 | |  |
| 32 | 7 | | 7061 | | |

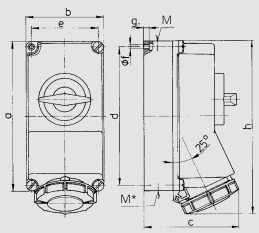
| Drawing | Amp. | 16 | 32 |
|---|---|---|---|
| 1 MB 383 | Poles | 7 | 7 |
| Dim. in mm | a | 225 | 225 |
| | b | 118 | 118 |
| | c | 141 | 146 |
| | d | 208 | 208 |
| | e | 101 | 101 |
| | f | 6,3 | 6,3 |
| | g. | 8 | 8 |
| | h | 254 | 264 |
| | M | 1x32 and 1x25 | 1x32 and 1x25 |
| | M* | 2x25 | 2x25 |
| Max. cable diam. (mm) | | 25 | 25 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 2,5 —10 |

| Ampere | Poles | 230V 50 a. 60 Hz 7p 9h | 400V 50 a. 60 Hz 7p 6h | 500V 50 a. 60 Hz 7p 7h | Drawing |
|---|---|---|---|---|---|
| 16 | 7 | | 7304 | 7320 |  |
| 32 | 7 | | 7305 | 5683 | |

| Drawing | Amp. | 16 | 32 |
|---|---|---|---|
| 1 MB 383 | Poles | 7 | 7 |
| Dim. in mm | a | 225 | 225 |
| | b | 118 | 118 |
| | c | 141 | 146 |
| | d | 208 | 208 |
| | e | 101 | 101 |
| | f | 6,3 | 6,3 |
| | g. | 8 | 8 |
| | h | 254 | 264 |
| | M | 1x32 and 1x25 | 1x32 and 1x25 |
| | M* | 2x25 | 2x25 |
| Max. cable diam. (mm) | | 25 | 25 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 2,5 —10 |

| Ampere | Poles | 230V 50 a. 60 Hz 7p 9h | 400V 50 a. 60 Hz 7p 6h | 500V 50 a. 60 Hz 7p 7h | Drawing |
|---|---|---|---|---|---|
| 16 | 7 | | 5785 | |  |
| 32 | 7 | | 6106 | | |

| Drawing | Amp. | 16 | 32 |
|---|---|---|---|
| 1 MB 382 | Poles | 7 | 7 |
| Dim. in mm | a | 225 | 225 |
| | b | 118 | 118 |
| | c | 147 | 153 |
| | d | 208 | 208 |
| | e | 101 | 101 |
| | f | 6,3 | 6,3 |
| | g. | 8 | 8 |
| | h | 259 | 274 |
| | M | 1x25 and 1x32 | 1x25 and 1x32 |
| | M* | 2x25 | 2x25 |
| Max. cable diam. (mm) | | 25 | 25 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 2,5 —10 |

| Ampere | Poles | 230V 50 a. 60 Hz 7p 9h | 400V 50 a. 60 Hz 7p 6h | 500V 50 a. 60 Hz 7p 7h | Drawing |
|---|---|---|---|---|---|
| 16 | 7 | | 7306 | |  |
| 32 | 7 | | 7307 | | |

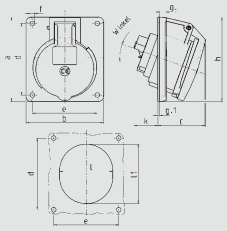
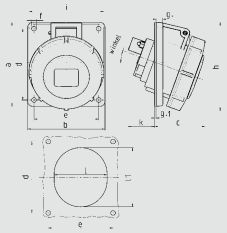
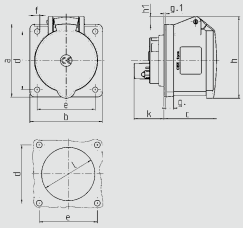
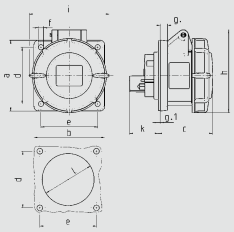
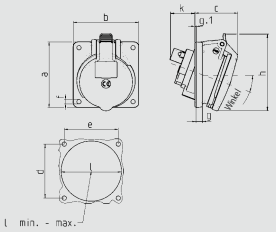
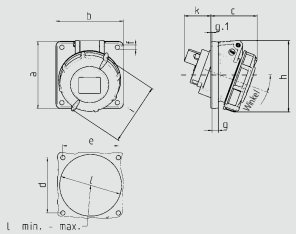
| Drawing | Amp. | 16 | 32 |
|---|---|---|---|
| 1 MB 382 | Poles | 7 | 7 |
| Dim. in mm | a | 225 | 225 |
| | b | 118 | 118 |
| | c | 147 | 153 |
| | d | 208 | 208 |
| | e | 101 | 101 |
| | f | 6,3 | 6,3 |
| | g. | 8 | 8 |
| | h | 259 | 274 |
| | M | 1x25 and 1x32 | 1x25 and 1x32 |
| | M* | 2x25 | 2x25 |
| Max. cable diam. (mm) | | 25 | 25 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 2,5 —10 |

# Special plugs and sockets ■ 7 pole, 16A - 32A, IP 44 and IP 67

to DIN VDE 0623-1, EN 60309-1. Colour: electric grey and/or colour code. Enclosure and insert made of AMAPLAST.

| Image | Title | Description |
|---|---|---|
|  | **Panel mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1044.<br>Image 1045. | ■ screw terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ 20° inclination<br>■ 32A receptacles are designed for adding an auxiliary contact switch |
|  | **Panel mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10<br><br>Product group 1048.<br>Image 2317. | ■ screw terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ 20° inclination<br>■ 32A receptacles are designed for adding an auxiliary contact switch |
|  | **Panel mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1056.<br>Image 2443. | ■ screw terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ straight |
|  | **Panel mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10<br><br>Product group 1046.<br>Image 2711. | ■ screw terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ straight |
|  | **Panel mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1018.<br>Image 3022. | ■ screw terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ uniform fixing hole spacing<br>■ suitable for through wiring<br>■ 20° inclination<br>■ receptacles are designed for adding an auxiliary contact switch |
|  | **Panel mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10<br><br>Product group 1019.<br>Image 1096. | ■ screw terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ uniform fixing hole spacing<br>■ suitable for through wiring<br>■ 20° inclination<br>■ receptacles are designed for adding an auxiliary contact switch |

Other voltages and frequencies available on request.

| Ampere | Poles | 230V 50 a. 60 Hz 7p 9h | 400V 50 a. 60 Hz 7p 6h | 500V 50 a. 60 Hz 7p 7h | Drawing |
|---|---|---|---|---|---|
| | | Part number | | | |
| 16 | 7 | 737 | 738 | 1045 |  |
| 32 | 7 | 739 | 740 | 1050 | |
| 16 | 7 | 2883 | 2459 | 2296 |  |
| 32 | 7 | | 2317 | 2212 | |
| 16 | 7 | | 2443 | |  |
| 32 | 7 | | 2584 | | |
| | | Blind flange to close unused openings, for 16A panel mounted receptacles, part no 41419. | | | |
| 16 | 7 | | 2711 | |  |
| 32 | 7 | | 2988 | | |
| | | Blind flange to close unused openings, for 16A panel mounted receptacles, part no 41419. | | | |
| 16 | 7 | 3021 | 3022 | 3023 |  |
| 32 | 7 | 3121 | 3120 | 3123 | |
| 16 | 7 | 1095 | 1096 | |  |
| 32 | 7 | 3242 | 3243 | | |

| Drawing 1 MB 260 | Amp. / Poles | 16 / 7 | 32 / 7 |
|---|---|---|---|
| Dim. in mm | a | 100 | 100 |
| | b | 92 | 92 |
| | c | 58 | 61 |
| | d | 85 | 85 |
| | e | 77 | 77 |
| | f | 5,5 | 5,5 |
| | g. | 8 | 8 |
| | g.1 | 2 | 2 |
| | h | 100 | 106 |
| | k | 40 | 55 |
| | l | 65 | 72 |
| | l1 | 72 | 85 |
| | α | 20° | 20° |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 2,5 —10 |

| Drawing 1 MB 251 | Amp. / Poles | 16 / 7 | 32 / 7 |
|---|---|---|---|
| Dim. in mm | a | 100 | 100 |
| | b | 92 | 92 |
| | c | 62 | 66 |
| | d | 85 | 85 |
| | e | 77 | 77 |
| | f | 5,5 | 5,5 |
| | g. | 8 | 8 |
| | g.1 | 2 | 2 |
| | h | 105 | 113 |
| | i | 96 | 110 |
| | k | 39 | 54 |
| | l | 65 | 72 |
| | l1 | 72 | 85 |
| | α | 20° | 20° |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 2,5 —10 |

| Drawing 1 MB 247 | Amp. / Poles | 16 / 7 | 32 / 7 |
|---|---|---|---|
| Dim. in mm | a | 75 | 85 |
| | b | 75 | 75 |
| | c | 53 | 65 |
| | d | 60 | 60 |
| | e | 60 | 60 |
| | f | 5,5 | 5,5 |
| | g. | 8 | 8 |
| | g.1 | 2 | 2 |
| | h | 83 | 100 |
| | h1 | 8 | 12 |
| | k | 32 | 39 |
| | l | 54 | 62 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 2,5 —10 |

| Drawing 1 MB 141 | Amp. / Poles | 16 / 7 | 32 / 7 |
|---|---|---|---|
| Dim. in mm | a | 75 | 85 |
| | b | 75 | 75 |
| | c | 61 | 72 |
| | d | 60 | 60 |
| | e | 60 | 60 |
| | f | 5,5 | 5,5 |
| | g. | 8 | 8 |
| | g.1 | 2 | 2 |
| | h | 95 | 105 |
| | i | 96 | 110 |
| | k | 32 | 39 |
| | l | 54 | 65 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 2,5 —10 |

| Drawing 1 MB 453 | Amp. / Poles | 16 / 7 | 32 / 7 |
|---|---|---|---|
| Dim. in mm | a | 85 | 85 |
| | b | 85 | 85 |
| | c | 57 | 67 |
| | d | 70 | 70 |
| | e | 70 | 70 |
| | f | 5,5 | 5,5 |
| | g | 8 | 8 |
| | g.1 | 2 | 2 |
| | h | 101 | 110 |
| | k | 41 | 49 |
| | l min. | 70 | 78 |
| | l max. | 78 | 78 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 2,5 —10 |

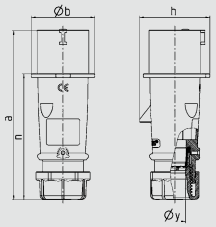
| Drawing 1 MB 452 | Amp. / Poles | 16 / 7 | 32 / 7 |
|---|---|---|---|
| Dim. in mm | a | 85 | 85 |
| | b | 85 | 85 |
| | c | 60 | 72 |
| | d | 70 | 70 |
| | e | 70 | 70 |
| | f | 5,5 | 5,5 |
| | g | 8 | 8 |
| | g.1 | 2 | 2 |
| | h | 99 | 110 |
| | i | 96 | 110 |
| | k | 41 | 49 |
| | l min. | 70 | 78 |
| | l max. | 78 | 78 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 2,5 —10 |

# Special plugs and sockets ■ 7 pole, 16A - 32A, IP 44 and IP 67

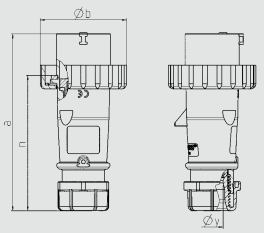
to DIN VDE 0623-1, EN 60309-1. Colour: electric grey and/or colour code. Enclosure and insert made of AMAPLAST.

| Image | Title | Description |
|---|---|---|
|  | **Plug AM-TOP®**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 2141.<br>Image 742. | ■ screw terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ single part body<br>■ cable gland and sealing<br>■ strain relief and protection against kinking |
|  | **Plug AM-TOP®**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10<br><br>Product group 2149.<br>Image 3777. | ■ screw terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ single part body<br>■ cable gland and sealing<br>■ strain relief and protection against kinking |
|  | **Wall mounted inlet**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 2045.<br>Image 2166. | ■ screw terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ cable entry for 32A devices also possible on the back side<br>■ enclosure base with stamped recess for quick cutting out |
|  | **Panel mounted inlet**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 2051.<br>Image 1075. | ■ screw terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts |
|  | **Panel mounted inlet**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10<br><br>Product group 2067.<br>Image 3914. | ■ screw terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ with protective cap |

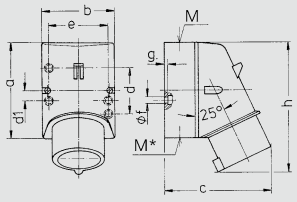
Other voltages and frequencies available on request.

| Ampere | Poles | 230V 50 a. 60 Hz 7p 9h | 400V 50 a. 60 Hz 7p 6h | 500V 50 a. 60 Hz 7p 7h | Drawing |
|---|---|---|---|---|---|
| | | Part number | | | |
| 16 | 7 | 741 | 742 | 1055 |  |
| 32 | 7 | 743 | 744 | 1060 | |

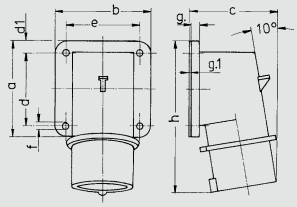
| Drawing 2 MB 217 | Amp. Poles | 16 7 | 32 7 |
|---|---|---|---|
| Dim. in mm | a | 147 | 180 |
| | b | 67 | 77 |
| | h | 76 | 89,5 |
| | n | 110,5 | 135 |
| | y | 16 | 22 |
| Terminal for cond. cross section (mm²) min.-max. | | 1 —2,5 | 2,5 —6 |

| | | | | | |
|---|---|---|---|---|---|
| 16 | 7 | 3776 | 3777 | 3913 |  |
| 32 | 7 | 2405 | 2324 | 2213 | |

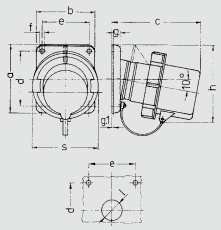
| Drawing 2 MB 218 | Amp. Poles | 16 7 | 32 7 |
|---|---|---|---|
| Dim. in mm | a | 147 | 180 |
| | b | 87 | 101 |
| | n | 114 | 138 |
| | y | 16 | 22 |
| Terminal for cond. cross | | 1 | 2,5 |
| section (mm²) min.-max. | | —2,5 | —6 |

| | | | | | |
|---|---|---|---|---|---|
| 16 | 7 | | 2166 | |  |
| 32 | 7 | | 2167 | | |

| Drawing 2 MB 147 | Amp. Poles | 16 7 | 32 7 |
|---|---|---|---|
| Dim. in mm | a | 100 | 128 |
| | b | 75 | 84 |
| | c | 110 | 135 |
| | d | — | — |
| | d1 | 10,5 | 11 |
| | e | 59 | 68 |
| | f | 5 | 5,3 |
| | g. | 4 | 4 |
| | h | 135 | 170 |
| | M | 20 | 32 |
| | M* | 20 (blind) to be cut out | 2x25 (blind) to be cut out |
| Max. cable diam. (mm) | | 15 | 18 |
| Terminal for cond. cross section (mm²) min.-max. | | 1 —2,5 | 2,5 —4 |

| | | | | | |
|---|---|---|---|---|---|
| 16 | 7 | 749 | 750 | 1075 |  |
| 32 | 7 | 751 | 752 | 1080 | |

| Drawing 2 MB 71 | Amp. Poles | 16 7 | 32 7 |
|---|---|---|---|
| Dim. in mm | a | 85 | 75 |
| | b | 85 | 90 |
| | c | 79 | 90 |
| | d | 64 | 45 |
| | d1 | 10 | 13 |
| | e | 64 | 78 |
| | f | 5,5 | 5,5 |
| | g. | 6 | 6 |
| | g.1 | 2 | 2 |
| | h | 129 | 138 |
| Terminal for cond. cross section (mm²) min.-max. | | 1 —2,5 | 2,5 —6 |

| | | | | | |
|---|---|---|---|---|---|
| 16 | 7 | | 3914 | |  |
| 32 | 7 | | 3915 | | |

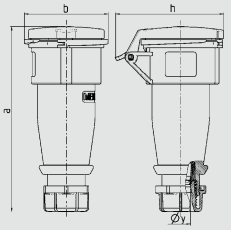
| Drawing 2 MB 203 | Amp. Poles | 16 7 | 32 7 |
|---|---|---|---|
| Dim. in mm | a | 85 | 85 |
| | b | 85 | 85 |
| | c | 132 | 137 |
| | d | 70 | 70 |
| | e | 70 | 70 |
| | f | 6,3 | 6,3 |
| | g. | 11 | 11 |
| | g.1 | 2 | 2 |
| | h | 107 | 111 |
| | s | 86 | 102 |
| | l | 30 | 30 |
| Terminal for cond. cross section (mm²) min.-max. | | 1 —2,5 | 2,5 —6 |

# Special plugs and sockets ■ 7 pole, 16A - 32A, IP 44 and IP 67

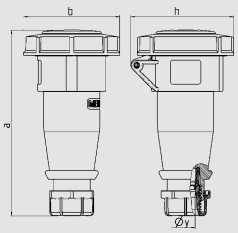
to DIN VDE 0623-1, EN 60309-1. Colour: electric grey and/or colour code. Enclosure and insert made of AMAPLAST.

| Image | Title | Description |
|---|---|---|
|  | **Connector AM-TOP®**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 3141.<br>Image 745. | ■ screw terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ single part body<br>■ cable gland and sealing<br>■ strain relief and protection against kinking |
|  | **Connector AM-TOP®**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10<br><br>Product group 3149.<br>Image 2255. | ■ screw terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ single part body<br>■ cable gland and sealing<br>■ strain relief and protection against kinking |

Other voltages and frequencies available on request.

| Ampere | Poles | 230V 50 a. 60 Hz 7p 9h | 400V 50 a. 60 Hz 7p 6h | 500V 50 a. 60 Hz 7p 7h | Drawing |
|---|---|---|---|---|---|
| | | Part number | | | |
| 16 | 7 | 745 | 746 | 1065 |  |
| 32 | 7 | 747 | 748 | 1070 | |

| Drawing 3 MB 63 | Amp. / Poles | 16 / 7 | 32 / 7 |
|---|---|---|---|
| Dim. in mm | a | 167 | 208 |
| | b | 76 | 89 |
| | h | 98 | 108 |
| | y | 16 | 22 |
| Terminal for cond. cross section (mm²) min.-max. | | 1 —2,5 | 2,5 —6 |

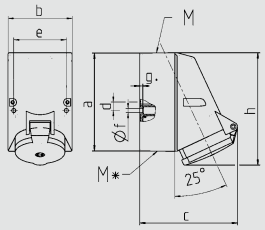
| Ampere | Poles | 230V 50 a. 60 Hz 7p 9h | 400V 50 a. 60 Hz 7p 6h | 500V 50 a. 60 Hz 7p 7h | Drawing |
|---|---|---|---|---|---|
| | | Part number | | | |
| 16 | 7 | 3783 | 3916 | 3784 |  |
| 32 | 7 | 2406 | 2255 | 2460 | |

| Drawing 3 MB 62 | Amp. / Poles | 16 / 7 | 32 / 7 |
|---|---|---|---|
| Dim. in mm | a | 172 | 213 |
| | b | 89 | 102 |
| | h | 95 | 105 |
| | y | 16 | 22 |
| Terminal for cond. cross section (mm²) min.-max. | | 1 —2,5 | 2,5 —6 |

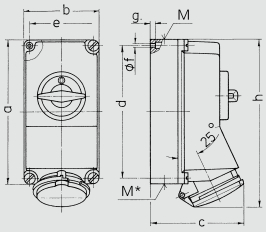
# Special plugs and sockets ■ 600V to 690V, 16A - 125A,

to DIN VDE 0623, EN 60309-2. Colour: electric grey and/or colour code. Enclosure and insert made of AMAPLAST.

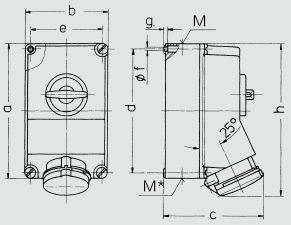
| Image | Title | Description |
|---|---|---|
|  | **Wall mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1041.<br>Image 2576A. | ■ screw terminals<br>■ internal fixing<br>■ one cable entry at top and two blind entries (can be cut out) at bottom<br>■ enclosure base can be turned 180° |
|  | **Wall mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 1<br><br>Product group 1075.<br>Image 5663A. | ■ screw terminals<br>■ switched<br>■ mechanical DUO-interlock<br>■ receptacles can be padlocked |
|  | **Wall mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 3<br><br>Product group 1075.<br>Image 6580. | ■ screw terminals<br>■ SoftCONTACT<br>■ switched<br>■ mechanical DUO-interlock<br>■ highly heat resistant contact carrier<br>■ receptacles can be padlocked |
|  | **Wall mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 1<br><br>Product group 1074.<br>Image 6015A. | ■ screw terminals<br>■ TorsionSpringCONTACT<br>■ switched<br>■ mechanical DUO-interlock<br>■ highly heat resistant contact carrier<br>■ add-on equipment is required to install a padlock |

| Ampere | Poles | 600 - 690V 50 a. 60 Hz<br>4p 5p<br>5h 5h<br>Part number | Drawing |
|---|---|---|---|
| 16 | 4 | 3790 |  |
| 16 | 5 | 2766A | |
| 32 | 4 | 2576A | |
| 32 | 5 | 2767A | |

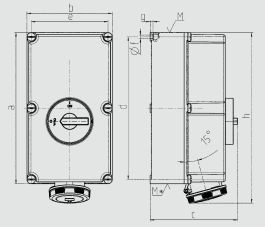
| Drawing | Amp. | 16 | | 32 | | |
|---|---|---|---|---|---|---|
| 1 MB 43 | Poles | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 128 | 128 | 128 | 128 | 128 |
| | b | 84 | 84 | 84 | 84 | 84 |
| | c | 122 | 124 | 136 | 136 | 138 |
| | d | 11 | 11 | 11 | 11 | 11 |
| | e | 68 | 68 | 68 | 68 | 68 |
| | f | 5,3 | 5,3 | 5,3 | 5,3 | 5,3 |
| | g. | 4 | 4 | 4 | 4 | 4 |
| | h | 144 | 145 | 158 | 158 | 160 |
| | M | 25 | 25 | 32 | 32 | 32 |
| | M* | 2x25 (blind) to be cut out | | 2x25 (blind) to be cut out | | |
| Max. cable diam. (mm) | | 18 | 18 | 18/25 | 18/25 | 18/25 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 2,5 —10 | 2,5 —10 | 2,5 —10 |

| | | | |
|---|---|---|---|
| 16 | 4 | 5781A |  |
| 16 | 5 | 5771A | |
| 32 | 4 | 5663A | |
| 32 | 5 | 5787A | |

| Drawing | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| 1 MB 174 | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 225 | 225 | 225 | 225 | 225 | 225 |
| | b | 118 | 118 | 118 | 118 | 118 | 118 |
| | c | 141 | 141 | 141 | 146 | 146 | 146 |
| | d | 208 | 208 | 208 | 208 | 208 | 208 |
| | e | 101 | 101 | 101 | 101 | 101 | 101 |
| | f | 6,3 | 6,3 | 6,3 | 6,3 | 6,3 | 6,3 |
| | g. | 8 | 8 | 8 | 8 | 8 | 8 |
| | h | 250 | 252 | 254 | 264 | 264 | 264 |
| | M | 1x25 and 1x32 | | | 1x25 and 1x32 | | |
| | M* | 2x25 | 2x25 | 2x25 | 2x25 | 2x25 | 2x25 |
| Max. cable diam. (mm) | | 25 | 25 | 25 | 25 | 25 | 25 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —10 | 2,5 —10 | 2,5 —10 |

| | | | |
|---|---|---|---|
| 63 | 4 | 6580 |  |
| 63 | 5 | 6262A | |

| Drawing | Amp. | 63 | | |
|---|---|---|---|---|
| 1 MB 234 | Poles | 3 | 4 | 5 |
| Dim. in mm | a | 264 | 264 | 264 |
| | b | 163 | 163 | 163 |
| | c | 192 | 192 | 192 |
| | d | 240 | 240 | 240 |
| | e | 140 | 140 | 140 |
| | f | 8,1 | 8,1 | 8,1 |
| | g. | 8 | 8 | 8 |
| | h | 300 | 300 | 300 |
| | M | 40 | 40 | 40 |
| | M* | 2x40 | 2x40 | 2x40 |
| Max. cable diam. (mm) | | 27 | 27 | 27 |
| Terminal for cond. cross section (mm²) min.-max. | | 6 —25 | 6 —25 | 6 —25 |

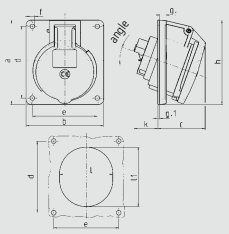
| | | | |
|---|---|---|---|
| 125 | 4 | 6015A |  |
| 125 | 5 | 6077 | |

| Drawing | Amp. | 125 | | |
|---|---|---|---|---|
| 1 MB 177 | Poles | 3 | 4 | 5 |
| Dim. in mm | a | 460 | 460 | 460 |
| | b | 260 | 260 | 260 |
| | c | 283 | 283 | 283 |
| | d | 434 | 434 | 434 |
| | e | 234 | 234 | 234 |
| | f | 11 | 11 | 11 |
| | g. | 9 | 9 | 9 |
| | h | 519 | 519 | 519 |
| | M | 63 | 63 | 63 |
| | M* | 2x63 | 2x63 | 2x63 |
| Max. cable diam. (mm) | | 44 | 44 | 44 |
| Terminal for cond. cross section (mm²) min.-max. | | 25 —70 | 25 —70 | 25 —70 |

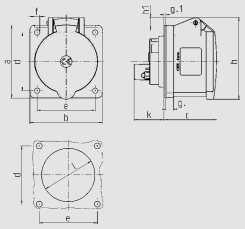
# Special plugs and sockets ■ 600V to 690V, 16A - 125A,

to DIN VDE 0623, EN 60309-2. Colour: electric grey and/or colour code. Enclosure and insert made of AMAPLAST.

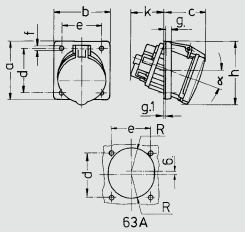
| Image | Title | Description |
|---|---|---|
|  | **Panel mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1044.<br>Image 3011. | ■ screw terminals |
|  | **Panel mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1056.<br>Image 3066. | ■ screw terminals<br>■ straight |
|  | **Panel mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 5<br><br>Product group 1044.<br>Image 2761P. | ■ screw terminals<br>■ with pilot contact<br>■ SoftCONTACT<br>■ highly heat resistant contact carrier<br>■ 20° inclination |
|  | **Panel mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 5<br><br>Product group 1056.<br>Image 3115P. | ■ screw terminals<br>■ with pilot contact<br>■ SoftCONTACT<br>■ highly heat resistant contact carrier<br>■ straight |
|  | **Panel mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 5<br><br>Product group 1048.<br>Image 2546P. | ■ screw terminals<br>■ with pilot contact<br>■ TorsionSpringCONTACT<br>■ highly heat resistant contact carrier<br>■ 15° inclination |
|  | **Panel mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 5<br><br>Product group 1046.<br>Image 3787P. | ■ screw terminals<br>■ with pilot contact<br>■ TorsionSpringCONTACT<br>■ highly heat resistant contact carrier<br>■ straight |

| Ampere | Poles | 600 - 690V 50 a. 60 Hz<br>4p 5p<br>5h 5h<br>Part number | Drawing |
|---|---|---|---|
| 16 | 4 | 3010 |  |
| 16 | 5 | 2765A | |
| 32 | 4 | 3011 | |
| 32 | 5 | 2764A | |

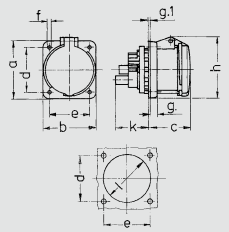
| Drawing 1 MB 260 | Amp. Poles | 16 3 | 16 4 | 16 5 | 32 3 | 32 4 | 32 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 73.5 | 100 | 100 | 100 | 100 | 100 |
| | b | 64 | 92 | 92 | 92 | 92 | 92 |
| | c | 50 | 59 | 58 | 62 | 62 | 61 |
| | d | 60 | 85 | 85 | 85 | 85 | 85 |
| | e | 52 | 77 | 77 | 77 | 77 | 77 |
| | f | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 |
| | g. | 7 | 8 | 8 | 8 | 8 | 8 |
| | g.1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | h | 79 | 100 | 100 | 103 | 103 | 106 |
| | k | 44 | 34 | 34 | 54 | 54 | 49 |
| | l | 52 | 55 | 65 | 67 | 67 | 72 |
| | l1 | 60 | 63 | 72 | 82 | 82 | 85 |
| | α | 20° | 20° | 20° | 20° | 20° | 20° |
| Terminal for cond. cross section (mm²) min.-max. | | 1.5 —4 | 1.5 —4 | 1.5 —4 | 2.5 —10 | 2.5 —10 | 2.5 —10 |

| | | | |
|---|---|---|---|
| 16 | 4 | 3183 |  |
| 16 | 5 | 3058 | |
| 32 | 4 | 3066 | |
| 32 | 5 | 3450 | |

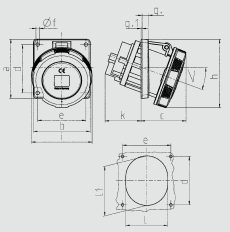
| Drawing 1 MB 247 | Amp. Poles | 16 3 | 16 4 | 16 5 | 32 3 | 32 4 | 32 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 75 | 75 | 75 | 75 | 75 | 75 |
| | b | 75 | 75 | 75 | 75 | 75 | 75 |
| | c | 53 | 53 | 55 | 64 | 64 | 65 |
| | d | 60 | 60 | 60 | 60 | 60 | 60 |
| | e | 60 | 60 | 60 | 60 | 60 | 60 |
| | f | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 |
| | g. | 8 | 8 | 8 | 8 | 8 | 8 |
| | g.1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | h | 75 | 80 | 83 | 89 | 89 | 100 |
| | h1 | | 6 | 8 | 11 | 11 | 12 |
| | k | 31 | 32 | 32 | 39 | 39 | 39 |
| | l | 43 | 52 | 54 | 58 | 58 | 62 |
| Terminal for cond. cross section (mm²) min.-max. | | 1.5 —4 | 1.5 —4 | 1.5 —4 | 2.5 —10 | 2.5 —10 | 2.5 —10 |

| | | | |
|---|---|---|---|
| 16 | 5 | 2761P |  |

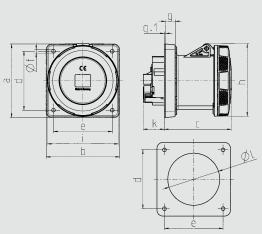
| Drawing 1 MB 297 | Amp. Poles | 63 3 | 63 4 | 63 5 |
|---|---|---|---|---|
| Dim. in mm | a | 110 | 110 | 110 |
| | b | 106 | 106 | 106 |
| | c | 85 | 85 | 85 |
| | d | 85 | 85 | 85 |
| | e | 77 | 77 | 77 |
| | f | 6,2 | 6,2 | 6,2 |
| | g. | 12 | 12 | 12 |
| | g.1 | 2 | 2 | 2 |
| | h | 122 | 122 | 122 |
| | k | 69 | 69 | 69 |
| | R | 46 | 46 | 46 |
| | α | 20° | 20° | 20° |
| Terminal for cond. cross section (mm²) min.-max. | | 6 —25 | 6 —25 | 6 —25 |

| | | | |
|---|---|---|---|
| 63 | 4 | 3079P |  |
| 63 | 5 | 3115P | |

| Drawing 1 MB 211 | Amp. Poles | 63 3 | 63 4 | 63 5 |
|---|---|---|---|---|
| Dim. in mm | a | 107 | 107 | 107 |
| | b | 100 | 100 | 100 |
| | c | 80 | 80 | 80 |
| | d | 85 | 85 | 85 |
| | e | 77 | 77 | 77 |
| | f | 6. | 6. | 6. |
| | g. | 12 | 12 | 12 |
| | g.1 | 2 | 2 | 2 |
| | h | 113 | 113 | 113 |
| | k | 55 | 55 | 55 |
| | l | 88 | 88 | 88 |
| Terminal for cond. cross section (mm²) min.-max. | | 6 —25 | 6 —25 | 6 —25 |

| | | | |
|---|---|---|---|
| 125 | 4 | 2203P |  |
| 125 | 5 | 2546P | |

| Drawing 1 MB 601 | Amp. Poles | 63 5 | 125 3 | 125 4 | 125 5 |
|---|---|---|---|---|---|
| Dim. in mm | a | 110 | 114 | 114 | 114 |
| | b | 106 | 110 | 110 | 110 |
| | c | 84 | 75 | 75 | 75 |
| | d | 90 | 90 | 90 | 90 |
| | e | 90 | 90 | 90 | 90 |
| | f | 6,5 | 6,2 | 6,2 | 6,2 |
| | g. | 12 | 13 | 13 | 13 |
| | g.1 | 2 | 2 | 2 | 2 |
| | h | 128 | 133 | 133 | 133 |
| | i | 113 | 126 | 126 | 126 |
| | k | 67 | 103 | 103 | 103 |
| | l | 92 | 94 | 94 | 94 |
| | l1 | 98 | 107 | 107 | 107 |
| | < | 15° | 15° | 15° | 15° |
| Terminal for cond. cross section (mm²) min.-max. | | 6 —20 | 25 —70 | 25 —70 | 25 —70 |

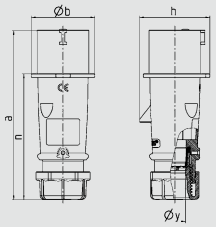
| | | | |
|---|---|---|---|
| 125 | 4 | 3663P |  |
| 125 | 5 | 3787P | |

| Drawing 1 MB 258 | Amp. Poles | 125 4 | 125 5 |
|---|---|---|---|
| Dim. in mm | a | 130 | 130 |
| | b | 130 | 130 |
| | c | 119 | 119 |
| | d | 104 | 104 |
| | e | 104 | 104 |
| | f | 6,5 | 6,5 |
| | g. | 18 | 18 |
| | g.1 | 2 | 2 |
| | h | 129 | 129 |
| | i | 126 | 126 |
| | k | 43 | 43 |
| | l | 95 | 95 |
| Terminal for cond. cross section (mm²) min.-max. | | 25 —70 | 25 —70 |

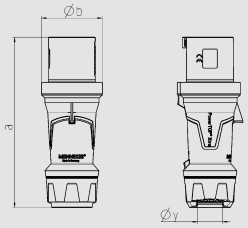
# Special plugs and sockets ■ 600V to 690V, 16A - 125A,

to DIN VDE 0623, EN 60309-2. Colour: electric grey and/or colour code. Enclosure and insert made of AMAPLAST.

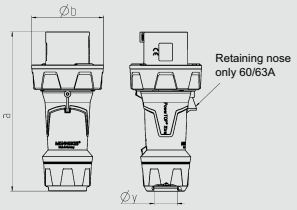
| Image | Title | Description |
|---|---|---|
|  | **Plug AM-TOP®**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 2141.<br>Image 2113. | ■ screw terminals<br>■ single part body<br>■ cable gland and sealing<br>■ strain relief and protection against kinking |
|  | **Plug PowerTOP® Xtra**<br><br>**IP 44**<br><br>Std. Pack. Qty: 5<br><br>Product group 2215.<br>Image 13137. | ■ screw terminals<br>■ rubberised grip area<br>■ frame terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ cable gland and sealing<br>■ strain relief and protection against kinking<br>■ enclosure with thread lock<br>■ two safety slides |
|  | **Plug PowerTOP® Xtra**<br><br>**IP 67**<br><br>Std. Pack. Qty: 5<br><br>Product group 2216.<br>Image 13239. | ■ screw terminals<br>■ rubberised grip area<br>■ frame terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ cable gland and sealing<br>■ strain relief and protection against kinking<br>■ enclosure with thread lock<br>■ two safety slides |
|  | **Connector AM-TOP®**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 3141.<br>Image 2798. | ■ screw terminals<br>■ single part body<br>■ cable gland and sealing<br>■ strain relief and protection against kinking |

| Ampere | Poles | 600 - 690V 50 a. 60 Hz<br>4p 5p<br>5h 5h<br>Part number | Drawing |
|---|---|---|---|
| 16 | 4 | 2113 |  |
| 16 | 5 | 2390 | |
| 32 | 4 | 2114 | |
| 32 | 5 | 2115 | |

| Drawing 2 MB 217 | Amp. Poles | 16 3 | 16 4 | 16 5 | 32 3 | 32 4 | 32 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 142 | 147 | 147 | 186 | 186 | 180 |
| | b | 53 | 59 | 67 | 70 | 70 | 77 |
| | h | 59 | 69,4 | 76 | 81 | 81 | 89,5 |
| | n | 105,2 | 110,5 | 110,5 | 141 | 141 | 135 |
| | y | 14,5 | 16 | 16 | 22 | 22 | 22 |
| Terminal for cond. cross | | 1 | 1 | 1 | 2,5 | 2,5 | 2,5 |
| section (mm²) min.-max. | | —2,5 | —2,5 | —2,5 | —6 | —6 | —6 |

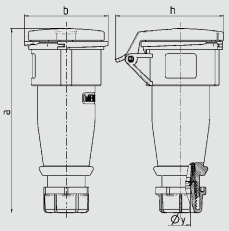
| Ampere | Poles | Part number | Drawing |
|---|---|---|---|
| 63 | 4 | 13136 |  |
| 63 | 5 | 13137 | |

| Drawing 2 MB 226 | Amp. Poles | 63 3 | 63 4 | 63 5 |
|---|---|---|---|---|
| Dim. in mm | a | 250 | 250 | 250 |
| | b | 90 | 90 | 90 |
| | y | 36 | 36 | 36 |
| Terminal for cond. cross | | 6 | 6 | 6 |
| section (mm²) min.-max. | | —16 | —16 | —16 |

| Ampere | Poles | Part number | Drawing |
|---|---|---|---|
| 125 | 4 | 13238 |  |
| 125 | 5 | 13239 | |



| Drawing 2 MB 225 | Amp. Poles | 63 3 | 63 4 | 63 5 | 125 3 | 125 4 | 125 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 250 | 250 | 250 | 290 | 290 | 290 |
| | b | 114 | 114 | 114 | 130 | 130 | 130 |
| | y | 36 | 36 | 36 | 49 | 49 | 49 |
| Terminal for cond. cross | | 6 | 6 | 6 | 25 | 25 | 25 |
| section (mm²) min.-max. | | —16 | —16 | —16 | —50 | —50 | —50 |

| Ampere | Poles | Part number | Drawing |
|---|---|---|---|
| 16 | 4 | 2798 |  |
| 16 | 5 | 2768 | |
| 32 | 4 | 2799 | |
| 32 | 5 | 2769 | |

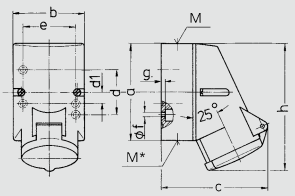
| Drawing 3 MB 63 | Amp. Poles | 16 3 | 16 4 | 16 5 | 32 3 | 32 4 | 32 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 162 | 165 | 167 | 209 | 209 | 208 |
| | b | 60 | 68 | 76 | 82 | 82 | 89 |
| | h | 83 | 92 | 98 | 100 | 100 | 108 |
| | y | 14,5 | 16 | 16 | 22 | 22 | 22 |
| Terminal for cond. cross | | 1 | 1 | 1 | 2,5 | 2,5 | 2,5 |
| section (mm²) min.-max. | | —2,5 | —2,5 | —2,5 | —6 | —6 | —6 |

# Special plugs and sockets ■ Special 1h earth position, 16A - 63A,

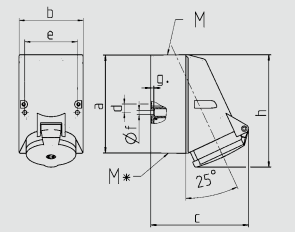
Colour: electric grey. Enclosure and insert made of AMAPLAST.

| Image | Title | Description |
|---|---|---|
|  | **Wall mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1040.<br>Image 2684. | ■ screw terminals<br>■ internal fixing<br>■ one cable entry at top and one blind entry (can be cut out) at bottom<br>■ enclosure base can be turned 180° (for 5 pole design) |
|  | **Wall mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1041.<br>Image 2983A. | ■ screw terminals<br>■ internal fixing<br>■ one cable entry at top and two blind entries (can be cut out) at bottom<br>■ enclosure base can be turned 180° |
|  | **Wall mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 5<br><br>Product group 1041.<br>Image 3719. | ■ screw terminals<br>■ SoftCONTACT<br>■ internal fixing<br>■ one cable entry at top and two blind entries (can be cut out) at bottom<br>■ enclosure base can be turned 180° |
|  | **Panel mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1056.<br>Image 2917A. | ■ screw terminals<br>■ straight |

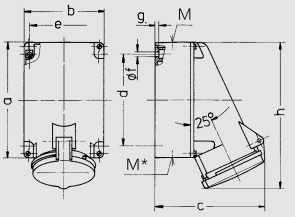
## >50 - 500V

| Ampere | Poles | 3p 4p 5p<br>1h 1h 1h<br>Part number | Drawing |
|---|---|---|---|
| 16 | 3 | 2684 |  |
| 16 | 5 | 2675 | |

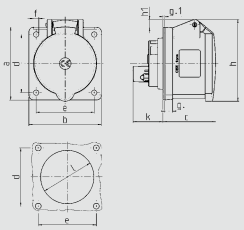
| Drawing | Amp. | 16 | | |
|---|---|---|---|---|
| 1 MB 209 | Poles | 3 | 4 | 5 |
| Dim. in mm | a | 87 | 100 | 100 |
| | b | 64 | 75 | 75 |
| | c | 99 | 110 | 113 |
| | d | 40 | – | – |
| | d1 | – | 11 | 11 |
| | e | 50 | 59 | 59 |
| | f | 4,5 | 5 | 5 |
| | g. | 4 | 4 | 4 |
| | h | 115 | 125 | 128 |
| | M | 20 | 20 | 20 |
| | M* | M20 (blind) to be cut out | | |
| Max. cable diam. (mm) | | 15 | 15 | 15 |
| Terminal for cond. cross section (mm²) min.-max. | | —4 | —4 | —4 |

| Ampere | Poles | 3p 4p 5p<br>1h 1h 1h<br>Part number | Drawing |
|---|---|---|---|
| 16 | 5 | 2840A |  |
| 32 | 4 | 2983A | |
| 32 | 5 | 2676A | |

| Drawing | Amp. | 16 | | 32 | | |
|---|---|---|---|---|---|---|
| 1 MB 43 | Poles | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 128 | 128 | 128 | 128 | 128 |
| | b | 84 | 84 | 84 | 84 | 84 |
| | c | 122 | 124 | 136 | 136 | 138 |
| | d | 11 | 11 | 11 | 11 | 11 |
| | e | 68 | 68 | 68 | 68 | 68 |
| | f | 5,3 | 5,3 | 5,3 | 5,3 | 5,3 |
| | g. | 4 | 4 | 4 | 4 | 4 |
| | h | 144 | 145 | 158 | 158 | 160 |
| | M | 25 | 25 | 32 | 32 | 32 |
| | M* | 2x25 (blind) to be cut out | | 2x25 (blind) to be cut out | | |
| Max. cable diam. (mm) | | 18 | 18 | 18/25 | 18/25 | 18/25 |
| Terminal for cond. cross section (mm²) min.-max. | | —4 | —4 | 2,5 —10 | 2,5 —10 | 2,5 —10 |

| Ampere | Poles | 3p 4p 5p<br>1h 1h 1h<br>Part number | Drawing |
|---|---|---|---|
| 63 | 5 | 3719 |  |

| Drawing | Amp. | 63 | | |
|---|---|---|---|---|
| 1 MB 213 | Poles | 3 | 4 | 5 |
| Dim. in mm | a | 170 | 170 | 170 |
| | b | 118 | 118 | 118 |
| | c | 164 | 164 | 164 |
| | d | 134,5 | 134,5 | 134,5 |
| | e | 103 | 103 | 103 |
| | f | 6,1 | 6,1 | 6,1 |
| | g. | 6 | 6 | 6 |
| | h | 216 | 216 | 216 |
| | M | 40 | 40 | 40 |
| | M* | 2xM40 (blind) to be cut out | | |
| Max. cable diam. (mm) | | 32 | 32 | 32 |
| Terminal for cond. cross section (mm²) min.-max. | | 6 —25 | 6 —25 | 6 —25 |

| Ampere | Poles | 3p 4p 5p<br>1h 1h 1h<br>Part number | Drawing |
|---|---|---|---|
| 16 | 3 | 2973A |  |
| 16 | 5 | 2917A | |
| 32 | 5 | 2997A | |

| Drawing | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| 1 MB 247 | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 75 | 75 | 75 | 75 | 75 | 75 |
| | b | 75 | 75 | 75 | 75 | 75 | 75 |
| | c | 53 | 53 | 55 | 64 | 64 | 65 |
| | d | 60 | 60 | 60 | 60 | 60 | 60 |
| | e | 60 | 60 | 60 | 60 | 60 | 60 |
| | f | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 |
| | g. | 8 | 8 | 8 | 8 | 8 | 8 |
| | g.1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | h | 75 | 80 | 83 | 89 | 89 | 100 |
| | h1 | | 6 | 8 | 11 | 11 | 12 |
| | k | 31 | 32 | 32 | 39 | 39 | 39 |
| | l | 43 | 52 | 54 | 58 | 58 | 62 |
| Terminal for cond. cross section (mm²) min.-max. | | 1.5 —4 | 1.5 —4 | 1.5 —4 | 2.5 —10 | 2.5 —10 | 2.5 —10 |

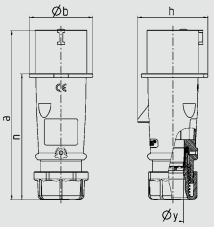
# Special plugs and sockets ■ Special 1h earth position, 16A - 63A,

Colour: grey or electric grey. Enclosure and insert made of AMAPLAST.

| Image | Title | Description |
|---|---|---|
|  | **Plug AM-TOP®**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 2141.<br>Image 2685. | ■ screw terminals<br>■ single part body<br>■ cable gland and sealing<br>■ strain relief and protection against kinking |
|  | **Plug PowerTOP® Xtra**<br><br>**IP 67**<br><br>Std. Pack. Qty: 5<br><br>Product group 2216.<br>Image 13248. | ■ screw terminals<br>■ rubberised grip area<br>■ frame terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ cable gland and sealing<br>■ strain relief and protection against kinking<br>■ enclosure with thread lock<br>■ two safety slides |
|  | **Wall mounted inlet**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 2045.<br>Image 3230. | ■ screw terminals |
|  | **Connector AM-TOP®**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 3141.<br>Image 3007. | ■ screw terminals<br>■ single part body<br>■ cable gland and sealing<br>■ strain relief and protection against kinking |
|  | **Connector PowerTOP® Xtra**<br><br>**IP 67**<br><br>Std. Pack. Qty: 5<br><br>Product group 3216.<br>Image 14248. | ■ screw terminals<br>■ SoftCONTACT<br>■ rubberised grip area<br>■ frame terminals<br>■ highly heat resistant contact carrier<br>■ cable gland and sealing<br>■ strain relief and protection against kinking<br>■ enclosure with thread lock<br>■ two safety slides |

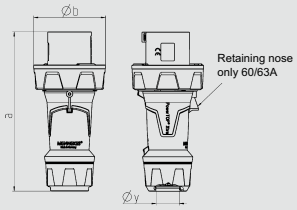
## >50 - 500V

| Ampere | Poles | 3p 4p 5p<br>1h 1h 1h<br>Part number | Drawing |
|---|---|---|---|
| 16 | 3 | 2685 | |
| 16 | 5 | 2677 | |
| 32 | 4 | 2801 | |
| 32 | 5 | 2678 | |



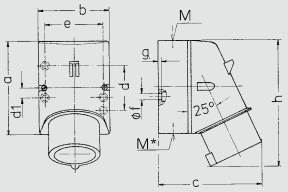

| Drawing 2 MB 217 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 142 | 147 | 147 | 186 | 186 | 180 |
| | b | 53 | 59 | 67 | 70 | 70 | 77 |
| | h | 59 | 69,4 | 76 | 81 | 81 | 89,5 |
| | n | 105,2 | 110,5 | 110,5 | 141 | 141 | 135 |
| | y | 14,5 | 16 | 16 | 22 | 22 | 22 |
| Terminal for cond. cross | | 1 | 1 | 1 | 2,5 | 2,5 | 2,5 |
| section (mm²) min.-max. | | —2,5 | —2,5 | —2,5 | —6 | —6 | —6 |

| Ampere | Poles | Part number | Drawing |
|---|---|---|---|
| 63 | 5 | 13248 | |



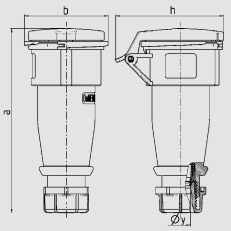

| Drawing 2 MB 225 | Amp. | 63 | | | 125 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 250 | 250 | 250 | 290 | 290 | 290 |
| | b | 114 | 114 | 114 | 130 | 130 | 130 |
| | y | 36 | 36 | 36 | 49 | 49 | 49 |
| Terminal for cond. cross | | 6 | 6 | 6 | 25 | 25 | 25 |
| section (mm²) min.-max. | | —16 | —16 | —16 | —50 | —50 | —50 |

| Ampere | Poles | Part number | Drawing |
|---|---|---|---|
| 16 | 3 | 3230 | |



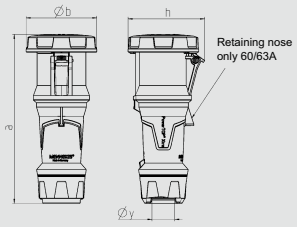

| Drawing 2 MB 32 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 87 | 100 | 100 | 128 | 128 | 128 |
| | b | 64 | 75 | 75 | 84 | 84 | 84 |
| | c | 93 | 106 | 110 | 133 | 133 | 135 |
| | d | 40 | — | — | — | — | — |
| | d1 | — | 10,5 | 10,5 | 11 | 11 | 11 |
| | e | 50,5 | 59 | 59 | 68 | 68 | 68 |
| | f | 4,5 | 5 | 5 | 5,3 | 5,3 | 5,3 |
| | g. | 4 | 4 | 4 | 4 | 4 | 4 |
| | h | 122 | 133 | 135 | 169 | 169 | 170 |
| | M | 20 | 20 | 20 | 32 | 32 | 32 |
| | M* | 1x20 (blind) to be cut out | | | 2x25 (blind) to be cut out | | |
| Max. cable diam. (mm) | | 15 | 15 | 15 | 18/25 | 18/25 | 18/25 |
| Terminal for cond. cross | | 1 | 1 | 1 | 2,5 | 2,5 | 2,5 |
| section (mm²) min.-max. | | —2,5 | —2,5 | —2,5 | —6 | —6 | —6 |

| Ampere | Poles | Part number | Drawing |
|---|---|---|---|
| 16 | 3 | 3007 | |
| 16 | 5 | 2918 | |
| 32 | 5 | 3229 | |




| Drawing 3 MB 63 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 162 | 165 | 167 | 209 | 209 | 208 |
| | b | 60 | 68 | 76 | 82 | 82 | 89 |
| | h | 83 | 92 | 98 | 100 | 100 | 108 |
| | y | 14,5 | 16 | 16 | 22 | 22 | 22 |
| Terminal for cond. cross | | 1 | 1 | 1 | 2,5 | 2,5 | 2,5 |
| section (mm²) min.-max. | | —2,5 | —2,5 | —2,5 | —6 | —6 | —6 |

| Ampere | Poles | Part number | Drawing |
|---|---|---|---|
| 63 | 5 | 14248 | |




| Drawing 3 MB 68 | Amp. | 63 | | | 125 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 270 | 270 | 270 | 310 | 310 | 310 |
| | b | 113 | 113 | 113 | 125 | 125 | 125 |
| | h | 123 | 123 | 123 | 135 | 135 | 135 |
| | y | 36 | 36 | 36 | 49 | 49 | 49 |
| Terminal for cond. cross | | 6 | 6 | 6 | 25 | 25 | 25 |
| section (mm²) min.-max. | | —16 | —16 | —16 | —50 | —50 | —50 |

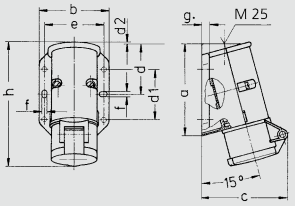
# Special plugs and sockets ■ Low voltages, 16A - 32A, IP 44

to DIN VDE 0623, EN 60309-2. Colour: electric grey and/or colour code. Enclosure and insert made of AMAPLAST.

| Image | Title | Description |
|---|---|---|
|  | **Wall mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1037.<br>Image 1845. | ■ screw terminals<br>■ external fixing<br>■ one cable entry at top and one blind cable entry (can be cut out) at the rear side |
|  | **Wall mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1041.<br>Image 578. | ■ screw terminals<br>■ internal fixing<br>■ one cable entry at top and two blind entries (can be cut out) at bottom<br>■ cable entry also possible from top or from the rear<br>■ enclosure base with stamped recess for quick cutting out<br>■ enclosure base can be turned 180° |
|  | **Panel mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1047.<br>Image 603. | ■ screw terminals<br>■ straight |
|  | **Panel mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1056.<br>Image 1657. | ■ screw terminals<br>■ straight<br>■ also suitable for cable ducts and flush mounted installation boxes |
|  | **Panel mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1045.<br>Image 2855. | ■ screw terminals<br>■ 20° inclination |
|  | **Panel mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1044.<br>Image 2837. | ■ screw terminals<br>■ 20° inclination |

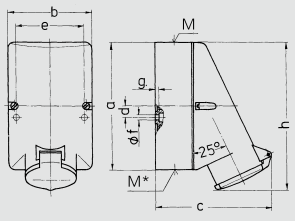
Other voltages and frequencies available on request.

| Ampere | Poles | 20 - 25V 50 a. 60 Hz | 40 - 50V 50 a. 60 Hz | 20 - 25V 40 - 50V 100-200 Hz | 20 - 25V 40 - 50V ⎓ |
|---|---|---|---|---|---|
| | | — | 12h | 4h | 10h |
| | | Part number | | | Drawing |
| 16 | 2 | 1825 | 1831 | | 1829 |
| 16 | 3 | 1832 | 1837 | 1835 | |
| 32 | 2 | 1838 | 1844 | | 1842 |
| 32 | 3 | 1845 | 1850 | 1848 | |



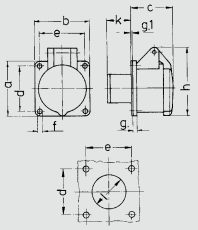

| Drawing 1 MB 294 | Amp. Poles | 16 2 | 16 3 | 32 2 | 32 3 |
|---|---|---|---|---|---|
| Dim. in mm | a | 96 | 96 | 96 | 96 |
| | b | 73 | 73 | 73 | 73 |
| | c | 90 | 90 | 90 | 90 |
| | d | 53 | 53 | 53 | 53 |
| | d1 | 52 | 52 | 52 | 52 |
| | d2 | 2 | 2 | 2 | 2 |
| | e | 62 | 62 | 62 | 62 |
| | f | 5,3 | 5,3 | 5,3 | 5,3 |
| | g | 8 | 8 | 8 | 8 |
| | h | 129 | 129 | 129 | 129 |
| Terminal for cond. cross section (mm²) min.-max. | | 4 —10 | 4 —10 | 4 —10 | 4 —10 |

| | | | | | |
|---|---|---|---|---|---|
| 16 | 2 | 577 | 578 | | 583 |
| 16 | 3 | 584 | 585 | 586 | |
| 32 | 2 | 590 | 591 | | 596 |
| 32 | 3 | 597 | 598 | 599 | |



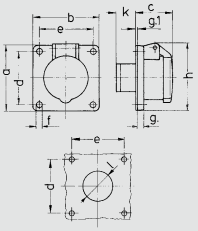

| Drawing 1 MB 137 | Amp. Poles | 16 2 | 16 3 | 32 2 | 32 3 |
|---|---|---|---|---|---|
| Dim. in mm | a | 128 | 128 | 128 | 128 |
| | b | 84 | 84 | 84 | 84 |
| | c | 120 | 120 | 120 | 120 |
| | d | 11 | 11 | 11 | 11 |
| | e | 68 | 68 | 68 | 68 |
| | f | 5,3 | 5,3 | 5,3 | 5,3 |
| | g. | 4 | 4 | 4 | 4 |
| | h | 146 | 146 | 146 | 146 |
| | M | 25 | 25 | 32 | 32 |
| | M* | 2x25 (blind) to be cut out | | 2x25 (blind) to be cut out | |
| Max. cable diam. (mm) | | 18 | 18 | 25 | 25 |
| Terminal for cond. cross section (mm²) min.-max. | | —2x6 | —10 | —2x6 | —10 |

| | | | | | |
|---|---|---|---|---|---|
| 16 | 2 | 603 | 604 | | 609 |
| 16 | 3 | 610 | 611 | 612 | |
| 32 | 2 | 616 | 617 | | 622 |
| 32 | 3 | 623 | 624 | 625 | |



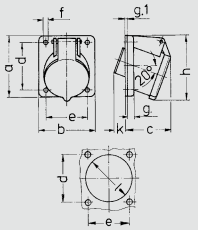

| Drawing 1 MB 136 | Amp. Poles | 16 2 | 16 3 | 32 2 | 32 3 |
|---|---|---|---|---|---|
| Dim. in mm | a | 55 | 55 | 55 | 55 |
| | b | 55 | 55 | 55 | 55 |
| | c | 44 | 44 | 44 | 44 |
| | d | 45 | 45 | 45 | 45 |
| | e | 45 | 45 | 45 | 45 |
| | f | 4,2 | 4,2 | 4,2 | 4,2 |
| | g. | 8 | 8 | 8 | 8 |
| | g.1 | 2 | 2 | 2 | 2 |
| | h | 67 | 67 | 67 | 67 |
| | k | 22 | 22 | 22 | 22 |
| | l | 34 | 34 | 34 | 34 |
| Terminal for cond. cross section (mm²) min.-max. | | 4 —10 | 4 —10 | 4 —10 | 4 —10 |

| | | | | | |
|---|---|---|---|---|---|
| 16 | 2 | 1602 | 1603 | | 2617A |
| 16 | 3 | 1657 | 1661 | 1823 | |
| 32 | 2 | 1693 | 3290 | | 2488A |
| 32 | 3 | 1594 | 1595 | 1579 | |



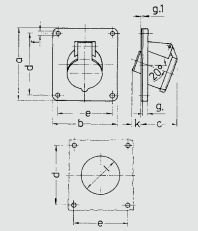

| Drawing 1 MB 292 | Amp. Poles | 16 2 | 16 3 | 32 2 | 32 3 |
|---|---|---|---|---|---|
| Dim. in mm | a | 75 | 75 | 75 | 75 |
| | b | 75 | 75 | 75 | 75 |
| | c | 44 | 44 | 44 | 44 |
| | d | 60 | 60 | 60 | 60 |
| | e | 60 | 60 | 60 | 60 |
| | f | 5,5 | 5,5 | 5,5 | 5,5 |
| | g. | 8 | 8 | 8 | 8 |
| | g.1 | 2 | 2 | 2 | 2 |
| | h | 77 | 77 | 77 | 77 |
| | k | 22 | 22 | 22 | 22 |
| | l | 34 | 34 | 34 | 34 |
| Terminal for cond. cross section (mm²) min.-max. | | 4 —10 | 4 —10 | 4 —10 | 4 —10 |

| | | | | | |
|---|---|---|---|---|---|
| 16 | 2 | 1270 | 2855 | | 2841 |
| 16 | 3 | 2845 | 1272 | 2860 | |
| 32 | 2 | 1271 | 2864 | | 2869 |
| 32 | 3 | 2870 | 1273 | 2852 | |




| Drawing 1 MB 231 | Amp. Poles | 16 2 | 16 3 | 32 2 | 32 3 |
|---|---|---|---|---|---|
| Dim. in mm | a | 68 | 68 | 68 | 68 |
| | b | 62 | 62 | 62 | 62 |
| | c | 42 | 42 | 42 | 42 |
| | d | 53 | 53 | 53 | 53 |
| | e | 47 | 47 | 47 | 47 |
| | f | 4,5 | 4,5 | 4,5 | 4,5 |
| | g. | 8 | 8 | 8 | 8 |
| | g.1 | 2 | 2 | 2 | 2 |
| | h | 72 | 72 | 72 | 72 |
| | k | 32 | 32 | 32 | 32 |
| | l | 55 | 55 | 55 | 55 |
| Terminal for cond. cross section (mm²) min.-max. | | 4 —10 | 4 —10 | 4 —10 | 4 —10 |

| | | | |
|---|---|---|---|
| 32 | 3 | | 2837 |




| Drawing 1 MB 236 | Amp. Poles | 32 3 |
|---|---|---|
| Dim. in mm | a | 100 |
| | b | 92 |
| | c | 42 |
| | d | 85 |
| | e | 77 |
| | f | 5,1 |
| | g. | 8 |
| | g.1 | 2 |
| | k | 31 |
| | l | 60 |
| Terminal for cond. cross section (mm²) min.-max. | | 4 —10 |

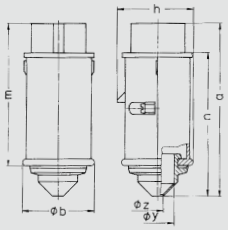
# Special plugs and sockets ■ Low voltages, 16A - 32A, IP 44

to DIN VDE 0623, EN 60309-2. Colour: electric grey and/or colour code. Enclosure and insert made of AMAPLAST.

| Image | Title | Description |
|---|---|---|
|  | **Plug**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 2074.<br>Image 637A. | ■ screw terminals<br>■ with grommet |
|  | **Plug**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 2075.<br>Image 677A. | ■ screw terminals<br>■ with cable gland |
|  | **Wall mounted inlet**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 2045.<br>Image 1962. | ■ screw terminals<br>■ external fixing<br>■ one cable entry at top and one blind cable entry (can be cut out) at the back side |
|  | **Connector**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 3074.<br>Image 681A. | ■ screw terminals<br>■ with grommet |
|  | **Connector**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 3075.<br>Image 729A. | ■ screw terminals<br>■ with cable gland |

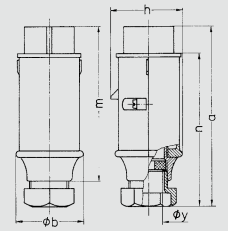
Other voltages and frequencies available on request.

| Ampere | Poles | 20 - 25V 50 a. 60 Hz | 40 - 50V 50 a. 60 Hz | 20 - 25V 40 - 50V 100-200 Hz | 20 - 25V 40 - 50V ⎓ |
|---|---|---|---|---|---|
| | | — | 12h | 4h | 10h |
| | | Part number | | | Drawing |
| 16 | 2 | 629A | 630A | | 635A |
| 16 | 3 | 636A | 637A | 638A | |
| 32 | 2 | 642A | 643A | | 648A |
| 32 | 3 | 649A | 650A | 651A | |



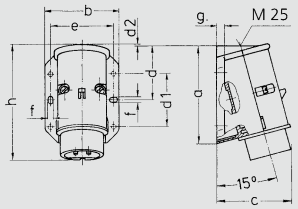

| Drawing 2 MB 159 | Amp. / Poles | 16 2 | 16 3 | 32 2 | 32 3 |
|---|---|---|---|---|---|
| Dim. in mm | a | 130 | 130 | 130 | 130 |
| | b | 55 | 55 | 55 | 55 |
| | h | 58 | 58 | 58 | 58 |
| | m | 108 | 108 | 108 | 108 |
| | n | 107 | 107 | 107 | 107 |
| | y | 25 | 25 | 25 | 25 |
| | z | 9 | 9 | 9 | 9 |
| Terminal for cond. cross section (mm²) min.-max. | | 4 —10 | 4 —10 | 4 —10 | 4 —10 |

| | | | | | |
|---|---|---|---|---|---|
| 16 | 2 | 655A | 656A | | 661A |
| 16 | 3 | 662A | 663A | 664A | |
| 32 | 2 | 668A | 669A | | 674A |
| 32 | 3 | 675A | 676A | 677A | |



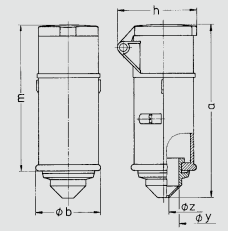

| Drawing 2 MB 158 | Amp. / Poles | 16 2 | 16 3 | 32 2 | 32 3 |
|---|---|---|---|---|---|
| Dim. in mm | a | 150 | 150 | 150 | 150 |
| | b | 55 | 55 | 55 | 55 |
| | h | 58 | 58 | 58 | 58 |
| | m | 128 | 128 | 128 | 128 |
| | n | 130 | 130 | 130 | 130 |
| | y | 24,7 | 24,7 | 24,7 | 24,7 |
| Terminal for cond. cross section (mm²) min.-max. | | 4 —10 | 4 —10 | 4 —10 | 4 —10 |

| | | | | | |
|---|---|---|---|---|---|
| 16 | 2 | 1955 | 1961 | | 1959 |
| 16 | 3 | 1962 | 1967 | 1965 | |
| 32 | 2 | 1968 | 1974 | | 1972 |
| 32 | 3 | 1975 | 1980 | 1978 | |



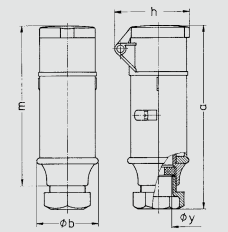

| Drawing 2 MB 160 | Amp. / Poles | 16 2 | 16 3 | 32 2 | 32 3 |
|---|---|---|---|---|---|
| Dim. in mm | a | 96 | 96 | 96 | 96 |
| | b | 73 | 73 | 73 | 73 |
| | c | 74 | 74 | 74 | 74 |
| | d | 53 | 53 | 53 | 53 |
| | d1 | 52 | 52 | 52 | 52 |
| | d2 | 2 | 2 | 2 | 2 |
| | e | 62 | 62 | 62 | 62 |
| | f | 5,3 | 5,3 | 5,3 | 5,3 |
| | g. | 8 | 8 | 8 | 8 |
| | h | 116 | 116 | 116 | 116 |
| Terminal for cond. cross section (mm²) min.-max. | | 4 —10 | 4 —10 | 4 —10 | 4 —10 |

| | | | | | |
|---|---|---|---|---|---|
| 16 | 2 | 681A | 682A | | 687A |
| 16 | 3 | 688A | 689A | 690A | |
| 32 | 2 | 694A | 695A | | 700A |
| 32 | 3 | 701A | 702A | 703A | |




| Drawing 3 MB 37 | Amp. / Poles | 16 2 | 16 3 | 32 2 | 32 3 |
|---|---|---|---|---|---|
| Dim. in mm | a | 144 | 144 | 144 | 144 |
| | b | 55 | 55 | 55 | 55 |
| | h | 67 | 67 | 67 | 67 |
| | m | 122 | 122 | 122 | 122 |
| | y | 25 | 25 | 25 | 25 |
| | z | 9 | 9 | 9 | 9 |
| Terminal for cond. cross section (mm²) min.-max. | | 4 —10 | 4 —10 | 4 —10 | 4 —10 |

| | | | | | |
|---|---|---|---|---|---|
| 16 | 2 | 707A | 708A | | 713A |
| 16 | 3 | 714A | 715A | 716A | |
| 32 | 2 | 720A | 721A | | 726A |
| 32 | 3 | 727A | 728A | 729A | |



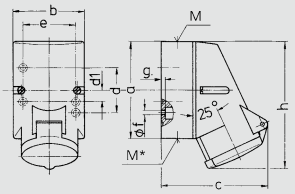
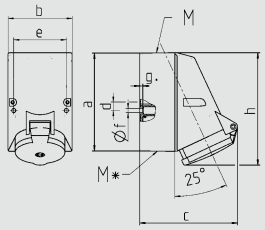
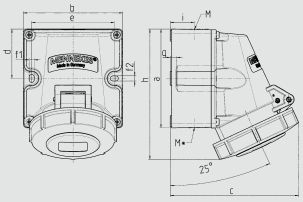
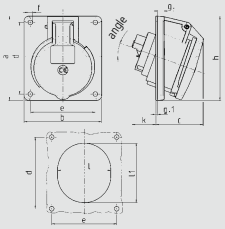
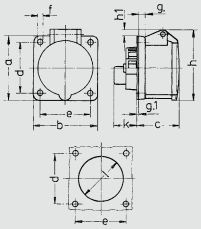
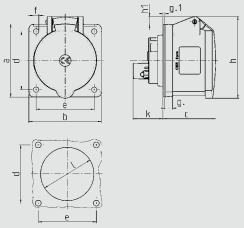

| Drawing 3 MB 36 | Amp. / Poles | 16 2 | 16 3 | 32 2 | 32 3 |
|---|---|---|---|---|---|
| Dim. in mm | a | 164 | 164 | 164 | 164 |
| | b | 55 | 55 | 55 | 55 |
| | h | 67 | 67 | 67 | 67 |
| | m | 142 | 142 | 142 | 142 |
| | y | 24,7 | 24,7 | 24,7 | 24,7 |
| Terminal for cond. cross section (mm²) min.-max. | | 4 —10 | 4 —10 | 4 —10 | 4 —10 |

# Special plugs and sockets ■ Isolating transformer, 16A - 32A,

Colour: electric grey. Enclosure and insert made of AMAPLAST.

| Image | Title | Description |
|---|---|---|
|  | **Wall mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1040.<br>Image 767. | ■ screw terminals<br>■ internal fixing<br>■ one cable entry at top and two blind cable entries (can be cut out) at bottom<br>■ in 4 pole version enclosure base can be turned 180° |
|  | **Wall mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1041.<br>Image 3147. | ■ screw terminals<br>■ internal fixing<br>■ one cable entry at top and two blind cable entries (can be cut out) at bottom<br>■ enclosure base can be turned 180° |
|  | **Wall mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10<br><br>Product group 1349.<br>Image 9377. | ■ screw terminals<br>■ two external fixings<br>■ one cable entry at top and two blind cable entries (can be cut out) at bottom<br>■ enclosure base can be turned 180°<br>■ receptacles are designed for adding an auxiliary contact switch |
|  | **Panel mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1044.<br>Image 3219. | ■ screw terminals<br>■ 20° inclination |
|  | **Panel mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1055.<br>Image 3222. | ■ screw terminals<br>■ straight |
|  | **Panel mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1056.<br>Image 3067. | ■ screw terminals<br>■ straight |

Other versions available on request.

| Ampere | Poles | Isolating transformer 3p 12h / 4p 12h — Part number | Drawing |
|---|---|---|---|
| 16 | 3 | 767 |  |
| 16 | 4 | 768 | |
| 32 | 3 | 3141 |  |
| 32 | 4 | 3147 | |
| 16 | 3 | 9304 |  |
| 16 | 4 | 9327 | |
| 32 | 3 | 9354 | |
| 32 | 4 | 9377 | |
| 16 | 3 | 3217 |  |
| 16 | 4 | 3218 | |
| 32 | 3 | 3219 | |
| 32 | 4 | 3220 | |
| 16 | 3 | 3221 |  |
| 16 | 4 | 3222 | |
| 16 | 3 | 3053 |  |
| 16 | 4 | 3052 | |
| 32 | 3 | 3088 | |
| 32 | 4 | 3067 | |

| Drawing 1 MB 209 | Amp. / Poles | 16 3 | 16 4 | 16 5 |
|---|---|---|---|---|
| Dim. in mm | a | 87 | 100 | 100 |
| | b | 64 | 75 | 75 |
| | c | 99 | 110 | 113 |
| | d | 40 | – | – |
| | d1 | – | 11 | 11 |
| | e | 50 | 59 | 59 |
| | f | 4,5 | 5 | 5 |
| | g. | 4 | 4 | 4 |
| | h | 115 | 125 | 128 |
| | M | 20 | 20 | 20 |
| | M* | M20 (blind) to be cut out | | |
| Max. cable diam. (mm) | | 15 | 15 | 15 |
| Terminal for cond. cross section (mm²) min.-max. | | –4 | –4 | –4 |

| Drawing 1 MB 43 | Amp. / Poles | 16 4 | 16 5 | 32 3 | 32 4 | 32 5 |
|---|---|---|---|---|---|---|
| Dim. in mm | a | 128 | 128 | 128 | 128 | 128 |
| | b | 84 | 84 | 84 | 84 | 84 |
| | c | 122 | 124 | 136 | 136 | 138 |
| | d | 11 | 11 | 11 | 11 | 11 |
| | e | 68 | 68 | 68 | 68 | 68 |
| | f | 5,3 | 5,3 | 5,3 | 5,3 | 5,3 |
| | g. | 4 | 4 | 4 | 4 | 4 |
| | h | 144 | 145 | 158 | 158 | 160 |
| | M | 25 | 25 | 32 | 32 | 32 |
| | M* | 2x25 (blind) to be cut out | | 2x25 (blind) to be cut out | | |
| Max. cable diam. (mm) | | 18 | 18 | 18/25 | 18/25 | 18/25 |
| Terminal for cond. cross section (mm²) min.-max. | | –4 | –4 | –10 | –10 | –10 |

| Drawing 1 MB 622 | Amp. / Poles | 16 3 | 16 4 | 16 5 | 32 3 | 32 4 | 32 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 100 | 100 | 100 | 100 | 100 | 100 |
| | b | 101 | 101 | 101 | 109 | 109 | 109 |
| | c | 117 | 125 | 131 | 157 | 157 | 160 |
| | d | 50 | 50 | 50 | 50 | 50 | 50 |
| | e | 84 | 84 | 84 | 92 | 92 | 92 |
| | f1 | 5,3 | 5,3 | 5,3 | 5,3 | 5,3 | 5,3 |
| | f2 | 5,3 | 5,3 | 5,3 | 5,3 | 5,3 | 5,3 |
| | g | 6,5 | 6,5 | 6,5 | 6,5 | 6,5 | 6,5 |
| | h | 131 | 131 | 132 | 148 | 148 | 148 |
| | i | 24,7 | 24,7 | 24,7 | 27,5 | 27,5 | 27,5 |
| | M | 25 (optional M20) | | | 32 (optional M25) | | |
| | M* | 2x25 (blind) to be cut out | | | 2x25 (blind) to be cut out | | |
| Max. cable diam. (mm) | | 18 (M25) and 15 (M20) | | | 25 (M32) and 18 (M25) | | |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 –4 | 1,5 –4 | 1,5 –4 | 2,5 –6 | 2,5 –6 | 2,5 –6 |

| Drawing 1 MB 260 | Amp. / Poles | 16 3 | 16 4 | 16 5 | 32 3 | 32 4 | 32 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 73.5 | 100 | 100 | 100 | 100 | 100 |
| | b | 64 | 92 | 92 | 92 | 92 | 92 |
| | c | 50 | 59 | 58 | 62 | 62 | 61 |
| | d | 60 | 85 | 85 | 85 | 85 | 85 |
| | e | 52 | 77 | 77 | 77 | 77 | 77 |
| | f | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 |
| | g. | 7 | 8 | 8 | 8 | 8 | 8 |
| | g.1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | h | 79 | 100 | 100 | 103 | 103 | 106 |
| | k | 44 | 34 | 34 | 54 | 54 | 49 |
| | l | 52 | 55 | 65 | 67 | 67 | 72 |
| | l1 | 60 | 63 | 72 | 82 | 82 | 85 |
| | α | 20° | 20° | 20° | 20° | 20° | 20° |
| Terminal for cond. cross section (mm²) min.-max. | | 1.5 –4 | 1.5 –4 | 1.5 –4 | 2.5 –10 | 2.5 –10 | 2.5 –10 |

| Drawing 1 MB 259 | Amp. / Poles | 16 3 | 16 4 | 16 5 |
|---|---|---|---|---|
| Dim. in mm | a | 62 | 72 | 72 |
| | b | 62 | 65 | 65 |
| | c | 54 | 54 | 54 |
| | d | 47 | 52 | 52 |
| | e | 47 | 52 | 52 |
| | f | 5,5 | 5,5 | 5,5 |
| | g. | 8 | 8 | 8 |
| | g.1 | 2 | 2 | 2 |
| | h | 68 | 77 | 85 |
| | h1 | 7 | 7 | 11 |
| | k | 28 | 28 | 28 |
| | l | 50 | 52 | 57 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 –4 | 1,5 –4 | 1,5 –4 |

| Drawing 1 MB 247 | Amp. / Poles | 16 3 | 16 4 | 16 5 | 32 3 | 32 4 | 32 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 75 | 75 | 75 | 75 | 75 | 75 |
| | b | 75 | 75 | 75 | 75 | 75 | 75 |
| | c | 53 | 53 | 55 | 64 | 64 | 65 |
| | d | 60 | 60 | 60 | 60 | 60 | 60 |
| | e | 60 | 60 | 60 | 60 | 60 | 60 |
| | f | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 |
| | g. | 8 | 8 | 8 | 8 | 8 | 8 |
| | g.1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | h | 75 | 80 | 83 | 89 | 89 | 100 |
| | h1 | | 6 | 8 | 11 | 11 | 12 |
| | k | 31 | 32 | 32 | 39 | 39 | 39 |
| | l | 43 | 52 | 54 | 58 | 58 | 62 |
| Terminal for cond. cross section (mm²) min.-max. | | 1.5 –4 | 1.5 –4 | 1.5 –4 | 2.5 –10 | 2.5 –10 | 2.5 –10 |

# Special plugs and sockets ■ Isolating transformer, 16A - 32A,

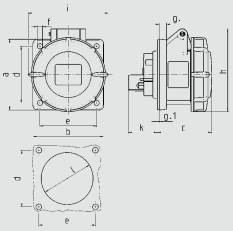
Colour: electric grey. Enclosure and insert made of AMAPLAST.

| Image | Title | Description |
|---|---|---|
|  | **Panel mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10<br><br>Product group 1046.<br>Image 809A. | ■ screw terminals<br>■ straight |
|  | **Plug AM-TOP®**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 2141.<br>Image 862. | ■ screw terminals<br>■ single part body<br>■ cable gland and sealing<br>■ strain relief and protection against kinking |
|  | **Plug AM-TOP®**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10<br><br>Product group 2149.<br>Image 886. | ■ screw terminals<br>■ single part body<br>■ cable gland and sealing<br>■ strain relief and protection against kinking |
|  | **Connector AM-TOP®**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 3141.<br>Image 1003. | ■ screw terminals<br>■ single part body<br>■ cable gland and sealing<br>■ strain relief and protection against kinking |
|  | **Connector AM-TOP®**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10<br><br>Product group 3149.<br>Image 1029. | ■ screw terminals<br>■ single part body<br>■ cable gland and sealing<br>■ strain relief and protection against kinking |

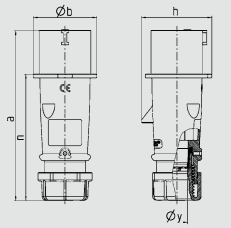
Other versions available on request.

## Isolating transformer

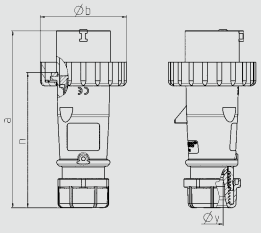
3p 4p
12h 12h

| Ampere | Poles | Part number | Drawing |
|---|---|---|---|
| 16 | 3 | 806A |  |
| 16 | 4 | 807A | |
| 32 | 3 | 808A | |
| 32 | 4 | 809A | |

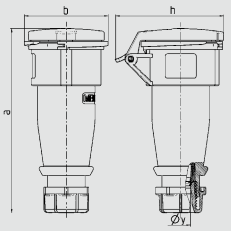
| Drawing 1 MB 141 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 75 | 75 | 75 | 85 | 85 | 85 |
| | b | 75 | 75 | 75 | 75 | 75 | 75 |
| | c | 60 | 61 | 61 | 70 | 70 | 72 |
| | d | 60 | 60 | 60 | 60 | 60 | 60 |
| | e | 60 | 60 | 60 | 60 | 60 | 60 |
| | f | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 |
| | g | 8 | 8 | 8 | 8 | 8 | 8 |
| | g.1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | h | 83 | 88 | 95 | 99 | 99 | 105 |
| | i | 78 | 85 | 96 | 103 | 103 | 110 |
| | k | 31 | 32 | 32 | 39 | 39 | 39 |
| | l | 43 | 52 | 54 | 58 | 58 | 65 |
| Terminal for cond. cross section (mm²) min.-max. | | 1.5 —4 | 1.5 —4 | 1.5 —4 | 2.5 —10 | 2.5 —10 | 2.5 —10 |

| 16 | 3 | 860 |  |
|---|---|---|---|
| 16 | 4 | 861 | |
| 32 | 3 | 862 | |
| 32 | 4 | 863 | |

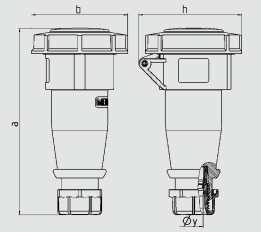
| Drawing 2 MB 217 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 142 | 147 | 147 | 186 | 186 | 180 |
| | b | 53 | 59 | 67 | 70 | 70 | 77 |
| | h | 59 | 69,4 | 76 | 81 | 81 | 89,5 |
| | n | 105,2 | 110,5 | 110,5 | 141 | 141 | 135 |
| | y | 14,5 | 16 | 16 | 22 | 22 | 22 |
| Terminal for cond. cross section (mm²) min.-max. | | 1 —2,5 | 1 —2,5 | 1 —2,5 | 2,5 —6 | 2,5 —6 | 2,5 —6 |

| 16 | 3 | 886 |  |
|---|---|---|---|
| 16 | 4 | 887 | |
| 32 | 3 | 888 | |
| 32 | 4 | 889 | |

| Drawing 2 MB 218 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 142 | 144 | 147 | 186 | 186 | 180 |
| | b | 70 | 78 | 87 | 94 | 94 | 101 |
| | n | 109 | 111 | 114 | 145 | 145 | 138 |
| | y | 14,5 | 16 | 16 | 22 | 22 | 22 |
| Terminal for cond. cross section (mm²) min.-max. | | 1 —2,5 | 1 —2,5 | 1 —2,5 | 2,5 —6 | 2,5 —6 | 2,5 —6 |

| 16 | 3 | 1003 |  |
|---|---|---|---|
| 16 | 4 | 1004 | |
| 32 | 3 | 1005 | |
| 32 | 4 | 1006 | |

| Drawing 3 MB 63 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 162 | 165 | 167 | 209 | 209 | 208 |
| | b | 60 | 68 | 76 | 82 | 82 | 89 |
| | h | 83 | 92 | 98 | 100 | 100 | 108 |
| | y | 14,5 | 16 | 16 | 22 | 22 | 22 |
| Terminal for cond. cross section (mm²) min.-max. | | 1 —2,5 | 1 —2,5 | 1 —2,5 | 2,5 —6 | 2,5 —6 | 2,5 —6 |

| 16 | 3 | 1029 |  |
|---|---|---|---|
| 16 | 4 | 1030 | |
| 32 | 3 | 1031 | |
| 32 | 4 | 1032 | |

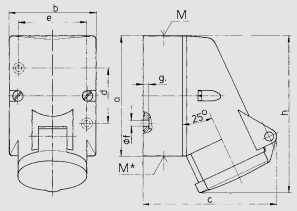
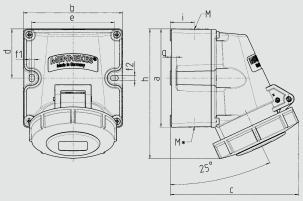
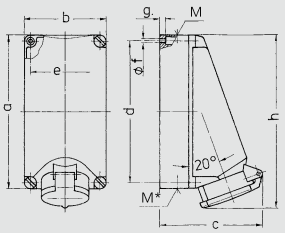
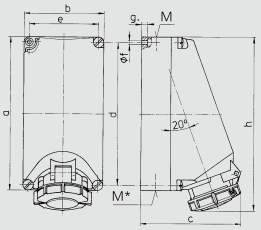
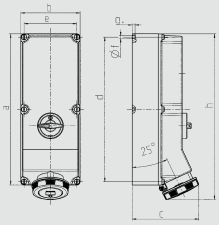
| Drawing 3 MB 62 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 146 | 166 | 172 | 212 | 212 | 213 |
| | b | 72 | 79 | 89 | 96 | 96 | 102 |
| | h | 80 | 88 | 95 | 98 | 98 | 105 |
| | y | 14,5 | 16 | 16 | 22 | 22 | 22 |
| Terminal for cond. cross section (mm²) min.-max. | | 1 —2,5 | 1 —2,5 | 1 —2,5 | 2,5 —6 | 2,5 —6 | 2,5 —6 |

# Special plugs and sockets ■ DC, 16A - 63A, IP 44, IP 55 and IP 67

to DIN VDE 0623, EN 60309-2. Colour: electric grey. Enclosure and insert made of AMAPLAST.

| Image | Title | Description |
|---|---|---|
|  | **Wall mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1040.<br>Image 2152. | ■ screw terminals<br>■ internal fixing<br>■ one cable entry at top and one blind cable entry (can be cut out) at bottom |
|  | **Wall mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10<br><br>Product group 1349.<br>Image 9303. | ■ screw terminals<br>■ two external fixings<br>■ one cable entry at top and two blind cable entries (can be cut out) at bottom<br>■ receptacles are designed for adding an auxiliary contact switch<br>■ enclosure base can be turned 180° |
|  | **Wall mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 1<br><br>Product group 1077.<br>Image 5467. | ■ screw terminals<br>■ switched<br>■ mechanical DODSCH-interlock |
|  | **Wall mounted receptacle**<br><br>**IP 55**<br><br>Std. Pack. Qty: 4<br><br>Product group 1187.<br>Image 7445. | ■ screw terminals<br>■ switched<br>■ mechanical DODSCH-interlock |
|  | **Wall mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 1<br><br>Product group 1074.<br>Image 5806A. | ■ screw terminals<br>■ switched<br>■ mechanical DUO-interlock<br>■ receptacles can be padlocked |

Other versions available on request.

| Ampere | Poles | > 50 - 250V ⎓ 3h | > 250V ⎓ 8h | Drawing |
|---|---|---|---|---|
| | | Part number | | |
| 16 | 3 | 2152 | |  |
| 16 | 3 | 9303 | |  |
| 16 | 3 | 5467 | |  |
| 32 | 3 | 5474 | | |
| 32 | 3 | 7446 | 7445 |  |
| 63 | 3 | 5806A | 5703A |  |

| Drawing | Amp. | 16 |
|---|---|---|
| 1 MB 369 | Poles | 3 |
| Dim. in mm | a | 87 |
| | b | 64 |
| | c | 99 |
| | d | 40 |
| | e | 50 |
| | f | 4,5 |
| | g. | 4 |
| | h | 115 |
| | M | 20 |
| | M* | 20 (blind) to be cut out |
| Max. cable diam. (mm) | | 15 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 |

| Drawing | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| 1 MB 622 | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 100 | 100 | 100 | 100 | 100 | 100 |
| | b | 101 | 101 | 101 | 109 | 109 | 109 |
| | c | 117 | 125 | 131 | 157 | 157 | 160 |
| | d | 50 | 50 | 50 | 50 | 50 | 50 |
| | e | 84 | 84 | 84 | 92 | 92 | 92 |
| | f1 | 5,3 | 5,3 | 5,3 | 5,3 | 5,3 | 5,3 |
| | f2 | 5,3 | 5,3 | 5,3 | 5,3 | 5,3 | 5,3 |
| | g | 6,5 | 6,5 | 6,5 | 6,5 | 6,5 | 6,5 |
| | h | 131 | 131 | 132 | 148 | 148 | 148 |
| | i | 24,7 | 24,7 | 24,7 | 27,5 | 27,5 | 27,5 |
| | M | 25 (optional M20) | | | 32 (optional M25) | | |
| | M* | 2x25 (blind) to be cut out 18 (M25) and 15 (M20) | | | 2x25 (blind) to be cut out 25 (M32) and 18 (M25) | | |
| Max. cable diam. (mm) | | | | | | | |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —6 | 2,5 —6 | 2,5 —6 |

| Drawing | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| 1 MB 142 | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 225 | 225 | 225 | 225 | 225 | 225 |
| | b | 118 | 118 | 118 | 118 | 118 | 118 |
| | c | 139 | 148 | 150 | 150 | 150 | 152 |
| | d | 208 | 208 | 208 | 208 | 208 | 208 |
| | e | 101 | 101 | 101 | 101 | 101 | 101 |
| | f | 6,3 | 6,3 | 6,3 | 6,3 | 6,3 | 6,3 |
| | g. | 8 | 8 | 8 | 8 | 8 | 8 |
| | h | 247 | 252 | 252 | 253 | 253 | 253 |
| | M | 1x25 and 1x32 | | | 1x25 and 1x32 | | |
| | M* | 2x25 | 2x25 | 2x25 | 2x25 | 2x25 | 2x25 |
| Max. cable diam. (mm) | | 25 | 25 | 25 | 25 | 25 | 25 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 2,5 —4 | 2,5 —4 | 2,5 —10 | 2,5 —10 | 2,5 —10 |

| Drawing | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| 1 MB 206 | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 225 | 225 | 225 | 225 | 225 | 225 |
| | b | 118 | 118 | 118 | 118 | 118 | 118 |
| | c | 144 | 150 | 152 | 155 | 155 | 159 |
| | d | 208 | 208 | 208 | 208 | 208 | 208 |
| | e | 101 | 101 | 101 | 101 | 101 | 101 |
| | f | 6,3 | 6,3 | 6,3 | 6,3 | 6,3 | 6,3 |
| | g. | 8 | 8 | 8 | 8 | 8 | 8 |
| | h | 249 | 251 | 253 | 255 | 253 | 259 |
| | M | 1x25 and 1x32 | | | 1x25 and 1x32 | | |
| | M* | 2x25 | 2x25 | 2x25 | 2x25 | 2x25 | 2x25 |
| Max. cable diam. (mm) | | 25 | 25 | 25 | 25 | 25 | 25 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —10 | 2,5 —10 | 2,5 —10 |

| Drawing | Amp. | 63 | | |
|---|---|---|---|---|
| 1 MB 621 | Poles | 3 | 4 | 5 |
| Dim. in mm | a | 460 | 460 | 460 |
| | b | 180 | 180 | 180 |
| | c | 202 | 202 | 202 |
| | d | 440 | 440 | 440 |
| | e | 160 | 160 | 160 |
| | f | 8,1 | 8,1 | 8,1 |
| | g. | 8 | 8 | 8 |
| | h | 505 | 505 | 505 |
| | M | 40 | 40 | 40 |
| | M* | 2x40 | 2x40 | 2x40 |
| Max. cable diam. (mm) | | 27 | 27 | 27 |
| Terminal for cond. cross section (mm²) min.-max. | | 4 —25 | 4 —25 | 4 —25 |

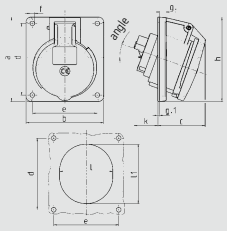
# Special plugs and sockets ■ DC, 16A, IP 44 and IP 67

to DIN VDE 0623, EN 60309-2. Colour: electric grey. Enclosure and insert made of AMAPLAST.

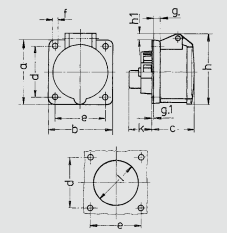
| Image | Title | Description |
|---|---|---|
|  | **Panel mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1044.<br>Image 3214. | ■ screw terminals<br>■ 20° inclination |
|  | **Panel mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1055.<br>Image 3215. | ■ screw terminals<br>■ straight |
|  | **Panel mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1056.<br>Image 3216. | ■ screw terminals<br>■ straight |
|  | **Panel mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10<br><br>Product group 1046.<br>Image 2289A. | ■ screw terminals<br>■ straight |

Other versions available on request.

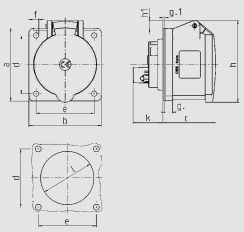
| Ampere | Poles | > 50 - 250V ⎓ 3h Part number | > 250V ⎓ 8h Part number | Drawing |
|---|---|---|---|---|
| 16 | 3 | 3214 | | |
| 16 | 3 | 3215 | | |
| 16 | 3 | 3216 | | |
| 16 | 3 | 2289A | | |



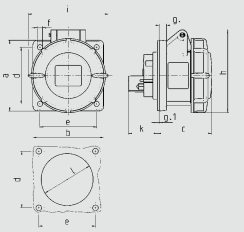
| Drawing 1 MB 260 | Amp. / Poles | 16 3 | 16 4 | 16 5 | 32 3 | 32 4 | 32 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 73.5 | 100 | 100 | 100 | 100 | 100 |
| | b | 64 | 92 | 92 | 92 | 92 | 92 |
| | c | 50 | 59 | 58 | 62 | 62 | 61 |
| | d | 60 | 85 | 85 | 85 | 85 | 85 |
| | e | 52 | 77 | 77 | 77 | 77 | 77 |
| | f | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 |
| | g. | 7 | 8 | 8 | 8 | 8 | 8 |
| | g.1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | h | 79 | 100 | 100 | 103 | 103 | 106 |
| | k | 44 | 34 | 34 | 54 | 54 | 49 |
| | l | 52 | 55 | 65 | 67 | 67 | 72 |
| | l1 | 60 | 63 | 72 | 82 | 82 | 85 |
| | α | 20° | 20° | 20° | 20° | 20° | 20° |
| Terminal for cond. cross section (mm²) min.-max. | | 1.5 —4 | 1.5 —4 | 1.5 —4 | 2.5 —10 | 2.5 —10 | 2.5 —10 |



| Drawing 1 MB 259 | Amp. / Poles | 16 3 | 16 4 | 16 5 |
|---|---|---|---|---|
| Dim. in mm | a | 62 | 72 | 72 |
| | b | 62 | 65 | 65 |
| | c | 54 | 54 | 54 |
| | d | 47 | 52 | 52 |
| | e | 47 | 52 | 52 |
| | f | 5,5 | 5,5 | 5,5 |
| | g. | 8 | 8 | 8 |
| | g.1 | 2 | 2 | 2 |
| | h | 68 | 77 | 85 |
| | h1 | 7 | 7 | 11 |
| | k | 28 | 28 | 28 |
| | l | 50 | 52 | 57 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 |



| Drawing 1 MB 247 | Amp. / Poles | 16 3 | 16 4 | 16 5 | 32 3 | 32 4 | 32 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 75 | 75 | 75 | 75 | 75 | 75 |
| | b | 75 | 75 | 75 | 75 | 75 | 75 |
| | c | 53 | 53 | 55 | 64 | 64 | 65 |
| | d | 60 | 60 | 60 | 60 | 60 | 60 |
| | e | 60 | 60 | 60 | 60 | 60 | 60 |
| | f | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 |
| | g. | 8 | 8 | 8 | 8 | 8 | 8 |
| | g.1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | h | 75 | 80 | 83 | 89 | 89 | 100 |
| | h1 | | 6 | 8 | 11 | 11 | 12 |
| | k | 31 | 32 | 32 | 39 | 39 | 39 |
| | l | 43 | 52 | 54 | 58 | 58 | 62 |
| Terminal for cond. cross section (mm²) min.-max. | | 1.5 —4 | 1.5 —4 | 1.5 —4 | 2.5 —10 | 2.5 —10 | 2.5 —10 |



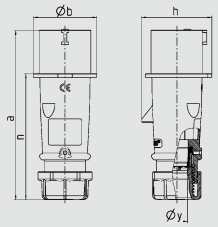
| Drawing 1 MB 141 | Amp. / Poles | 16 3 | 16 4 | 16 5 | 32 3 | 32 4 | 32 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 75 | 75 | 75 | 85 | 85 | 85 |
| | b | 75 | 75 | 75 | 75 | 75 | 75 |
| | c | 60 | 61 | 61 | 70 | 70 | 72 |
| | d | 60 | 60 | 60 | 60 | 60 | 60 |
| | e | 60 | 60 | 60 | 60 | 60 | 60 |
| | f | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 |
| | g. | 8 | 8 | 8 | 8 | 8 | 8 |
| | g.1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | h | 83 | 88 | 95 | 99 | 99 | 105 |
| | i | 78 | 85 | 96 | 103 | 103 | 110 |
| | k | 31 | 32 | 32 | 39 | 39 | 39 |
| | l | 43 | 52 | 54 | 58 | 58 | 65 |
| Terminal for cond. cross section (mm²) min.-max. | | 1.5 —4 | 1.5 —4 | 1.5 —4 | 2.5 —10 | 2.5 —10 | 2.5 —10 |

# Special plugs and sockets ■ DC, 16A - 63A, IP 44 and IP 67

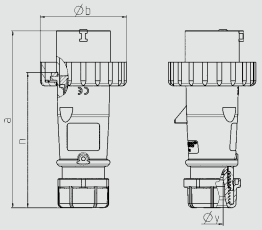
to DIN VDE 0623, EN 60309-2. Colour: grey or electric grey. Enclosure and insert made of AMAPLAST.

| Image | Title | Description |
|---|---|---|
|  | **Plug AM-TOP®**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 2141.<br>Image 2184. | ■ screw terminals<br>■ single part body<br>■ cable gland and sealing<br>■ strain relief and protection against kinking |
|  | **Plug AM-TOP®**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10<br><br>Product group 2149.<br>Image 2422. | ■ screw terminals<br>■ single part body<br>■ cable gland and sealing<br>■ strain relief and protection against kinking |
|  | **Plug PowerTOP® Xtra**<br><br>**IP 67**<br><br>Std. Pack. Qty: 5<br><br>Product group 2216.<br>Image 13240. | ■ screw terminals<br>■ rubberised grip area<br>■ frame terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ cable gland and sealing<br>■ strain relief and protection against kinking<br>■ enclosure with thread lock<br>■ two safety slides |
|  | **Connector AM-TOP®**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 3141.<br>Image 2185. | ■ screw terminals<br>■ single part body<br>■ cable gland and sealing<br>■ strain relief and protection against kinking |
|  | **Connector AM-TOP®**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10<br><br>Product group 3149.<br>Image 2605. | ■ screw terminals<br>■ single part body<br>■ cable gland and sealing<br>■ strain relief and protection against kinking |

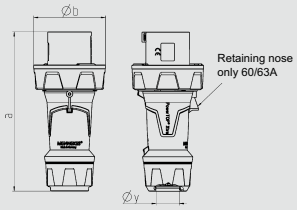
Other versions available on request.

| Ampere | Poles | > 50 - 250V ⎓ 3h | > 250V ⎓ 8h | Drawing |
|---|---|---|---|---|
| | | Part number | | |
| 16 | 3 | 2184 | 2331 |  |
| 32 | 3 | 2211 | 2221 | |

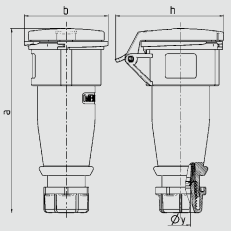
| Drawing 2 MB 217 | Amp. Poles | 16 3 | 16 4 | 16 5 | 32 3 | 32 4 | 32 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 142 | 147 | 147 | 186 | 186 | 180 |
| | b | 53 | 59 | 67 | 70 | 70 | 77 |
| | h | 59 | 69,4 | 76 | 81 | 81 | 89,5 |
| | n | 105,2 | 110,5 | 110,5 | 141 | 141 | 135 |
| | y | 14,5 | 16 | 16 | 22 | 22 | 22 |
| Terminal for cond. cross | | 1 | 1 | 1 | 2,5 | 2,5 | 2,5 |
| section (mm²) min.-max. | | —2,5 | —2,5 | —2,5 | —6 | —6 | —6 |

| | | | | |
|---|---|---|---|---|
| 16 | 3 | 2422 | 2930 |  |
| 32 | 3 | 2117 | 2118 | |

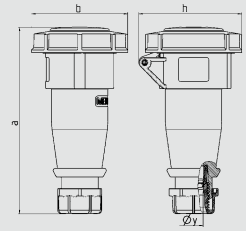
| Drawing 2 MB 218 | Amp. Poles | 16 3 | 16 4 | 16 5 | 32 3 | 32 4 | 32 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 142 | 144 | 147 | 186 | 186 | 180 |
| | b | 70 | 78 | 87 | 94 | 94 | 101 |
| | n | 109 | 111 | 114 | 145 | 145 | 138 |
| | y | 14,5 | 16 | 16 | 22 | 22 | 22 |
| Terminal for cond. cross | | 1 | 1 | 1 | 2,5 | 2,5 | 2,5 |
| section (mm²) min.-max. | | —2,5 | —2,5 | —2,5 | —6 | —6 | —6 |

| | | | | |
|---|---|---|---|---|
| 63 | 3 | 13240 | 13241 |   |

| Drawing 2 MB 225 | Amp. Poles | 63 3 | 63 4 | 63 5 | 125 3 | 125 4 | 125 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 250 | 250 | 250 | 290 | 290 | 290 |
| | b | 114 | 114 | 114 | 130 | 130 | 130 |
| | y | 36 | 36 | 36 | 49 | 49 | 49 |
| Terminal for cond. cross | | 6 | 6 | 6 | 25 | 25 | 25 |
| section (mm²) min.-max. | | —16 | —16 | —16 | —50 | —50 | —50 |

| | | | | |
|---|---|---|---|---|
| 16 | 3 | 2185 | |  |

| Drawing 3 MB 63 | Amp. Poles | 16 3 | 16 4 | 16 5 | 32 3 | 32 4 | 32 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 162 | 165 | 167 | 209 | 209 | 208 |
| | b | 60 | 68 | 76 | 82 | 82 | 89 |
| | h | 83 | 92 | 98 | 100 | 100 | 108 |
| | y | 14,5 | 16 | 16 | 22 | 22 | 22 |
| Terminal for cond. cross | | 1 | 1 | 1 | 2,5 | 2,5 | 2,5 |
| section (mm²) min.-max. | | —2,5 | —2,5 | —2,5 | —6 | —6 | —6 |

| | | | | |
|---|---|---|---|---|
| 16 | 3 | 2605 | |  |

| Drawing 3 MB 62 | Amp. Poles | 16 3 | 16 4 | 16 5 | 32 3 | 32 4 | 32 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 146 | 166 | 172 | 212 | 212 | 213 |
| | b | 72 | 79 | 89 | 96 | 96 | 102 |
| | h | 80 | 88 | 95 | 98 | 98 | 105 |
| | y | 14,5 | 16 | 16 | 22 | 22 | 22 |
| Terminal for cond. cross | | 1 | 1 | 1 | 2,5 | 2,5 | 2,5 |
| section (mm²) min.-max. | | —2,5 | —2,5 | —2,5 | —6 | —6 | —6 |

# Special plugs and sockets ■ Ex zone 22 - for hazardous areas,

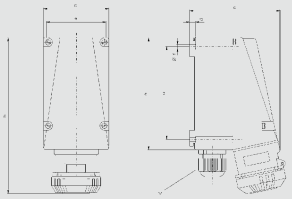
IEC 60309-1/2. Enclosure wall mounted receptacles: glass-fibe reinforced polyester. Enclosure plugs: impact resistant polyamide.

| Image | Title | Description |
|---|---|---|
|  | **Wall mounted receptacle**<br><br>**IP 66**<br><br>Std. Pack. Qty: 1<br><br>Product group 1211.<br>Image 7826. | ■ screw terminals<br>■ all-pole ON/OFF switching by turning the plug<br>■ identification acc. to 94/9/EG: II 3D Ex tD A22 T80 °C<br>■ dust ignition protection type provided: Ex de IIC T6<br>■ cable entry 1x Ex-cable gland and 1x Ex-screw plug made of plastic at bottom<br>■ permissible ambient temperature: -25 °C to +45 °C |
|  | **Wall mounted receptacle**<br><br>**IP 66**<br><br>Std. Pack. Qty: 1<br><br>Product group 1211.<br>Image 7866. | ■ screw terminals<br>■ all-pole ON/OFF switching with handle<br>■ identification acc. to 94/9/EG: II 3D Ex tD A22 T80 °C<br>■ dust ignition protection type provided: Ex de IIC T6<br>■ cable entry 1x Ex-cable gland and 1x Ex-screw plug made of plastic at bottom<br>■ permissible ambient temperature: -25 °C to +45 °C |
|  | **Ex-cable gland**<br><br>Std. Pack. Qty: 1<br><br>Product group 8441.<br>Image 41590. | ■ black<br>■ single packaging<br>■ only necessary for through wiring (1 piece per wall mounted receptacle) |
|  | **Plug**<br><br>**IP 66**<br><br>Std. Pack. Qty: 1<br><br>Product group 2211.<br>Image 7726. | ■ screw terminals<br>■ identification acc. to 94/9/EG: II 3D Ex tD A22 T80 °C<br>■ dust ignition protection type provided: Ex de IIC T6<br>■ permissible ambient temperature: -25 °C to +45 °C |
|  | **Plug**<br><br>**IP 66**<br><br>Std. Pack. Qty: 1<br><br>Product group 2211.<br>Image 7766. | ■ screw terminals<br>■ identification acc. to 94/9/EG: II 3D Ex tD A22 T80 °C<br>■ dust ignition protection type provided: Ex de IIC T6<br>■ permissible ambient temperature: -25 °C to +45 °C |

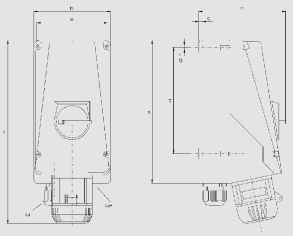
# 16A - 125A, IP 66

Other voltages and frequencies available on request.

| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | Drawing |
|---|---|---|---|---|---|---|
| | | 3p 4p 5p<br>4h 4h 4h | 3p 4p 5p<br>6h 9h 9h | 3p 4p 5p<br>9h 6h 6h | 3p 4p 5p<br>7h 7h 7h | |
| | | Part number | | | | |
| 16 | 3 | | 7806 | | | |
| 16 | 4 | | | 7816 | | |
| 16 | 5 | | | 7826 | | |
| 32 | 4 | | | 7836 | | |
| 32 | 5 | | | 7846 | | |
| 63 | 4 | | | 7856 | | |
| 63 | 5 | | | 7866 | | |
| 125 | 4 | | | 7876 | | |
| 125 | 5 | | | 7886 | | |



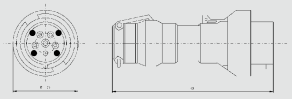
| Drawing D22516-7a | Amp. | 16 | | | 32 | |
|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 4 | 5 |
| Dim. in mm | a | 155 | 175 | 175 | 205 | 205 |
| | b | 90 | 110 | 110 | 120 | 120 |
| | c | 121 | 147 | 147 | 166 | 166 |
| | d | 115 | 135 | 135 | 170 | 170 |
| | e | 80 | 100 | 100 | 110 | 110 |
| | f | 7 | 7 | 7 | 7 | 7 |
| | g | 11 | 11 | 11 | 11 | 11 |
| | h | 223 | 236 | 236 | 285 | 285 |
| | M | 25 | 25 | 25 | 40 | 40 |
| | M* | 25 (mounted cable gland) | | | 40 (mounted cable gland) | |
| Max. cable diam. (mm) | | 8-17 | 8-17 | 8-17 | 17-28 | 17-28 |
| Terminal for cond. cross section (mm²) min.-max. | | 1 —4 | 1 —4 | 1 —4 | 4 —10 | 4 —10 |



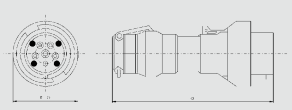
| Drawing D22518-9a | Amp. | 63 | | 125 | |
|---|---|---|---|---|---|
| | Poles | 4 | 5 | 4 | 5 |
| Dim. in mm | a | 370 | 370 | 430 | 430 |
| | b | 200 | 200 | 234 | 234 |
| | c | 226 | 226 | 258 | 258 |
| | d | 276 | 276 | 303 | 303 |
| | e | 184 | 184 | 218 | 218 |
| | f | 9 | 9 | 9 | 9 |
| | g | 10 | 10 | 11 | 11 |
| | h | 475 | 475 | 537 | 537 |
| | M | 50 | 50 | 50 | 50 |
| | M* | 50 (mounted cable gland) | | 50 (mounted cable gland) | |
| Max. cable diam. (mm) | | 22-35 | 22-35 | 22-35 | 22-35 |
| Terminal for cond. cross section (mm²) min.-max. | | 4 —25 | 4 —25 | 4 —50 | 4 —50 |

| | | | |
|---|---|---|---|
| (M 25, | for 16A, | for cable from: 8 - 17 mm) | 41588 |
| (M 40, | for 32A, | for cable from: 17 - 28 mm) | 41590 |

| Ampere | Poles | 110V 50 a. 60 Hz | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 500V 50 a. 60 Hz | Drawing |
|---|---|---|---|---|---|---|
| | | 3p 4p 5p<br>4h 4h 4h | 3p 4p 5p<br>6h 9h 9h | 3p 4p 5p<br>9h 6h 6h | 3p 4p 5p<br>7h 7h 7h | |
| | | Part number | | | | |
| 16 | 3 | | 7706 | | | |
| 16 | 4 | | | 7716 | | |
| 16 | 5 | | | 7726 | | |
| 32 | 4 | | | 7736 | | |
| 32 | 5 | | | 7746 | | |
| 63 | 4 | | | 7756 | | |
| 63 | 5 | | | 7766 | | |
| 125 | 4 | | | 7776 | | |
| 125 | 5 | | | 7786 | | |



| Drawing D22516-7 | Amp. | 16 | | | 32 | |
|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 4 | 5 |
| Dim. in mm | a | 175 | 192 | 192 | 249 | 249 |
| | b | 72 | 76,5 | 84 | 95 | 100 |
| Max. cable diam. (mm) | | 8-19 | 12-21 | 12-21 | 17-28 | 17-28 |
| Terminal for cond. cross section (mm²) min.-max. | | 1 —2,5 | 1 —2,5 | 1 —2,5 | 1 —6 | 1 —6 |



| Drawing D22518-9 | Amp. | 63 | | 125 | |
|---|---|---|---|---|---|
| | Poles | 4 | 5 | 4 | 5 |
| Dim. in mm | a | 272 | 272 | 320 | 320 |
| | b | 110 | 110 | 120 | 120 |
| Max. cable diam. (mm) | | 19-34 | 19-34 | 31-55 | 31-55 |
| Terminal for cond. cross section (mm²) min.-max. | | 4 —16 | 4 —16 | 4 —35 | 4 —35 |

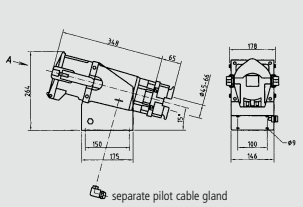
# Special plugs and sockets ■ 200A to 400A, IP 55 and IP 67

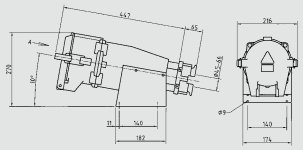
Design based on IEC 309-1, EN 60309-1, DIN VDE 0623 part 1. Enclosure made of aluminium and/or plastic or sheet steel.

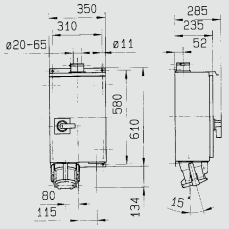
| Image | Title | Description |
|---|---|---|
|  | **Wall mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 1<br><br>Product group 1350.<br>Image 75226. | ■ screw terminals<br>■ external fixing<br>■ cable entry at top<br>■ with cable gland<br>■ seawater resistant products are available on request<br>■ if required, pilot cables can be introduced separately into the enclosures, please add „PK“ to the part number |
|  | **Wall mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 1<br><br>Product group 1350.<br>Image 75111. | ■ screw terminals<br>■ external fixing<br>■ cable entry at top<br>■ with cable gland<br>■ seawater resistant products are available on request |
|  | **Wall mounted receptacle**<br><br>**IP 55**<br><br>Std. Pack. Qty: 1<br><br>Product group 1374.<br>Image 75236. | ■ screw terminals<br>■ switched<br>■ mechanical interlock<br>■ cable entry bushing for cables of up to 65 mm at top and blind flange at bottom<br>■ enclosure made of sheet steel, painted in RAL 1021<br>■ seawater resistant products are available on request |
|  | **Wall mounted receptacle**<br><br>**IP 55**<br><br>Std. Pack. Qty: 1<br><br>Product group 1374.<br>Image 75121. | ■ screw terminals<br>■ switched<br>■ mechanical interlock<br>■ cable entry bushing for cables of up to 65 mm at top and blind flange at bottom<br>■ enclosure made of sheet steel, painted in RAL 1021<br>■ seawater resistant products are available on request |
|  | **Wall mounted receptacle**<br><br>**IP 55**<br><br>Std. Pack. Qty: 1<br><br>Product group 1378.<br>Image 75271. | ■ screw terminals<br>■ switched<br>■ with contactor<br>■ electrical interlock<br>■ cable entry bushing for cables of up to 65 mm at top and blind flange at bottom<br>■ enclosure made of sheet steel, painted in RAL 1021<br>■ seawater resistant products are available on request |
|  | **Wall mounted receptacle**<br><br>**IP 55**<br><br>Std. Pack. Qty: 1<br><br>Product group 1378.<br>Image 75174. | ■ screw terminals<br>■ switched<br>■ with contactor<br>■ electrical interlock<br>■ cable entry bushing for cables of up to 65 mm at top and blind flange at bottom<br>■ enclosure made of sheet steel, painted in RAL 1021<br>■ seawater resistant products are available on request |

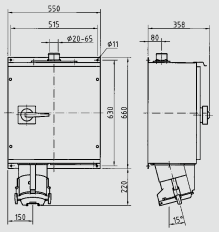
Other voltages and frequencies as well as larger cable entries, enclosures made of plastic or stainless steel available on request.

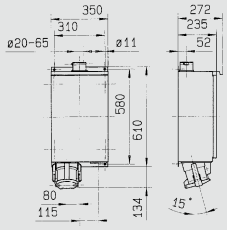
| Ampere | Poles | 400V 50 a. 60 Hz<br>4p 5p<br>6h 6h<br>Part number | Drawing |
|---|---|---|---|
| 200 | 4 | 75221 | Drawing 1 MB 385<br>Dim. in mm |
| 200 | 5 | 75226 | |
| 250 | 4 | 75021 | Drawing 1 MB 389/1<br>Dim. in mm |
| 250 | 5 | 75111 | |
| 400 | 4 | 75026 | |
| 400 | 5 | 75116 | |
| 200 | 4 | 75231 | Drawing 1 MB 386<br>Dim. in mm |
| 200 | 5 | 75236 | |
| 250 | 4 | 75031 | Drawing 1 MB 403/2<br>Dim. in mm |
| 250 | 5 | 75121 | |
| 400 | 4 | 75036 | |
| 400 | 5 | 75126 | |
| 200 | 4 | 75271 | Drawing 1 MB 387<br>Dim. in mm |
| 250 | 4 | 75437 | Drawing 1 MB 404/2<br>Dim. in mm |
| 250 | 5 | 75441 | |
| 400 | 4 | 75174 | |
| 400 | 5 | 75448 | |

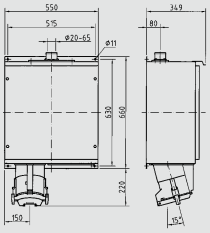




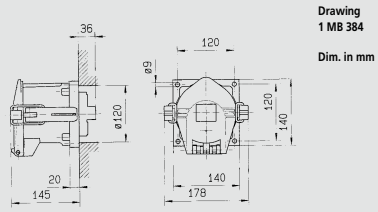
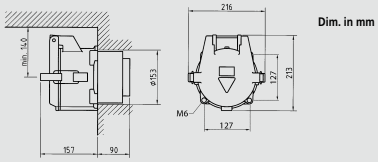
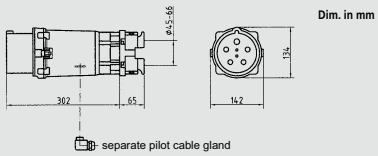
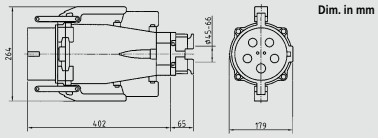
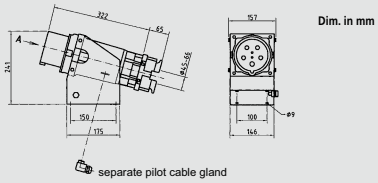
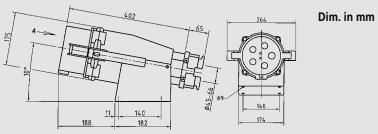



# Special plugs and sockets ■ 200A to 400A, IP 67

Design based on IEC 309-1, EN 60309-1, DIN VDE 0623 part 1. Enclosure made of aluminium and/or plastic.

| Image | Title | Description |
|---|---|---|
|  | **Panel mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 1/2<br><br>Product group 1346.<br>Image 75246. | ■ screw terminals<br>■ seawater resistant products are available on request |
|  | **Panel mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 1/2<br><br>Product group 1346.<br>Image 75131. | ■ screw terminals<br>■ seawater resistant products are available on request |
|  | **Plug**<br><br>**IP 67**<br><br>Std. Pack. Qty: 1<br><br>Product group 2313.<br>Image 75206. | ■ screw terminals<br>■ with cable gland<br>■ seawater resistant products are available on request<br>■ if required, pilot cables can be introduced separately into the enclosures, please add „PK“ to the part number |
|  | **Plug**<br><br>**IP 67**<br><br>Std. Pack. Qty: 1<br><br>Product group 2313.<br>Image 75091. | ■ screw terminals<br>■ with cable gland<br>■ seawater resistant products are available on request |
|  | **Inlet**<br><br>**IP 67**<br><br>Std. Pack. Qty: 1<br><br>Product group 2348.<br>Image 75256. | ■ screw terminals<br>■ with cable gland<br>■ seawater resistant products are available on request<br>■ if required, pilot cables can be introduced separately into the enclosures, please add „PK“ to the part number |
|  | **Inlet**<br><br>**IP 67**<br><br>Std. Pack. Qty: 1<br><br>Product group 2348.<br>Image 75173. | ■ screw terminals<br>■ with cable gland<br>■ seawater resistant products are available on request |

Other voltages and frequencies as well as larger cable entries available on request.

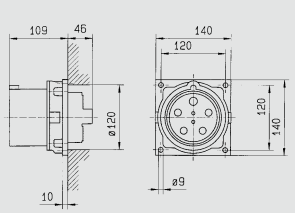
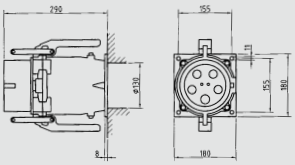
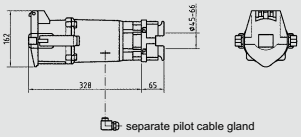
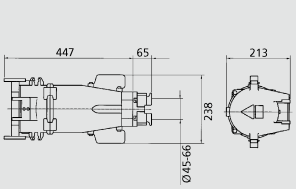
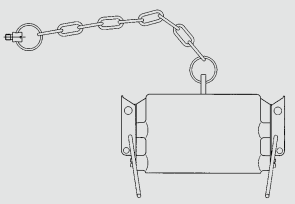
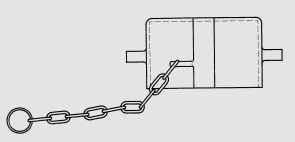
| Ampere | Poles | 400V 50 a. 60 Hz<br>4p 5p<br>6h 6h<br>Part number | Drawing |
|---|---|---|---|
| 200 | 4 | 75241 |  Drawing 1 MB 384 Dim. in mm |
| 200 | 5 | 75246 | |
| 250 | 4 | 75041 |  Drawing 1 MB 388/1 Dim. in mm |
| 250 | 5 | 75131 | |
| 400 | 4 | 75046 | |
| 400 | 5 | 75136 | |
| 200 | 4 | 75201 |  Drawing 2 MB 195 Dim. in mm |
| 200 | 5 | 75206 | |
| 250 | 4 | 75001 |  Drawing 2 MB 198/1 Dim. in mm |
| 250 | 5 | 75091 | |
| 400 | 4 | 75006 | |
| 400 | 5 | 75096 | |
| 200 | 4 | 75251 |  Drawing 2 MB 197 Dim. in mm |
| 200 | 5 | 75256 | |
| 250 | 4 | 75172 |  Drawing 2 MB 200/1 Dim. in mm |
| 250 | 5 | 75173 | |
| 400 | 4 | 75389 | |
| 400 | 5 | 75398 | |

# Special plugs and sockets ■ 200A to 400A, IP 67

Design based on IEC 309-1, EN 60309-1, DIN VDE 0623 part 1. Enclosure made of aluminium and/or plastic.

| Image | Title | Description |
|---|---|---|
|  | **Panel mounted inlet**<br><br>**IP 67**<br><br>Std. Pack. Qty: 1<br><br>Product group 2350.<br>Image 75261. | ■ screw terminals<br>■ seawater resistant products are available on request |
|  | **Panel mounted inlet**<br><br>**IP 67**<br><br>Std. Pack. Qty: 1<br><br>Product group 2350.<br>Image 75295. | ■ screw terminals<br>■ seawater resistant products are available on request |
|  | **Connector**<br><br>**IP 67**<br><br>Std. Pack. Qty: 1<br><br>Product group 3313.<br>Image 75216. | ■ screw terminals<br>■ with cable gland<br>■ seawater resistant products are available on request<br>■ if required, pilot cables can be introduced separately into plugs/ enclosures, please add PK to the part number |
|  | **Connector**<br><br>**IP 67**<br><br>Std. Pack. Qty: 1<br><br>Product group 3313.<br>Image 75101. | ■ screw terminals<br>■ with cable gland<br>■ seawater resistant products are available on request |
|  | **Protective cap**<br><br>Std. Pack. Qty: 1<br><br>Product group 8326.<br>Image 75280. | ■ for plugs and inlets 200A<br>■ seawater resistant products are available on request |
|  | **Protective cap**<br><br>Std. Pack. Qty: 1<br><br>Product group 8326.<br>Image 75160. | ■ for plugs and inlets 250A and 400A<br>■ seawater resistant products are available on request |

Other voltages and frequencies as well as larger cable entries available on request.

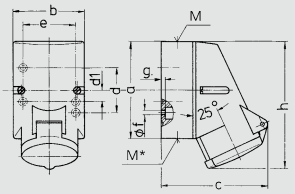
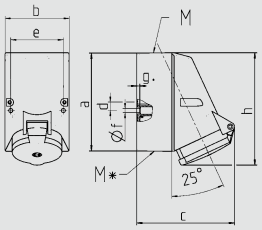
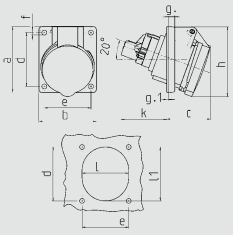
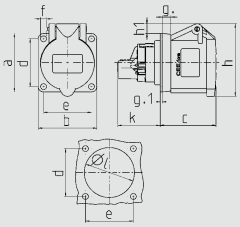
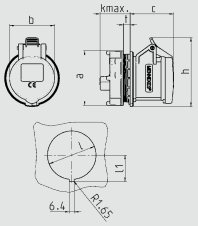
| Ampere | Poles | 400V 50 a. 60 Hz<br>4p 5p<br>6h 6h<br>Part number | Drawing |
|---|---|---|---|
| 200 | 4 | 75261 |  Drawing 2 MB 196 Dim. in mm |
| 200 | 5 | 75266 | |
| 250 | 4 | 75284 |  Drawing 2 MB 199/1 Dim. in mm |
| 250 | 5 | 75287 | |
| 400 | 4 | 75291 | |
| 400 | 5 | 75295 | |
| 200 | 4 | 75211 |  Drawing 3 MB 53 Dim. in mm |
| 200 | 5 | 75216 | |
| 250 | 4 | 75011 |  Drawing 3 MB 54/1 Dim. in mm |
| 250 | 5 | 75101 | |
| 400 | 4 | 75016 | |
| 400 | 5 | 75106 | |
| | | 75280 |  Drawing 2 MB 205 Dim. in mm |
| | | 75160 |  Drawing 2 MB 201 Dim. in mm |

# Special plugs and sockets ■ CEEplus®, 16A, IP 44

Plugs and sockets compatible with IEC 60309/EN 60309. Colour: electric grey and/or colour code.

| Image | Title | Description |
|---|---|---|
|  | **Wall mounted receptacle CEEplus®**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1166.<br>Image 955. | ■ screw terminals<br>■ with 4 additional contacts<br>■ internal fixing<br>■ one cable entry at top (M 20), one blind entry (M 20 can be cut out) at bottom |
|  | **Wall mounted receptacle CEEplus®**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1167.<br>Image 963. | ■ screw terminals<br>■ with 4 additional contacts<br>■ internal fixing<br>■ one cable entry at top (M 25), two blind entries (M 25 can be cut out) at bottom<br>■ enclosure base can be turned 180° |
|  | **Panel mounted receptacle CEEplus®**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1149/1152.<br>Image 927. | ■ screw terminals<br>■ with 4 additional contacts<br>■ 20° inclination |
|  | **Panel mounted receptacle CEEplus®**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1150/1151.<br>Image 961. | ■ screw terminals<br>■ with 4 additional contacts<br>■ straight |
|  | **Panel mounted receptacle RAPIDO® CEEplus®**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1159.<br>Image 956. | ■ screw terminals<br>■ with 4 additional contacts<br>■ straight<br>■ central fixing 61 mm Ø |

Enclosure and insert made of AMAPLAST. Auxiliary contacts made from silver-plated bronze.

| Ampere | Poles | 230V 50 a. 60 Hz<br>3p 5p<br>6h 9h<br>Part number | 400V 50 a. 60 Hz<br>3p 5p<br>9h 6h<br>Part number | Drawing |
|---|---|---|---|---|
| 16 | 3 | 955 | |  |
| | | For solid supply lines for auxiliary contacts, an additional adapter is required. | | |
| 16 | 5 | | 963 |  |
| | | For solid supply lines for auxiliary contacts, an additional adapter is required. | | |
| 16 | 3 | 927 | |  |
| 16 | 5 | | 960 | |
| 16 | 3 | 946 | |  |
| 16 | 5 | | 961 | |
| 16 | 3 | 956 | |  |
| 16 | 5 | | 962 | |

| Drawing 1 MB 209 | Amp. / Poles | 16 3 | 16 4 | 16 5 |
|---|---|---|---|---|
| Dim. in mm | a | 87 | 100 | 100 |
| | b | 64 | 75 | 75 |
| | c | 99 | 110 | 113 |
| | d | 40 | – | – |
| | d1 | – | 11 | 11 |
| | e | 50 | 59 | 59 |
| | f | 4,5 | 5 | 5 |
| | g. | 4 | 4 | 4 |
| | h | 115 | 125 | 128 |
| | M | 20 | 20 | 20 |
| | M* | M20 (blind) to be cut out | | |
| Max. cable diam. (mm) | | 15 | 15 | 15 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 |

| Drawing 1 MB 43 | Amp. / Poles | 16 4 | 16 5 | 32 3 | 32 4 | 32 5 |
|---|---|---|---|---|---|---|
| Dim. in mm | a | 128 | 128 | 128 | 128 | 128 |
| | b | 84 | 84 | 84 | 84 | 84 |
| | c | 122 | 124 | 136 | 136 | 138 |
| | d | 11 | 11 | 11 | 11 | 11 |
| | e | 68 | 68 | 68 | 68 | 68 |
| | f | 5,3 | 5,3 | 5,3 | 5,3 | 5,3 |
| | g. | 4 | 4 | 4 | 4 | 4 |
| | h | 144 | 145 | 158 | 158 | 160 |
| | M | 25 | 25 | 32 | 32 | 32 |
| | M* | 2x25 (blind) to be cut out | | 2x25 (blind) to be cut out | | |
| Max. cable diam. (mm) | | 18 | 18 | 18/25 | 18/25 | 18/25 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 2,5 —10 | 2,5 —10 | 2,5 —10 |

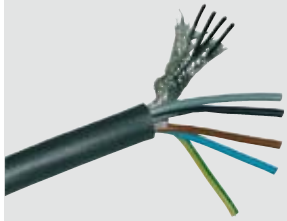
| Drawing 1 MB 459/453 | Amp. / Poles | 16 3 | 16 5 |
|---|---|---|---|
| Dim. in mm | a | 73,5 | 85 |
| | b | 64 | 85 |
| | c | 52 | 57 |
| | d | 60 | 70 |
| | e | 52 | 70 |
| | f | 5.3 | 5.5 |
| | g. | 7 | 8 |
| | g.1 | 2 | 2 |
| | h | 79 | 101 |
| | k | 51 | 33 |
| | l | 52 | 70 |
| | l1 | 60 | 78 |
| | α | 20° | 20° |
| Terminal for cond. cross section (mm²) min.-max. | | 1.5 —4 | 1.5 —4 |

| Drawing 1 MB 460/247 | Amp. / Poles | 16 3 | 16 5 |
|---|---|---|---|
| Dim. in mm | a | 55 | 75 |
| | b | 55 | 75 |
| | c | 54 | 55 |
| | d | 45 | 60 |
| | e | 45 | 60 |
| | f | 5.5 | 5.5 |
| | g. | 8 | 8 |
| | g.1 | 2 | 2 |
| | h | 70 | 83 |
| | h1 | 10 | 8 |
| | k | 40.5 | 32 |
| | l | 47 | 54 |
| Terminal for cond. cross section (mm²) min.-max. | | 1.5 —4 | 1.5 —4 |

| Drawing 1 MB 458/468 | Amp. / Poles | 16 3 | 16 5 |
|---|---|---|---|
| Dim. in mm | a | 69 | 69 |
| | b | 57 | 69 |
| | c | 55 | 52 |
| | d | 38 | 32 |
| | h | 87 | 98 |
| | k max. | 30 | 32 |
| | l | Ø61 | Ø61 |
| | l1 | 33,25 | 33,25 |
| | t | 2-9 | 2-9 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 |

# Special plugs and sockets ■ CEEplus®, 16A, IP 44

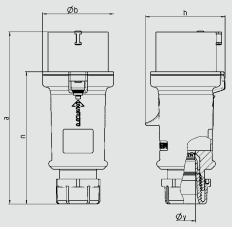
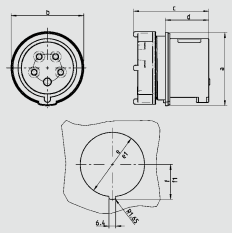
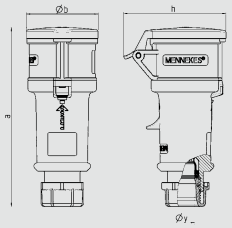
Plugs and sockets compatible with IEC 60309/EN 60309. Colour: electric grey and/or colour code.

| Image | Title | Description |
|---|---|---|
|  | **Plug CEEplus®**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 2198.<br>Image 978. | ■ screw terminals<br>■ with 4 additional contacts<br>■ cable gland and sealing<br>■ strain relief and protection against kinking<br>■ enclosure with thread lock and safety slide |
|  | **Panel mounted inlet RAPIDO® CEEplus®**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 2088.<br>Image 957. | ■ screw terminals<br>■ with 4 additional contacts<br>■ straight<br>■ central fixing 61 mm Ø |
|  | **Connector CEEplus®**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 3198.<br>Image 928. | ■ screw terminals<br>■ with 4 additional contacts<br>■ cable gland and sealing<br>■ strain relief and protection against kinking<br>■ enclosure with thread lock and safety slide |
|  | **Hybrid cable**<br><br>Std. Pack. Qty: 3<br><br>Product group 5072.<br>Image 50781000. | ■ 3/5 x 2.5 mm² + 4 x 0.75 mm²<br>■ screened for plugs and connectors |

## Technical data CEEplus®.

| | |
|---|---|
| **Current / main contacts** | 16A |
| **No. of poles / main contacts** | 3p or 5p |
| **Current capacity of additional contacts** | 5mA up to max. 5A, if power contacts are subject to max. 16A. (For currents less than 10 mA and voltages less than 10V, it may be an advantage to solder the wires). |
| **Voltage on additional contacts** | min. 5V up to max. 50V |
| **No. of poles/ additional contact** | 4, less than 4 on request. |
| **Leading/lagging** | When connecting, 1 signal contact is lagging the other (min. 3 mm), and when disconnecting, it is leading. |
| **Material of additional contacts** | Silver-plated bronze |
| **Clockface position** | 6h, other positions (h) on request. |
| **Protection** | IP 44. |
| **Connection cross-section** | |
| min. | CEEplus® power contacts 1.0 mm²,<br>CEEplus® additional contacts 0.3 mm². |
| max. | CEEplus® power contacts 2.5 mm²,<br>CEEplus® additional contacts 2.5 mm². |
| Please note (Additional contacts) | The flat pin bushings provided (red, fully insulated) can be used for connecting cross-sections 0.5 – 1.5 mm².<br>As an alternative, a soldered connection using a heat shrinkable insulation sleeve is possible. The heat shrinkable sleeve is included in the delivery. |

Enclosure and insert made of AMAPLAST. Auxiliary contacts made from silver-plated bronze.

| Ampere | Poles | 230V 50 a. 60 Hz<br>3p 5p<br>6h 9h<br>Part number | 400V 50 a. 60 Hz<br>3p 5p<br>9h 6h<br>Part number | Drawing |
|---|---|---|---|---|
| 16 | 3 | 926 | |  |
| 16 | 5 | | 978 | |
| 16 | 3 | 957 | |  |
| 16 | 5 | | 983 | |
| 16 | 3 | 928 | |  |
| 16 | 5 | | 982 | |
| | | 50780000 | | |
| | | 50781000 | | |

| Drawing 2 MB 214 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 148 | 160 | 160 | 197 | 197 | 197 |
| | b | 55 | 65,6 | 65,6 | 75 | 75 | 75 |
| | h | 61 | 72,5 | 72,5 | 80,5 | 80,5 | 85 |
| | n | 112 | 123,5 | 123,5 | 152 | 152 | 152 |
| | y | 14,5 | 16 | 16 | 22 | 22 | 22 |
| Terminal for cond. cross | | 1 | 1 | 1 | 2,5 | 2,5 | 2,5 |
| section (mm²) min.-max. | | —2,5 | —2,5 | —2,5 | —6 | —6 | —6 |

| Drawing 2 MB 220/216 | Amp. | 16 | |
|---|---|---|---|
| | Poles | 3 | 5 |
| Dim. in mm | a | 70 | 70 |
| | b | 69 | 69 |
| | c | max.73 | max.72 |
| | d | 44 | 44 |
| | e | Ø61 | Ø61 |
| | f | 33,25 | 33,25 |
| | e1 | — | — |
| | f1 | — | — |
| Terminal for cond. cross | | 1 | 1 |
| section (mm²) min.-max. | | —2,5 | —2,5 |

| Drawing 3 MB 60 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 160 | 174 | 172 | 214 | 214 | 210 |
| | b | 57 | 61 | 69 | 75 | 75 | 80 |
| | h | 83 | 92 | 98 | 100 | 100 | 108 |
| | y | 16 | 16 | 16 | 22 | 22 | 22 |
| Terminal for cond. cross | | 1 | 1 | 1 | 2,5 | 2,5 | 2,5 |
| section (mm²) min.-max. | | —2,5 | —2,5 | —2,5 | —6 | —6 | —6 |

**Cable entry** (plugs / connectors)
min. 16A 3p: 7,5 mm
16A 5p: 8,0 mm
max. 16A 3p: 14,5 mm
16A 5p: 16 mm

**Terminal design**
Power contacts: Screw-type terminal as socket-type terminal
Additional contacts: Use fully insulated flat pin bushings 2.8 x 0.5 mm (4 bushings are included in the delivery).
**Terminal connection**
Power contacts: Use a screwdriver
Additional contacts: Flat cable lugs are connected using a suitable crimping tool and they can then be pushed on without a tool.
**Limitation on use**: ATTENTION! When using CEE plugs with metal enclosures, short-circuiting of signal contacts may occur. Therefore never insert CEE plugs with a metal enclosure into CEEplus receptacles or connectors!
**Standards**: IEC 60309/EN 60309 compatible plugs and sockets
**Assembling and fitting**: See fitting instructions included in the delivery!
**High frequency characteristics**: Crosstalk attenuation (near and far) of the system consisting of CEEplus receptacle, plug, MENNEKES hybrid cable, CEEplus connector and panel mounted inlet between power and signal component:
max. 1 MHz, min. 50 dB
Capacitance of the signal component: wire/wire: 95 nF/km, wire/screen: 150 nF/km
Cable inductivity signal pair: 0.65 mH/km
**MENNEKES hybrid cable**: Data sheets on request!

**Network enclosure made of AMAPLAST. Protection type IP 44.**
Front cover electric grey RAL 7035 or yellow RAL 1021, bottom part black with nuts for installation of a mounting plate, including a height-adjustable mounting rail with mounting rail latches, cable glands with multiple sealing grommets.



**Compact network distributor**

**Fitted with**
2 SCHUKO® 16A, 230V
1 Cepex data port socket with 2 RJ45 connection module couplings, type E-DAT module, port, cat.6, brand: BTR

**Connection/feeder cable**
2 M 25 at the top (closed)
1 M 25 at the bottom (with cable gland)
1 M 25 (2 x 8) at the bottom (with cable gland seal insert for 2 individual cables up to 8 mm Ø) with terminal for 1 cable up to 3 x 4 mm²

**Enclosure size**
118 x 170 mm (H x W)

**Part no. 25705**



**Compact network distributor**

**Fitted with**
4 SCHUKO® 16A, 230V
1 Cepex data port socket with 2 RJ45 connection module couplings, type E-DAT module, port, cat.6, brand: BTR

**Connection/feeder cable**
2 M 25 at the top (closed)
1 M 25 at the bottom (with cable gland)
1 M 25 (3 x 5-7) at the bottom (with cable gland seal insert for 2 individual cables up to 8 mm Ø) with terminal for 1 cable up to 5 x 4 mm²

**Enclosure size**
160 x 245 mm (H x W)

**Part no. 25715**



**AMAXX® s receptacle combination**

**Fitted with**
1 CEE 16A, 5p, 400V
3 SCHUKO® 16A, 230V
1 Cepex data port socket RJ45, 2 fold cat.6

**Connection/feeder cable**
for 1 cable up to 5 x 10 mm²

**Enclosure size**
650 x 112.5 mm (H x W)

**Part no. 960005**



**Network enclosure AMAXX®**

**Fitted with**
1 CEE 32A, 5p, 400V
1 CEE 16A, 5p, 400V
2 SCHUKO® 16A, 230V
2 Cepex data port sockets RJ45, 2 fold cat.6

**Fusing**
1 RCD 40A, 4p, 0.03A
1 MCB 32A, 3p, C
1 MCB 16A, 3p, C
2 MCB´s 16A, 1p, C

**Connection/feeder cable**
for 2 cables up to 5 x 25 mm²

**Enclosure size**
520 x 225 mm (H x W)

**Part no. 940018**

# Application example production




Network enclosure

Energy enclosure

**In the network enclosure:**

- 1 ready-made 4-fibre OWG breakout cable with ST plugs.
- 2 OWG fibres with ST plugs are located as reserve in the bottom part of the enclosure.
- 3-port Ethernet switch for DIN rail installation with OWG port (ST, MM).
- 1 short-circuit proof switching power supply 24V for DIN rail installation (power supply for switch).
- 3 RJ45 Cu ports led through via lockable Cepex data port receptacles.

**Advantages at a glance:**

- Physically separated enclosures with hinged front cover.
- Standard pre-punched cable inserts.
- Cable gland set with several seal inserts for variable cable insertion.
- External data access via lockable Cepex data port receptacles possible.
- External installation by one single fitter.

| Image | Title | Description |
|---|---|---|
|  | **Data module**<br><br>**Part no. 41455** | ■ BTR, type: RJ45 connection module 270° (type E-DAT module 8(8) jack cat.6)<br>■ suitable for Cepex receptacles, part no. 4340, 4342, 4344, 4355<br>■ easy to install connection of data cables<br>■ installation without special tools<br>■ Strain relief per locking clip directly on the stuffer cap |
|  | **Data module**<br><br>**Part no. 41457** | ■ AMP, type: RJ45 connection module (type cat.6 SL Jack)<br>■ suitable for Cepex receptacles, part no. 4360 and versions |
|  | **Data module**<br><br>**Part no. 25056** | ■ Reichle + De-Massari, type: data port insert real 10, cat.6, screened, incl. frame for snap-in<br>■ fits Cepex data port receptacle, part no. 4375 and variants |
|  | **Data module**<br><br>**Part no. 25051** | ■ Reichle + De-Massari, type: data port insert RJ45 real 10, cat.6, screened, with retaining plate, incl. frame for snap-in<br>■ fits patch panel, part no. 25053 |
|  | **Data module**<br><br>**Part no. 41492** | ■ Rutenbeck, type: data port insert 2 x RJ45, cat.6, (type UP0S)<br>■ suitable for Cepex receptacles, part no. 4320 and versions |
|  | **Data module**<br><br>**Part no. 41456** | ■ AMP, type: data port insert 2 x RJ45, cat.6, (type AMP Twist Dual/Outlet)<br>■ suitable for Cepex receptacles, part no. 4350 and versions |

| Image | Title | Description |
|---|---|---|
|  | **Data module**<br><br>**Part no. 41452** | ■ TKM, type: data port insert 2 x RJ45, cat.6, type KDMF<br>■ suitable for Cepex receptacles, part no. 4300 and versions |
|  | **Data module**<br><br>**Part no. 25042** | ■ for Cepex data port receptacles<br>■ RJ45 connection module, type E-DAT module connector 8(8) 90°, cat.6 (recommended for improved cable routing) |
|  | **Data module**<br><br>**Part no. 25037** | ■ BTR Industry V4 bulkhead data port receptacle, RJ45 connection module type BTR E-DAT Industry RJ45 connector insert, cat.6 |
|  | **Data module**<br><br>**Part no. 25038** | ■ BTR E-DAT V6 data port receptacle<br>■ also suited for Cepex data port receptacle (part no. 25033) RJ45 connection module, type E-DAT module connector 8(8), cat.6 |

| Image | Title | Description |
|---|---|---|
|  | **Flush mounted installation box**<br><br>**Part no. 41404** | ■ for Cepex CEE receptacles 16A and 32A and Cepex receptacles SCHUKO®<br>■ can be combined with all Cepex panel mounted receptacles |
|  | **Spacer frame**<br><br>**Part no. 4191** grey | ■ to compensate for unequal heights<br>■ matching all Cepex surface mounted receptacles SCHUKO® as well as all Cepex CEE surface mounted 16A and 32A receptacles |
|  | **Cable gland**<br><br>**Part no. 41453** | ■ grey<br>■ M 25<br>■ 2 x 8, for 2 cables 3-8 mm<br>■ matching all Cepex wall mounted receptacles |
|  | **AMAXX® cable gland set**<br><br>**Part no. 25023** M 25 - 3 openings<br>**Part no. 25024** M 32 - 4 openings<br>**Part no. 25025** M 40 - 7 openings | ■ black<br>■ 1 screw gland, 1 multi-seal with openings for cable diameters from 5 to 7 mm and blind plugs<br>■ 1 seal (perforation by the customer) |
|  | **Cable gland**<br><br>**Part no. 990607** M 20 for cable from 6-13 mm, IP 44<br>**Part no. 990611** M 20 for cable from 6-13 mm, IP 67<br>**Part no. 990610** M 25 for cable from 9-17 mm, IP 44<br>**Part no. 990608** M 32 for cable from 13-21 mm, IP 44<br>**Part no. 990612** M 32 for cable from 13-21 mm, IP 67<br>**Part no. 990609** M 40 for cable from 14-28 mm, IP 67 | ■ black RAL 9005<br>■ individual packed |

Enclosure and insert made of AMAPLAST. Colours: grey (RAL 7035), alpine white (RAL 9010), silver (RAL 9006), black (RAL 9005).

| Image | Title / Description | Brand | Type | suitable insert | Part no. |
|---|---|---|---|---|---|
|  | **Cepex enclosure, grey**<br>■ as wall mounted receptacle<br>■ for installation of RJ45 data port receptacles<br>■ 2 keys<br>**IP 44**<br>Product group 1024.<br>Image 4300. | AMP | Twist | 1 x 41456 | 4350 1) |
| | | AMP | Jack | 2 x 41457 | 4360 |
| | | AMP | CO Plus | — | 4370 * |
| | | BTR | E-DAT module | 2 x 41455 | 4340 3) |
| | | Rutenbeck | iso-8/8 Up0S | 1 x 41492 | 4320 |
| | | TKM | KDMF | 1 x 41452 | 4300 1) |
| | | Reichle & De-Massari | Module Real 10 | 2 x 25056 | 4375 2) |
| | | with identical locks: part no + index G | | | |
|  | **Cepex enclosure, grey**<br>■ as panel mounted receptacle<br>■ for installation of RJ45 data port receptacles<br>■ 2 keys<br>**IP 44**<br>Product group 1020.<br>Image 4302. | AMP | Twist | 1 x 41456 | 4352 1) |
| | | AMP | Jack | 2 x 41457 | 4362 |
| | | AMP | CO Plus | — | 4372 * |
| | | BTR | E-DAT module | 2 x 41455 | 4342 3) |
| | | Rutenbeck | iso-8/8 Up0S | 1 x 41492 | 4322 |
| | | TKM | KDMF | 1 x 41452 | 4302 1) |
| | | Reichle & De-Massari | Module Real 10 | 2 x 25056 | 4377 2) |
| | | with identical locks: part no + index G | | | |
|  | **Cepex enclosure, alpine white**<br>■ as panel mounted receptacle<br>■ for installation of RJ45 data port receptacles<br>■ 2 keys<br>**IP 44**<br>Product group 1020.<br>Image 4304. | AMP | Twist | 1 x 41456 | 4354 1) |
| | | AMP | Jack | 2 x 41457 | 4364 |
| | | AMP | CO Plus | — | 4374 * |
| | | BTR | E-DAT module | 2 x 41455 | 4344 3) |
| | | Rutenbeck | iso-8/8 Up0S | 1 x 41492 | 4324 |
| | | TKM | KDMF | 1 x 41452 | 4304 1) |
| | | with identical locks: part no + index G | | | |
|  | **Cepex enclosure, silver**<br>■ as panel mounted receptacle<br>■ for installation of RJ45 data port receptacles<br>■ 2 keys<br>**IP 44**<br>Product group 1020.<br>Image 4326. | Rutenbeck | iso-8/8 Up0S | 1 x 41492 | 4326 |
| | | with identical locks: part no + index G | | | |
|  | **Cepex enclosure, black**<br>■ as wall mounted receptacle<br>■ for installation of RJ45 data port receptacles<br>■ 2 keys<br>**IP 44**<br>Product group 1020.<br>Image 4345. | BTR | E-DAT Modul | 2 x 41455 | 4345 3) |
| | | Rutenbeck | iso-8/8 Up0S | 1 x 41492 | 4367 |
| | | Reichle & De-Massari | Module Real 10 | 2 x 25056 | 4378 2) |
| | | with identical locks: part no + index G | | | |

1) Cepex enclosures also suited for data modules of Telegärtner (AMJ 45 Up/O, cat.6a) and Nexans (LANmark-6 Snap-in Connector with jumper ring Modular Outlet 50).

2) Cepex enclosures also suited for data modules of Telegärtner (AMJ/UMJ cat.6+, Setec (XKJ), Corning (FutureCOM S10TENe Keystone), Dätwyler (KS-T6A, MS-K, PS-GG45), Rutenbeck (UM real cat.6a, A), LEONI MegaLine, (Keystone).

3) Cepex enclosures also suited for LEONI MegaLine.

* The data inserts/modules AMP CO Plus are not part of the MENNEKES delivery program!

# Sophisticated details




1 Cable glands with multiple sealing grommets for cable with diameters from 5-7 mm and blanking plugs

2 Empty tube for supply cable from the top, for safe separation of the energy cables, 19 mm diameter

3 Snap-in DIN-rails different installation depths possible

4 Mounting plate with pre-mounted support rail

5 Separation plate with membrane bushes Dustproof, easy to install, also suited for the separation of special cables

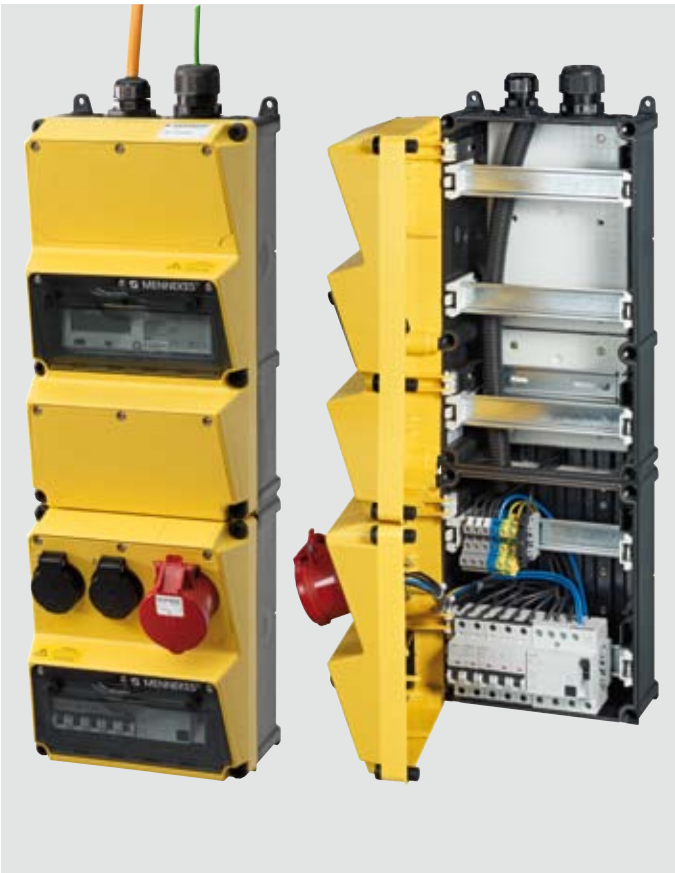
6 Fine-wire fuse for mains unit Fuse clamp with glas tube fuse T 6.3A

**Possible application fields:**

- Machine and production facilities: Installation of compact controls SPS
- Sewage treatment plants and water works: Pump control, dosing and fill level monitoring
- Building management: Heating, air conditioning, ventilation and lighting
- Agriculture: Feed and climate control
- Alarm management: data recording and error signalling modules GSM

**AMAXX® automation enclosure made of AMAPLAST. Protection type IP 44.**
Front cover electric grey RAL 7035 or yellow RAL 1021, bottom part with nuts for installation of a mounting plate, including: a height-adjustable DIN-rail with mounting rail latches, cable glands with multiple sealing grommets.





**AMAXX® automation enclosur**

**Fitted with**
2 SCHUKO® 16A, 230V

**Triple data enclosure**
with transparent operating window (lockable)
3 x liftable DIN-rails
1 x mounting plate 230 x 166 mm, mounted
1 x mounting plate 130 x 166 mm, mounted
1 x empty tube with 19 mm diameter (for seperation of supply cable)
1 x seperation plate with 2 membranes M 32

**Fusing**
1 RCD 25A, 2p, 0.03A
2 MCB´s 16A, 1p, C
1 glas tube fuse T 6.3A (controller fuse)

**Connection/feeder cable**
for 1 cable up to 5 x 10 mm²

**Enclosure size**
650 x 225 mm (H x W)

**Part no. 25505** grey

**Part no. 25505GE** yellow

**AMAXX® automation enclosur**

**Fitted with**
1 CEE 16A, 5p, 400V / 2 SCHUKO® 16A, 230V

**Triple data enclosure**
with transparent operating window (lockable)
3 x liftable DIN-rails
1 x mounting plate 230 x 166 mm, mounted
1 x mounting plate 130 x 166 mm, mounted
1 x empty tube with 19 mm diameter (for seperation of supply cable)
1 x seperation plate with 2 membranes M 32

**Fusing**
1 RCD 40A, 4p, 0.03A
1 MCB 16A, 3p, C
2 MCB´s 16A, 1p, C
1 glas tube fuse T 6.3A (controller fuse)

**Connection/feeder cable**
for 1 cable up to 5 x 10 mm²

**Enclosure size**
650 x 225 mm (H x W)

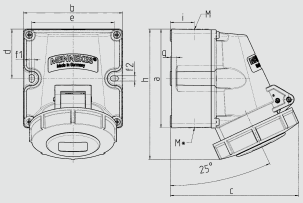
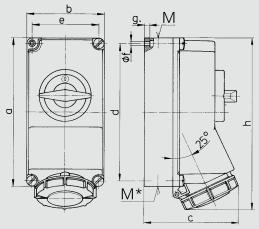
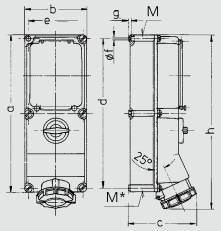
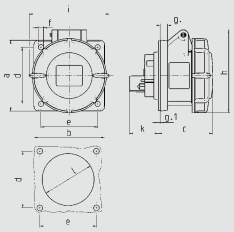
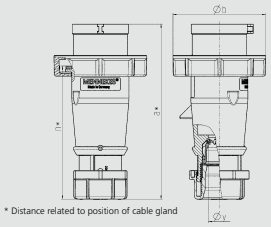
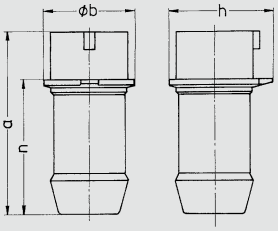
**Part no. 25506** grey

**Part no. 25506GE** yellow

to DIN VDE 0623-2, EN 60309-2. Earthing contact in the 3 o'clock position. Colour: electric grey and/or colour code.

| Image | Title | Description |
|---|---|---|
|  | **Wall mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10<br><br>Product group 1349.<br>Image 9562. | ■ screw terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ two external fixings<br>■ one cable entry at top and two blind cable entries (can be cut out) at bottom<br>■ receptacles are designed for adding an auxiliary contact switch<br>■ enclosure base can be turned 180° |
|  | **Wall mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 1<br><br>Product group 1074.<br>Image 5792A. | ■ screw terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ switched<br>■ mechanical DUO-interlock<br>■ receptacles can be padlocked |
|  | **Wall mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 2<br><br>Product group 1089.<br>Image 5946A. | ■ screw terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ switched<br>■ mechanical DUO-interlock and DIN rail<br>■ receptacles can be padlocked |
|  | **Panel mounted receptacle**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10<br><br>Product group 1046.<br>Image 2123A. | ■ screw terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ straight |
|  | **Plug AM-TOP®**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10<br><br>Product group 2149.<br>Image 2175B. | ■ screw terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ single part body<br>■ cable gland and sealing<br>■ strain relief and protection against kinking |
|  | **Phase sequence test plug**<br><br>**IP 44**<br><br>Std. Pack. Qty: 5<br><br>Product group 2070.<br>Image 3718. | ■ earthing contact in the 3 o'clock position<br>■ conforming to VDE 0413 part 7, DIN-EN 61557-7 |

Enclosure and insert made of AMAPLAST. Other versions available on request.

| Ampere | Poles | 380 - 440V 50 a. 60 Hz<br>4p<br>3h<br>Part number | Drawing |
|---|---|---|---|
| 32 | 4 | 9562 |  |
| 32 | 4 | 5792A |  |
| 32 | 4 | 5946A |  |
| 32 | 4 | 2123A |  |
| 32 | 4 | 2175B | <br>* Distance related to position of cable gland |
| 32 | 4 | 3718 |  |

| Drawing | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| 1 MB 622 | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 100 | 100 | 100 | 100 | 100 | 100 |
| | b | 101 | 101 | 101 | 109 | 109 | 109 |
| | c | 117 | 125 | 131 | 157 | 157 | 160 |
| | d | 50 | 50 | 50 | 50 | 50 | 50 |
| | e | 84 | 84 | 84 | 92 | 92 | 92 |
| | f1 | 5,3 | 5,3 | 5,3 | 5,3 | 5,3 | 5,3 |
| | f2 | 5,3 | 5,3 | 5,3 | 5,3 | 5,3 | 5,3 |
| | g | 6,5 | 6,5 | 6,5 | 6,5 | 6,5 | 6,5 |
| | h | 131 | 131 | 132 | 148 | 148 | 148 |
| | i | 24,7 | 24,7 | 24,7 | 27,5 | 27,5 | 27,5 |
| | M | 25 (optional M20) | | | 32 (optional M25) | | |
| | M* | 2x25 (blind) to be cut out 18 (M25) and 15 (M20) | | | 2x25 (blind) to be cut out 25 (M32) and 18 (M25) | | |
| Max. cable diam. (mm) | | 1,5 | 1,5 | 1,5 | 2,5 | 2,5 | 2,5 |
| Terminal for cond. cross section (mm²) min.-max. | | —4 | —4 | —4 | —6 | —6 | —6 |

| Drawing | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| 1 MB 207 | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 225 | 225 | 225 | 225 | 225 | 225 |
| | b | 118 | 118 | 118 | 118 | 118 | 118 |
| | c | 144 | 146 | 147 | 152 | 152 | 153 |
| | d | 208 | 208 | 208 | 208 | 208 | 208 |
| | e | 101 | 101 | 101 | 101 | 101 | 101 |
| | f | 6,3 | 6,3 | 6,3 | 6,3 | 6,3 | 6,3 |
| | g. | 8 | 8 | 8 | 8 | 8 | 8 |
| | h | 252 | 255 | 259 | 268 | 268 | 274 |
| | M | 1xM25 and 1xM32 | | | 1xM25 and 1xM32 | | |
| | M* | 2x25 | 2x25 | 2x25 | 2x25 | 2x25 | 2x25 |
| Max. cable diam. (mm) | | 25 | 25 | 25 | 25 | 25 | 25 |
| Terminal for cond. cross section (mm²) min.-max. | | —4 | —4 | —4 | —10 | —10 | —10 |

| Drawing | Amp. | 16 | | | 32 | | 63 | |
|---|---|---|---|---|---|---|---|---|
| 1 MB 181 | Poles | 3 | 4 | 5 | 4 | 5 | 4 | 5 |
| Dim. in mm | a | 364 | 364 | 364 | 364 | 364 | 460 | 460 |
| | b | 134 | 134 | 134 | 134 | 134 | 180 | 180 |
| | c | 160 | 162 | 163 | 168 | 168 | 209 | 209 |
| | d | 347 | 347 | 347 | 347 | 347 | 440 | 440 |
| | e | 117 | 117 | 117 | 117 | 117 | 160 | 160 |
| | f | 6,3 | 6,3 | 6,3 | 6,3 | 6,3 | 8,1 | 8,1 |
| | g. | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | h | 391 | 395 | 398 | 408 | 411 | 525 | 525 |
| | M | 32/40 | 32/40 | 32/40 | 32/40 | 32/40 | 40 | 40 |
| | M* | 2x32 | 2x32 | 2x32 | 2x32 | 2x32 | 2x40 | 2x40 |
| Max. cable diam. (mm) | | 27 | 27 | 27 | 27 | 27 | 27 | 27 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 | 2,5 —10 | 2,5 —10 | 6 —25 | 6 —25 |

| Drawing | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| 1 MB 141 | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 75 | 75 | 75 | 85 | 85 | 85 |
| | b | 75 | 75 | 75 | 75 | 75 | 75 |
| | c | 60 | 61 | 61 | 70 | 70 | 72 |
| | d | 60 | 60 | 60 | 60 | 60 | 60 |
| | e | 60 | 60 | 60 | 60 | 60 | 60 |
| | f | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 |
| | g. | 8 | 8 | 8 | 8 | 8 | 8 |
| | g.1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | h | 83 | 88 | 95 | 99 | 99 | 105 |
| | i | 78 | 85 | 96 | 103 | 103 | 110 |
| | k | 31 | 32 | 32 | 39 | 39 | 39 |
| | l | 43 | 52 | 54 | 58 | 58 | 65 |
| Terminal for cond. cross section (mm²) min.-max. | | 1.5 —4 | 1.5 —4 | 1.5 —4 | 2.5 —10 | 2.5 —10 | 2.5 —10 |

| Drawing | Amp. | 32 |
|---|---|---|
| 2 MB 218-2 | Poles | 4 |
| Dim. in mm | a*max | 178 |
| | b | 94 |
| | n*max | 135 |
| | y | 22 |
| Terminal for cond. cross section (mm²) min.-max. | | 2,5 —6 |

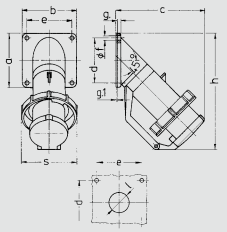
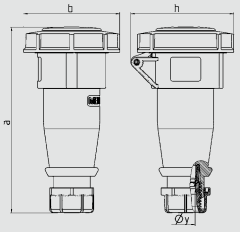
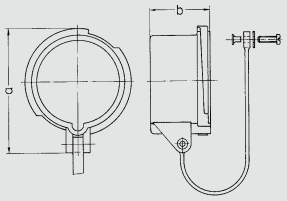
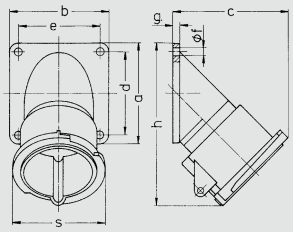
| Drawing | Amp. | 16 | | 32 | | 63 | |
|---|---|---|---|---|---|---|---|
| 2 MB 140 | Poles | 4 | 5 | 4 | 5 | 4 | 5 |
| Dim. in mm | a | 126 | 129 | 145 | 145 | 211 | 211 |
| | b | 60 | 65 | 66 | 74 | 100 | 100 |
| | h | 62 | 69 | 71 | 80 | 100 | 100 |
| | n | 90 | 93 | 99 | 99 | 145 | 145 |

# Special plugs and sockets ■ Reefer containers, 32A, IP 67

to VDE 0623-2, EN 60309-2. Earthing contact in the 3 o'clock position. Colour: electric grey and/or colour code.

| Image | Title | Description |
|---|---|---|
|  | **Panel mounted inlet**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10<br><br>Product group 2050.<br>Image 2692. | ■ screw terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ with hinged lid |
|  | **Connector AM-TOP®**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10<br><br>Product group 3149.<br>Image 2177A. | ■ screw terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ single part body<br>■ cable gland and sealing<br>■ strain relief and protection against kinking |
|  | **Protective cover**<br><br>Std. Pack. Qty: 50<br><br>Product group 8226.<br>Image 40841. | ■ for watertight plugs, wall mounted and panel mounted inlets |
|  | **Holder**<br><br>Std. Pack. Qty: 10<br><br>Product group 8215.<br>Image 41342. | ■ for plugs 32A, 4p |

Enclosure and insert made of AMAPLAST. Other versions available on request.

| Ampere | Poles | 380 - 440V 50 a. 60 Hz<br>4p<br>3h<br>Part number | Drawing |
|---|---|---|---|
| 32 | 4 | 2692 |  |
| 32 | 4 | 2177A |  |
| | | 40841 |  |
| | | 41342 |  |

| Drawing | Amp. | 16 | | | 32 | | | 63 | |
|---|---|---|---|---|---|---|---|---|---|
| 2 MB 40 | Poles | 5 | 3 | 4 | 5 | 4 | 5 | | |
| Dim. in mm | a | 85 | 85 | 85 | 85 | 114 | 114 | | |
| | b | 85 | 85 | 85 | 85 | 114 | 114 | | |
| | c | 141 | 141 | 141 | 144 | 180 | 180 | | |
| | d | 70 | 70 | 70 | 70 | 90 | 90 | | |
| | e | 70 | 70 | 70 | 70 | 90 | 90 | | |
| | f | 6,2 | 6,2 | 6,2 | 6,2 | 6,2 | 6,2 | | |
| | g. | 6 | 6 | 6 | 6 | 6 | 6 | | |
| | g.1 | 2 | 2 | 2 | 2 | 2 | 2 | | |
| | h | 181 | 181 | 181 | 188 | 242 | 242 | | |
| | s | 86 | 93 | 93 | 100 | 113 | 113 | | |
| | l | 30 | 30 | 30 | 30 | 40 | 40 | | |
| Terminal for cond. cross section (mm²) min.-max. | | 1 —2,5 | 2,5 —6 | 2,5 —6 | 2,5 —6 | 4 —10 | 4 —10 | | |

| Drawing | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| 3 MB 62 | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 146 | 166 | 172 | 212 | 212 | 213 |
| | b | 72 | 79 | 89 | 96 | 96 | 102 |
| | h | 80 | 88 | 95 | 98 | 98 | 105 |
| | y | 14,5 | 16 | 16 | 22 | 22 | 22 |
| Terminal for cond. cross section (mm²) min.-max. | | 1 —2,5 | 1 —2,5 | 1 —2,5 | 2,5 —6 | 2,5 —6 | 2,5 —6 |

| Drawing | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| 2 MB 146 | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 70 | 79 | 86 | 91 | 91 | 99 |
| | b | 41 | 41 | 42 | 51 | 51 | 52 |

| Drawing | Amp. | 63 | | | 125 | | |
|---|---|---|---|---|---|---|---|
| 2 MB 146 | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 108 | 108 | 108 | 119 | 119 | 119 |
| | b | 73 | 73 | 73 | 79 | 79 | 79 |

| Drawing | Amp. | 32 |
|---|---|---|
| 2 MB 186 | Poles | 4 |
| Dim. in mm | a | 85 |
| | b | 85 |
| | c | 100 |
| | d | 70 |
| | e | 70 |
| | f | 6,2 |
| | g. | 6 |
| | h | 138 |
| | s | 82 |

# Receptacle combinations for containers, made to measure



From the AMAXX® enclosure product range with 1, 2, 3, 4 or 5 segments or in the AMAXX®s variant, we put together your desired combination.

Multiple adjacent enclosures can also be connected to form a unit.

The combinations are manufactured with or without switched interlocked DUO receptacles.

In addition, the enclsoures can be equipped with monitoring sockets. See combination 940019 in this regard.



Container plugs and sockets can be delivered custom-tailored in size and equipment to meet customer requirements for the particular application. Special colours are possible in some cases. Please contact us.



The photo shows an EverGUM distributor for supplying two consumers via integrated time control.

**Standard made of AMAPLAST, protection type IP 67**

to DIN VDE 0623-2, EN 60309-2 and IEC 60309-2. Pre-wired for installation, bottom part black, top part electric grey (RAL 7035), hinged to the side. Fusing behind a transparent cover. DUO-receptacles switched and interlocked with highly heat resistant contact carrier and nickel plated contacts. For drawings and dimensions see page 167.

**Of course we offer client-specific solutions, which are especially designed for your demand.**



**CEE receptacles**

3 CEE 32A, 4p, 380 - 440V, 3h
switched, with mechanical DUO interlock

**CEE receptacles**

**Receptacles SCHUKO®**

**Fusing**

3 MCB´s 32A, 3p, C
1 earth bolt M 10, V2A

**Connection/feeder cable**

for 1 cable up to 5 x 25 mm²

**Enclosure size**

520 x 225 mm (H x W)

**Part no.**

**940027**



**CEE receptacles**

3 CEE 32A, 4p, 380 - 440V, 3h
switched, with mechanical DUO interlock

**CEE receptacles**

**Receptacles SCHUKO®**

**Fusing**

3 MCB´s 32A, 3p, C
3 monitoring sockets MS3102E 14S2S
1 earth bolt M 10, V2A

**Connection/feeder cable**

for 2 cables up to 5 x 25 mm²
for 3 monitoring sockets up to 4 x 4 mm²

**Enclosure size**

520 x 225 mm (H x W)

**Part no.**

**940019**

# Special plugs and sockets ■ Camping, 16A, 3p, 230V, IP 44

for electric appliances on camp sites, in caravans, for docksides and boats. To DIN VDE 0623, EN 60309-2.

| Image | Title | Description |
|---|---|---|
|  | **Wall mounted receptacle with TwinCONTACT**<br>**IP 44**<br>Std. Pack. Qty: 10<br>**Part no. 1341** | ■ screwless spring terminals<br>■ external fixing<br>■ cable entry from top<br>■ blind entry (can be cut out) on the backside |
|  | **Panel mounted receptacle**<br>**IP 44**<br>Std. Pack. Qty: 10<br>**Part no. 851** | ■ screw terminals<br>■ with eyelet<br>■ flange: 68 x 62 mm<br>■ fixing hole spacing: 47 x 47 mm<br>■ 20° inclination |
|  | **Panel mounted receptacle with TwinCONTACT**<br>**IP 44**<br>Std. Pack. Qty: 10<br>**Part no. 1619** | ■ screwless spring terminals<br>■ suitable for through wiring<br>■ flange: 55 x 55 mm<br>■ fixing hole spacing: 45 x 45 mm<br>■ straight |
|  | **Panel mounted receptacle with Twin CONTACT**<br>**IP 44**<br>Std. Pack. Qty: 10<br>**Part no. 1350** | ■ screwless spring terminals<br>■ suitable for through wiring<br>■ flange: 62 x 62 mm<br>■ fixing hole spacing: 47 x 47 mm<br>■ straight |
|  | **Panel mounted receptacle with TwinCONTACT**<br>**IP 44**<br>Std. Pack. Qty: 10<br>**Part no. 1632** | ■ screwless spring terminals<br>■ suitable for through wiring<br>■ flange: 73.5 x 64 mm<br>■ fixing hole spacing: 60 x 52 mm<br>■ 20° inclination |
|  | **Panel mounted receptacle with TwinCONTACT**<br>**IP 44**<br>Std. Pack. Qty: 10<br>**Part no. 1668** | ■ screwless spring terminals<br>■ suitable for through wiring<br>■ flange: 75 x 75 mm<br>■ fixing hole spacing: 60 x 60 mm<br>■ straight |

Colour: electric grey and/or colour code. Enclosure and insert made of AMAPLAST. Other versions on request.

| Image | Title | Description |
|---|---|---|
|  | **Plug ProTOP**<br>**IP 44**<br>Std. Pack. Qty: 10<br>**Part no. 148A** | ■ screw terminals<br>■ cable gland and sealing<br>■ strain relief and protection against kinking<br>■ enclosure with thread lock and safety slide |
|  | **Plug**<br>**IP 44**<br>Std. Pack. Qty: 10<br>**Part no. 852** | ■ screw terminals<br>■ with eyelet<br>■ matching panel mounted receptacle 851 |
|  | **Angled plug**<br>**IP 44**<br>Std. Pack. Qty: 10<br>**Part no. 1411** | ■ screw terminals<br>■ nickel plated contacts<br>■ with grommet |
|  | **Wall mounted inlet**<br>**IP 44**<br>Std. Pack. Qty: 10<br>**Part no. 847** | ■ screw terminals<br>■ with hinged lid<br>■ for internal or external fixing<br>■ cable entry also possible from top or from the rear |
|  | **Wall mounted inlet**<br>**IP 44**<br>Std. Pack. Qty: 10<br>**Part no. 844** | ■ screw terminals<br>■ for internal or external fixing<br>■ cable entry also possible from top or from the rear<br>■ for hinged lids for retrofit see accessories |
|  | **Wall mounted inlet**<br>**IP 44**<br>Std. Pack. Qty: 10<br>**Part no. 332** | ■ screw terminals<br>■ enclosure base with stamped recess for quick cutting out |

# Special plugs and sockets ■ Camping, 16A, 3p, 230V, IP 44

for electric appliances on camp sites, in caravans, for docksides and boats. To DIN VDE 0623, EN 60309-2.

| Image | Title | Description |
|---|---|---|
|  | **Built-in plug CaraCONTACT**<br>**IP 44**<br>Std. Pack. Qty: 5<br>**Part no. 8001** | ■ screw terminals<br>■ nickel plated contacts<br>■ lid: electric grey |
|  | **Built-in plug CaraCONTACT**<br>**IP 44**<br>Std. Pack. Qty: 5<br>**Part no. 8008** | ■ screw terminals<br>■ nickel plated contacts<br>■ lid: black |
|  | **Connector ProTOP**<br>**IP 44**<br>Std. Pack. Qty: 10<br>**Part no. 180AC** | ■ screw terminals<br>■ cable gland and sealing<br>■ strain relief and protection against kinking<br>■ enclosure with thread lock and safety slide |
|  | **Angled connector**<br>**IP 44**<br>Std. Pack. Qty: 10<br>**Part no. 1438** | ■ screw terminals<br>■ with grommet |

Colour: electric grey and/or colour code. Enclosure and insert made of AMAPLAST. Other versions on request.

| Image | Title | Description |
|---|---|---|
|  | **Check frame**<br><br>Std. Pack. Qty: 100<br><br>**Part no. 40744** | ■ for built-in plug, CaraCONTACT no. 8001, 8008 |
|  | **Adapter cable**<br><br>Std. Pack. Qty: 10<br><br>**Part no. 8004** | ■ 3-core rubber sheathed cable 1.5 m long with CEE connector 16A, 3p, 230V and plug SCHUKO® 16A, 230V |
|  | **Adapter cable**<br><br>Std. Pack. Qty: 10<br><br>**Part no. 8005** | ■ 3-core rubber sheathed cable 1.5 m long with connector SCHUKO® 16A, 230V and CEE plug 16A, 3p, 230V |

| Image | Title | Description |
|---|---|---|
|   | **CombiTOWER®**<br><br>Std. Pack. Qty: 1<br><br>**Part no. 15679** painted signal yellow (RAL 1003)<br>**Part no. 15678** bright finish | ■ made from stainless steel (material 1.4301)<br>■ material 1.4571 on request<br>■ with removable cover<br>■ dimensions (H x W x D): 1043 x 254.5 x 250 mm<br>■ for AMAXX® enclosures with 2, 3 or 4 segments |
|   | **CombiTOWER®**<br><br>Std. Pack. Qty: 1<br><br>**Part no. 15681** painted signal yellow (RAL 1003)<br>**Part no. 15680** bright finish | ■ with lockable door<br>■ made from stainless steel (material 1.4301)<br>■ material 1.4571 on request<br>■ with removable cover<br>■ dimensions (H x W x D): 1043 x 254 x 415 mm<br>■ for AMAXX® enclosures with 2, 3 or 4 segments |
|  | **Weather shield**<br><br>Std. Pack. Qty: 1<br><br>**Part no. 15682** | ■ made from stainless steel (material 1.4301)<br>■ with side blinds<br>■ cover can be removed from the back<br>■ for wall mounting or on column 15530<br>■ for AMAXX® enclosures with 2 or 3 segments<br>■ dimensions (H x W x D): 496.5 x 254 x 250 mm<br>■ surface: bright finish |
|  | **Weather shield**<br><br>Std. Pack. Qty: 1<br><br>**Part no. 15683** | ■ made from stainless steel (material 1.4301)<br>■ with side blinds<br>■ cover can be removed from the back<br>■ for wall mounting or on column 15530<br>■ for AMAXX® enclosures with 4 or 5 segments<br>■ dimensions (H x W x D): 758 x 254 x 280 mm<br>■ surface: bright finish |
|  | **Column**<br><br>Std. Pack. Qty: 1<br><br>**Part no. 15530** | ■ made from stainless steel (material 1.4301)<br>■ surface: stainless steel, bright finish (basic column for the shields 15682 and 15683)<br>■ height approx. 130 mm |





Overview Index

**Standard made of AMAPLAST, protection type IP 44**
Pre-wired for installation, bottom part black, top part electric grey (RAL 7035), hinged to the side. Fusing behind a transparent cover. For drawings and depth dimensions see page 167. **MENNEKES AMAXX® receptacle combinations for camp sites already comply to the standard and regulations which came into force 01.07.2007 according to DIN VDE 0100-708:2006-02 and DIN VDE 0100-754:2006.02.**



**CEE receptacles**

**CEE receptacles**
3 CEE 16A, 3p, 230V
(with eyelets)

**Receptacles SCHUKO®**

**Fusing**
3 RCD´s 25A, 2p, 0.03A
3 MCB´s 16A, 1p, B

**Connection/feeder cable**
for 1 cable up to 5 x 10 mm²

**Enclosure size**
260 x 225 mm (H x W)

**Part no.**
**920031**



**CEE receptacles**

**CEE receptacles**
4 CEE 16A, 3p, 230V
(with eyelets)

**Receptacles SCHUKO®**

**Fusing**
4 RCD´s 25A, 2p, 0.03A
4 MCB´s 16A, 1p, B

**Connection/feeder cable**
for 2 cables up to 5 x 25 mm²

**Enclosure size**
520 x 225 mm (H x W)

**Part no.**
**941265**

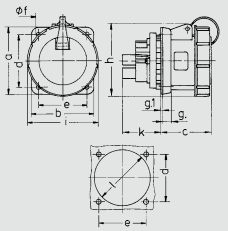
# Special plugs and sockets ■ TM for military purpose, 16A - 125A,

to DIN EN 60309-2. Colour: bronze-green (RAL 6031). Enclosure and insert made of AMAPLAST. The suffix of the defence equipment

| Image | Title | Description |
|---|---|---|
|  | **Panel mounted receptacle TM**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10/5<br><br>Product group 1047.<br>Image 20459. | ■ screw terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ straight<br>■ (form AS) |
|  | **Panel mounted receptacle TM**<br><br>**IP 67**<br><br>Std. Pack. Qty: 5<br><br>Product group 1046.<br>Image 23432. | ■ screw terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ straight<br>■ (form AS) |
|  | **Panel mounted receptacle TM**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10/5<br><br>Product group 1039.<br>Image 24740. | ■ screw terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ 20° inclination<br>■ (form BS) |
|  | **Panel mounted receptacle TM**<br><br>**IP 67**<br><br>Std. Pack. Qty: 5<br><br>Product group 1048.<br>Image 22189A. | ■ screw terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ 15° inclination<br>■ (form BS) |
|  | **Plug AM-TOP® TM**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10<br><br>Product group 2172.<br>Image 24770. | ■ screw terminals<br>■ single part body<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ cable gland and sealing<br>■ strain relief and protection against kinking<br>■ with protective cap<br>■ (form CP) |
|  | **Plug PowerTOP® Xtra TM**<br><br>**IP 67**<br><br>Std. Pack. Qty: 5<br><br>Product group 2221.<br>Image 24870. | ■ screw terminals<br>■ rubberised grip area<br>■ frame terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ cable gland and sealing<br>■ strain relief and protection against kinking<br>■ enclosure with thread lock<br>■ two safety slides<br>■ with protective cap<br>■ (form CP) |

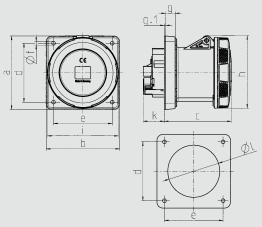
norm no. 96919-… you will find below the relevant MENNEKES part no. Other voltages and frequencies available on request.

| Ampere | Poles | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 440-460V 60 Hz | >50-500V >300-500 Hz | Drawing |
|---|---|---|---|---|---|---|
| | | 3p 5p<br>6h 9h | 5p<br>6h | 5p<br>11h | 3p 5p<br>2h 2h | |
| | | Part number | | | | |
| 16 | 3 | **22928**<br>AS013 | | | | |
| 16 | 5 | **23151**<br>AS002 | **20458**<br>AS001 | **23163**<br>AS003 | **23175**<br>AS004 | |
| 32 | 3 | **23293A**<br>AS042 | | | | |
| 32 | 5 | | **20459**<br>AS005 | | **23176**<br>AS008 | |
| 63 | 5 | **23153**<br>AS010 | **20460**<br>AS009 | **23165**<br>AS011 | **23177**<br>AS012 | |



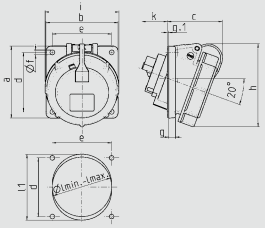
| Drawing | Amp. | 16 | | 32 | | 63 |
|---|---|---|---|---|---|---|
| 1 MB 217/1 | Poles | 3 | 5 | 3 | 5 | 5 |
| Dim. in mm | a | 75 | 75 | 85 | 85 | 107 |
| | b | 75 | 75 | 75 | 75 | 100 |
| | c | 60 | 60 | 67 | 73 | 82 |
| | d | 60 | 60 | 60 | 60 | 85 |
| | e | 60 | 60 | 60 | 60 | 77 |
| | f | 5,5 | 5,5 | 5,5 | 5,5 | 6,5 |
| | g. | 8 | 8 | 8 | 8 | 12 |
| | g.1 | 2 | 2 | 2 | 2 | 2 |
| | h | 81 | 95 | 95 | 106 | 115 |
| | i | 70 | 88 | 94 | 102 | 114 |
| | k | 26 | 27 | 34 | 34 | 55 |
| | l | 52 | 57 | 58 | 65 | 88 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 2,5 —10 | 2,5 —10 | 6 —25 |

| Ampere | Poles | | | | | |
|---|---|---|---|---|---|---|
| 125 | 5 | | **23432**<br>AS014 | | | |



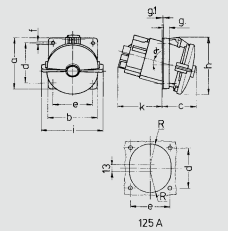
| Drawing | Amp. | 125 | |
|---|---|---|---|
| 1 MB 258 | Poles | 4 | 5 |
| Dim. in mm | a | 130 | 130 |
| | b | 130 | 130 |
| | c | 119 | 119 |
| | d | 104 | 104 |
| | e | 104 | 104 |
| | f | 6,5 | 6,5 |
| | g. | 18 | 18 |
| | g.1 | 2 | 2 |
| | h | 129 | 129 |
| | i | 126 | 126 |
| | k | 43 | 43 |
| | l | 95 | 95 |
| Terminal for cond. cross section (mm²) min.-max. | | 25 —70 | 25 —70 |

| Ampere | Poles | | | | | |
|---|---|---|---|---|---|---|
| 16 | 3 | **24630**<br>BS017 | | | | |
| 16 | 5 | | **24640**<br>BS001 | | **24643**<br>BS004 | |
| 32 | 3 | **24730**<br>BS042 | | | | |
| 32 | 5 | | **24740**<br>BS005 | | | |
| 63 | 5 | **24841**<br>BS010 | **24840**<br>BS009 | **24842**<br>BS011 | | |



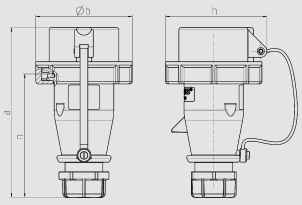
| Drawing | Amp. | 16 | | 32 | | 63 |
|---|---|---|---|---|---|---|
| 1 MB 474 | Pole | 3 | 5 | 3/4 | 5 | 3/4/5 |
| Maße in mm | a | 85 | 85 | 85 | 85 | 114 |
| | b | 85 | 85 | 85 | 85 | 114 |
| | c | 71 | 65 | 65 | 80 | 98 |
| | d | 70 | 70 | 70 | 70 | 90 |
| | e | 70 | 70 | 70 | 70 | 90 |
| | f | 5,5 | 5,5 | 5,5 | 5,5 | 5,5 |
| | g | 8 | 8 | 8 | 8 | 12 |
| | g.1 | 2 | 2 | 2 | 2 | 2 |
| | h | 92 | 98 | 101 | 115 | 135 |
| | i | 70 | 87 | 94 | 101 | 112 |
| | k | 39 | 33 | 53 | 53 | 70 |
| | l min. | 57 | 70 | 78 | 78 | 92 |
| | l max. | 78 | 78 | 78 | 78 | 105 |
| | l1 | — | — | — | — | 105 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 2,5 —10 | 2,5 —10 | 6 —25 |

| Ampere | Poles | | | | | |
|---|---|---|---|---|---|---|
| 125 | 5 | | **22189A**<br>BS013 | | | |



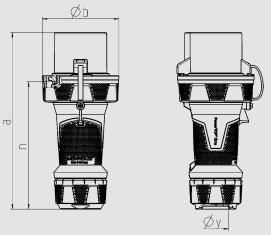

| Drawing | Amp. | 125 | |
|---|---|---|---|
| 1 MB 339 | Poles | 4 | 5 |
| Dim. in mm | a | 114 | 114 |
| | b | 110 | 110 |
| | c | 85 | 85 |
| | d | 90 | 90 |
| | e | 90 | 90 |
| | f | 6,2 | 6,2 |
| | g. | 13 | 13 |
| | g.1 | 2 | 2 |
| | h | 135 | 135 |
| | i | 135 | 135 |
| | k | 103 | 103 |
| | R | 47 | 47 |
| | α | 15° | 15° |
| Terminal for cond. cross section (mm²) min.-max. | | 25 70 | 25 70 |

| Ampere | Poles | | | | | |
|---|---|---|---|---|---|---|
| 16 | 3 | **24660**<br>CP017 | | | | |
| 16 | 5 | **24671**<br>CP002 | **24670**<br>CP001 | **24672**<br>CP003 | | |
| 32 | 3 | **24760**<br>CP042 | | | | |
| 32 | 5 | | **24770**<br>CP005 | **24772**<br>CP007 | **24773**<br>CP008 | |



| Drawing | Amp. | 16 | | 32 | |
|---|---|---|---|---|---|
| 2 MB 240 | Poles | 3 | 5 | 4 | 5 |
| Dim. in mm | a | 148 | 153 | 191 | 185 |
| | b | 70 | 87 | 94 | 101 |
| | h | 75 | 92 | 97 | 105 |
| | n | 108 | 112 | 141 | 133 |
| | y | 14,5 | 16 | 22 | 22 |
| Terminal for cond. cross section (mm²) min.-max. | | 1 —2,5 | 1 —2,5 | 2,5 —6 | 2,5 —6 |

| Ampere | Poles | | | | | |
|---|---|---|---|---|---|---|
| 63 | 5 | | **24870**<br>CP009 | | **24873**<br>CP012 | |
| 125 | 5 | | **24970**<br>CP013 | | | |



| Drawing | Amp. | 63 | 125 |
|---|---|---|---|
| 2 MB 241 | Poles | 5 | 5 |
| Dim. in mm | a | 260 | 300 |
| | b | 114 | 130 |
| | n | 188 | 219 |
| | y | 36 | 22 |
| Terminal for cond. cross section (mm²) min.-max. | | 6 —16 | 25 —50 |

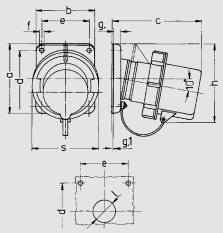
# Special plugs and sockets ■ TM for military purpose, 16A - 125A,

to DIN EN 60309-2. Colour: bronze-green (RAL 6031). Enclosure and insert made of AMAPLAST. The suffix of the defence equipment

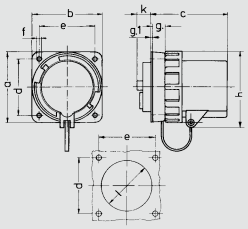
| Image | Title | Description |
|---|---|---|
|  | **Panel mounted inlet TM**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10/5<br><br>Product group 2067.<br>Image 20463. | ■ screw terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ with protective cap<br>■ (form BP) |
|  | **Panel mounted inlet TM**<br><br>**IP 67**<br><br>Std. Pack. Qty: 5<br><br>Product group 2077.<br>Image similar. | ■ screw terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ with protective cap<br>■ (form AP) |
|  | **Phase inverter AM-TOP® TM**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10<br><br>Product group 2092.<br>Image 24774. | ■ screw terminals<br>■ single part body<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ cable gland and sealing<br>■ strain relief and protection against kinking<br>■ with protective cap<br>■ (form CP) |
|  | **Connector AM-TOP® TM**<br><br>**IP 67**<br><br>Std. Pack. Qty: 10<br><br>Product group 3150.<br>Image 24785. | ■ screw terminals<br>■ single part body<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ cable gland and sealing<br>■ strain relief and protection against kinking<br>■ with protective cap<br>■ (form DS) |
|  | **Connector PowerTOP® Xtra TM**<br><br>**IP 67**<br><br>Std. Pack. Qty: 5<br><br>Product group 3221.<br>Image 24885. | ■ screw terminals<br>■ rubberised grip area<br>■ frame terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ cable gland and sealing<br>■ strain relief and protection against kinking<br>■ enclosure with thread lock<br>■ two safety slides<br>■ (form DS) |
|  | **Protective cover TM**<br><br>Std. Pack. Qty: 50<br><br>Product group 3221.<br>Image 40927. | ■ for watertight plugs and inlets<br>■ (form G) |

# IP 67

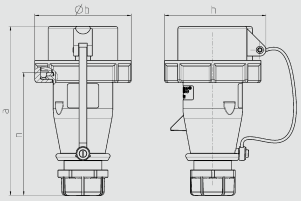
norm no. 96919-... you will find below the relevant MENNEKES part no. Other voltages and frequencies available on request.

| Ampere | Poles | 230V 50 a. 60 Hz | 400V 50 a. 60 Hz | 440-460V 60 Hz | >50-500V >300-500 Hz | Drawing |
|---|---|---|---|---|---|---|
| | | 3p 5p<br>6h 9h | 5p<br>6h | 5p<br>11h | 3p 5p<br>2h 2h | |
| | | Part number | | | | |
| 16 | 3 | **24210**<br>BP013 | | | |  |
| 16 | 5 | | **20461**<br>BP001 | | | |
| 32 | 3 | **23249**<br>BP042 | | | | |
| 32 | 5 | | **20462**<br>BP005 | | | |
| 63 | 5 | | **20463**<br>BP009 | | | |

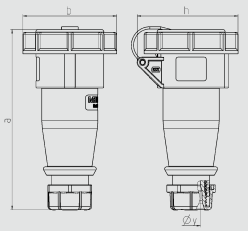
| Drawing 2 MB 62/1 | Amp. | 16 | | 32 | | 63 |
|---|---|---|---|---|---|---|
| | Poles | 3 | 5 | 3 | 5 | 5 |
| Dim. in mm | a | 85 | 85 | 85 | 85 | 106 |
| | b | 85 | 85 | 85 | 85 | 101 |
| | c | 128 | 128 | 129 | 135 | 152 |
| | d | 70 | 70 | 70 | 70 | 85 |
| | e | 70 | 70 | 70 | 70 | 77 |
| | f | 6,3 | 6,3 | 6,3 | 6,3 | 6,5 |
| | g. | 11 | 11 | 11 | 11 | 12 |
| | h | 105 | 107 | 108 | 111 | 130 |
| | s | 70 | 86 | 92 | 101,5 | 114 |
| Terminal for cond. cross section (mm²) min.-max. | | —2,5 | —2,5 | —6 | —6 | —10 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 125 | 5 | | **23433** | | |  |

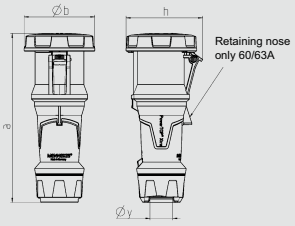
| Drawing 2 MB 206 | Amp. | 125 |
|---|---|---|
| | Poles | 5 |
| Dim. in mm | a | 130 |
| | b | 130 |
| | c | 120 |
| | d | 104 |
| | e | 104 |
| | f | 6,5 |
| | g. | 18 |
| | g.1 | 2 |
| | h | 131 |
| | k | 28 |
| | l | 95 |
| Terminal for cond. cross section (mm²) min.-max. | | 25<br>—70 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 16 | 5 | | **24674**<br>CP057 | | |  |
| 32 | 5 | | **24774**<br>CP058 | | | |

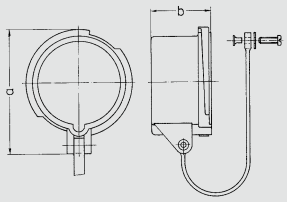
| Drawing 2 MB 240 | Amp. | 16 | | 32 | |
|---|---|---|---|---|---|
| | Poles | 3 | 5 | 4 | 5 |
| Dim. in mm | a | 148 | 153 | 191 | 185 |
| | b | 70 | 87 | 94 | 101 |
| | h | 75 | 92 | 97 | 105 |
| | n | 108 | 112 | 141 | 133 |
| | y | 14,5 | 16 | 22 | 22 |
| Terminal for cond. cross | | 1 | 1 | 2,5 | 2,5 |
| section (mm²) min.-max. | | —2,5 | —2,5 | —6 | —6 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 16 | 3 | **24675**<br>DS017 | | | |  |
| 16 | 5 | **24686**<br>DS002 | **24685**<br>DS001 | **24687**<br>DS003 | | |
| 32 | 3 | **24775**<br>DS042 | | | | |
| 32 | 5 | | **24785**<br>DS005 | **24787**<br>DS007 | **24788**<br>DS008 | |

| Drawing 3 MB 73 | Amp. | 16 | | 32 | |
|---|---|---|---|---|---|
| | Poles | 3 | 5 | 3 | 5 |
| Dim. in mm | a | 160 | 170 | 204 | 205 |
| | b | 70 | 87 | 101 | 101 |
| | h | 78 | 94 | 98 | 105 |
| | y | 14,5 | 16 | 22 | 22 |
| Terminal for cond. cross | | 1 | 1 | 2,5 | 2,5 |
| section (mm²) min.-max. | | —2,5 | —2,5 | —6 | —6 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 63 | 5 | | **24885**<br>DS009 | | **24888**<br>DS012 |  |
| 125 | 5 | | **24985**<br>DS013 | | | |

| Drawing 3 MB 68 | Amp. | 63 | | | 125 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 270 | 270 | 270 | 310 | 310 | 310 |
| | b | 113 | 113 | 113 | 125 | 125 | 125 |
| | h | 123 | 123 | 123 | 135 | 135 | 135 |
| | y | 36 | 36 | 36 | 49 | 49 | 49 |
| Terminal for cond. cross | | 6 | 6 | 6 | 25 | 25 | 25 |
| section (mm²) min.-max. | | —16 | —16 | —16 | —50 | —50 | —50 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 16 | 3 | **40926**<br>G-16-3 | | | |  |
| 16 | 5 | **40927**<br>G-16-5 | | | | |
| 32 | 3 | **40928** | | | | |
| 63 | 5 | **40930**<br>G-63-5 | | | | |
| 125 | 5 | **40931**<br>G-125-5 | | | | |

| Drawing 2 MB 146 | Amp. | 16 | | | 32 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 70 | 79 | 86 | 91 | 91 | 99 |
| | b | 41 | 41 | 42 | 51 | 51 | 52 |

| Drawing 2 MB 146 | Amp. | 63 | | | 125 | | |
|---|---|---|---|---|---|---|---|
| | Poles | 3 | 4 | 5 | 3 | 4 | 5 |
| Dim. in mm | a | 108 | 108 | 108 | 119 | 119 | 119 |
| | b | 73 | 73 | 73 | 79 | 79 | 79 |

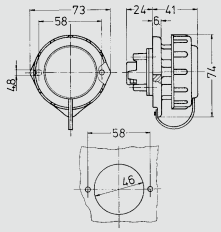
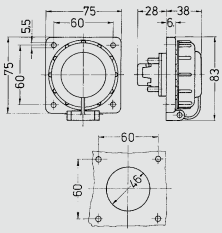
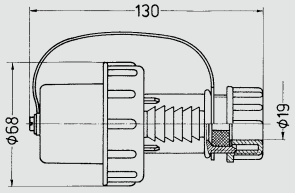
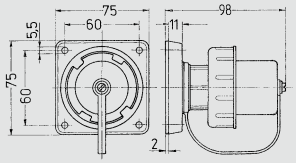
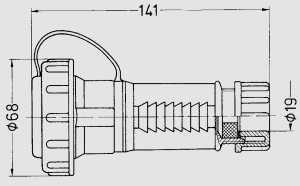
# Special plugs and sockets ■ TM for military purpose, pressure

to DIN 49442/43 and DIN VDE 0620. Colour: bronze-green (RAL 6031). Enclosure and insert made of AMAPLAST. The suffix of the defence

| Image | Title | Description |
|---|---|---|
|  | **Panel mounted receptacle SCHUKO® TM**<br><br>**IP 68**<br><br>Std. Pack. Qty: 10<br><br>Product group 1931.<br>Image 10803. | ■ screw terminals<br>■ bayonet lock lid attached by a strap<br>■ with oval flange<br>■ two fixing holes<br>■ (form BS)<br>■ connecting protective cap, part no. 19027706 available on request |
|  | **Panel mounted receptacle SCHUKO® TM**<br><br>**IP 68**<br><br>Std. Pack. Qty: 10<br><br>Product group 1933.<br>Image 10812. | ■ screw terminals<br>■ bayonet lock lid attached by a strap<br>■ square flange<br>■ four fixing holes<br>■ (form AS)<br>■ connecting protective cap, part no. 19027706 available on request |
|  | **Plug SCHUKO® TM**<br><br>**IP 68**<br><br>Std. Pack. Qty: 5<br><br>Product group 2930.<br>Image 10829. | ■ screw terminals<br>■ with double PE-conductor acc. to german and french-belgian standard<br>■ with bayonet ring<br>■ protective cap attached by a strap<br>■ for cables up to 3 x 2.5 mm² up to H07RN-F<br>■ (form CP)<br>Design-Innovationen Auszeichnung für hohe Design-Qualität Haus Industrieform Essen HiF |
|  | **Panel mounted inlet SCHUKO® TM**<br><br>**IP 68**<br><br>Std. Pack. Qty: 10<br><br>Product group 2932.<br>Image 10853. | ■ screw terminals<br>■ with double PE-conductor acc. to german and french-belgian standard<br>■ with bayonet ring<br>■ protective cap attached by a strap<br>■ (form AP) |
|  | **Connector SCHUKO® TM**<br><br>**IP 68**<br><br>Std. Pack. Qty: 5<br><br>Product group 3929.<br>Image 10834. | ■ screw terminals<br>■ bayonet lid attached by strap<br>■ for cables up to 3 x 2.5 mm², up to H07RN-F<br>■ (form DS)<br>Design-Innovationen Auszeichnung für hohe Design-Qualität Haus Industrieform Essen HiF |

# watertight IP 68

equipment norm no. 96919-... you will find below the relevant MENNEKES part no. Other voltages and frequencies available on request.

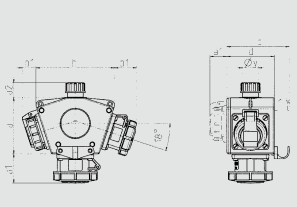
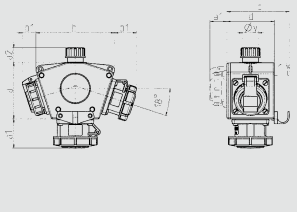
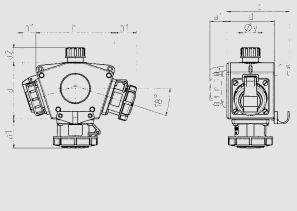
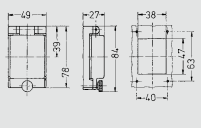
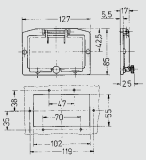
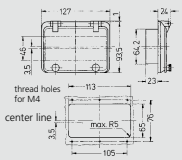
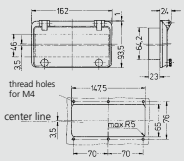
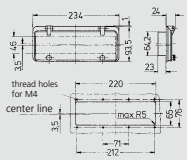
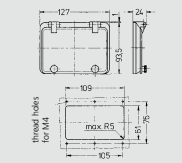
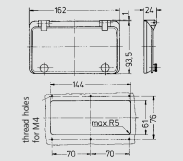
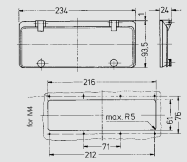
| Ampere | Poles | 230V<br>Part number | Drawing |
|---|---|---|---|
| 16 | 2p+E | **10803**<br>BS001 |  Drawing 1 MB 301 Dim. in mm |
| 16 | 2p+E | **10812**<br>AS001 |  Drawing 1 MB 300 Dim. in mm |
| 16 | 2p+E | **10829**<br>CP001 |  Drawing 2 MB 163 Dim. in mm |
| 16 | 2p+E | **10853**<br>AP001 |  Drawing 2 MB 164 Dim. in mm |
| 16 | 2p+E | **10834**<br>DS001 |  Drawing 3 MB 41 Dim. in mm |

to DIN 49442/43 and DIN VDE 0620. Colour: bronze-green (RAL 6031). Enclosure and insert made of AMAPLAST.

| Image | Title | Description |
|---|---|---|
|  | **DELTA-BOX TM**<br><br>**IP 68**<br><br>Std. Pack. Qty: 5<br><br>Product group 8003.<br>Image 10861. | ■ screw terminals<br>■ 3 SCHUKO® 16A, 230V with bayonet lid attached by a strap<br>■ pre-wired for installation<br>■ with cable grip and installed hanging hook<br>■ with hanging clip |
|  | **DELTA-BOX TM**<br><br>**IP 68**<br><br>Std. Pack. Qty: 1<br><br>Product group 8003.<br>Image similar (4 x SCHUKO®). | ■ screw terminals<br>■ 4 SCHUKO® 16A, 230V with bayonet lid attached by a strap<br>■ pre-wired for installation<br>■ with cable grip and installed hanging hook<br>■ with hanging clip |
|  | **DELTA BOX TM**<br><br>**IP 68**<br><br>Std. Pack. Qty: 1<br><br>Product group 8003.<br>Image 84708. | ■ screw terminals<br>■ 3 SCHUKO® 16A, 230V with bayonet lid attached by a strap<br>■ pre-wired for installation<br>■ with cable grip and installed hanging hook<br>■ with hanging clip<br>■ supply cable tail 1.5 m H07RN-F3G2.5 and plug SCHUKO® |
|  | **Hinged window TM**<br><br>Std. Pack. Qty: 200<br><br>Product group 8222.<br>Image 21375/21051. | ■ without protective cover<br>■ with knurled screws<br>■ window smoked glass |
|  | **Hinged window TM**<br><br>Std. Pack. Qty: 50/40<br><br>Product group 8222.<br>Image 24698. | ■ with protective cover<br>■ with knurled screws<br>■ window smoked glass |
|  | **Hinged window TM**<br><br>Std. Pack. Qty: 100/50/40<br><br>Product group 8222.<br>Image 24798. | ■ without protective cover<br>■ with knurled screws<br>■ window smoked glass |

# watertight IP 68

Other voltages and frequencies available on request.

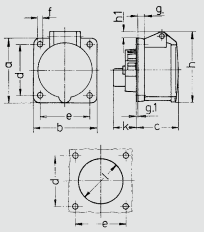
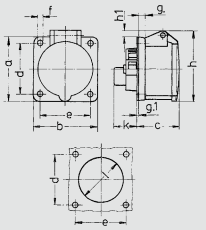
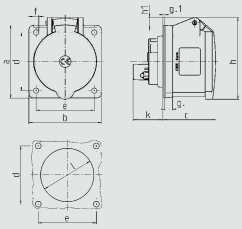
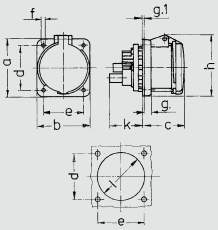
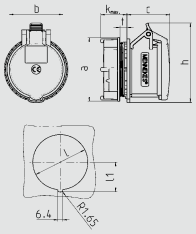
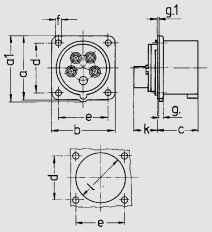
| Ampere | Poles | 230V<br>Part number | Drawing |
|---|---|---|---|
| 16 | 2p+E | 10861 |  |
| 16 | 2p+E | 83840 |  |
| 16 | 2p+E | 84708 |  |
| | | for 2 modules 21375 |  Part no. 40444 / Draw. 6 MB 3 / 2 modules |
| | | for 5 modules 21051 |  Part no. 40871 / Draw. 6 MB 4 / 5 modules |
| | | for 6 modules 24696 |  Part no. 40986 / Draw. 6 MB 17 / 6 modules |
| | | for 8 modules 24697 |  Part no. 40979 / Draw. 6 MB 12 / 8 modules |
| | | for 12 modules 24698 |  Part no. 40981 / Draw. 6 MB 13 / 12 modules |
| | | for 6 modules 24796 |  Part no. 40985 / Draw. 6 MB 16 / 6 modules |
| | | for 8 modules 24797 |  Part no. 40978 / Draw. 6 MB 15 / 8 modules |
| | | for 12 modules 24798 |  Part no. 40980 / Draw. 6 MB 14 / 12 modules |

| 3 MB 45 | | | |
|---|---|---|---|
| Pos. | Receptacles | IP-degrees | Dim. |
| a | | | 114.0 mm |
| a1 | SCHUKO®, 16A, 230V | IP 68 | 35.0 mm |
| a1 | CEE 16A, 3p, 230V | IP 67 | 56.3 mm |
| a1 | CEE 16A, 5p, 400V | IP 67 | 59.0 mm |
| a2 | | | 30.0 mm |
| b | | | 160.0 mm |
| b1 | SCHUKO®, 16A, 230V | IP 44 | 24.0 mm |
| b1 | CEE 16A, 3p, 230V | IP 44 | 44.3 mm |
| b1 | CEE 16A, 5p, 400V | IP 44 | 47.0 mm |
| c | | | 133.0 mm |
| d | | | 97.0 mm |
| y | | | 17.0 mm |

Enclosure and insert made of AMAPLAST. All visible plastic parts in black or dark-grey colour.

| Image | Title | Description |
|---|---|---|
|  | **Panel mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1055.<br>Image 1629ZC. | ■ screw terminals<br>■ straight |
|  | **Panel mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1055.<br>Image 1387ZA. | ■ screw terminals<br>■ straight |
|  | **Panel mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1056.<br>Image 1385ZI. | ■ screw terminals<br>■ straight |
|  | **Panel mounted receptacle**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1056.<br>Image 1261AE. | ■ screw terminals<br>■ straight |
|  | **Panel mounted receptacle RAPIDO®**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 1154/1157.<br>Image 997AB. | ■ 997AB: screwless spring terminals, TwinCONTACT for wall apertures 61 mm Ø<br>■ 995AB: screw terminals for wall apertures 70 mm Ø<br>■ suitable for through wiring<br>■ central fixing |
|  | **Panel mounted inlet**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 2084/2096.<br>Image 853SW. | ■ screw terminals<br>■ a retaining nose to hold the hinged lid of the connector must be provided by the customer in order to ensure satisfactory locking |

Reference for colour coding see page 335. Other voltages and frequencies available on request.

| Ampere | Poles | 110V 50 a. 60 Hz<br>3p 4p 5p<br>4h 4h 4h | 230V 50 a. 60 Hz<br>3p 4p 5p<br>6h 9h 9h | 400V 50 a. 60 Hz<br>3p 4p 5p<br>9h 6h 6h | Drawing |
|---|---|---|---|---|---|
| | | Part number | | | |
| 16 | 3 | | 1629ZC | |  |
| 16 | 4 | | | 1387ZA |  |
| 16 | 5 | | | 1385ZI |  |
| 32 | 3 | | 1395ZD | | |
| 32 | 5 | | | 22071ZA | |
| 63 | 3 | | 1261AE | |  |
| 63 | 5 | | | 1252AC | |
| 16 | 3 | | 997AB | |  |
| 32 | 3 | | 995AB | | |
| 16 | 5 | | | 853SW |  |
| 32 | 5 | | | 24152ZA | |

| Drawing 1 MB 426 | Amp. / Poles | 16 / 3 |
|---|---|---|
| Dim. in mm | a | 55 |
| | b | 55 |
| | c | 54 |
| | d | 45 |
| | e | 45 |
| | f | 5,5 |
| | g. | 8 |
| | g.1 | 2 |
| | h | 70 |
| | h1 | 12 |
| | k | 28 |
| | l | 47 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 |

| Drawing 1 MB 259 | Amp. / Poles | 16 / 3 | 16 / 4 | 16 / 5 |
|---|---|---|---|---|
| Dim. in mm | a | 62 | 72 | 72 |
| | b | 62 | 65 | 65 |
| | c | 54 | 54 | 54 |
| | d | 47 | 52 | 52 |
| | e | 47 | 52 | 52 |
| | f | 5,5 | 5,5 | 5,5 |
| | g. | 8 | 8 | 8 |
| | g.1 | 2 | 2 | 2 |
| | h | 68 | 77 | 85 |
| | h1 | 7 | 7 | 11 |
| | k | 28 | 28 | 28 |
| | l | 50 | 52 | 57 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 1,5 —4 | 1,5 —4 |

| Drawing 1 MB 247 | Amp. / Poles | 16 / 3 | 16 / 4 | 16 / 5 | 32 / 3 | 32 / 4 | 32 / 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 75 | 75 | 75 | 75 | 75 | 75 |
| | b | 75 | 75 | 75 | 75 | 75 | 75 |
| | c | 53 | 53 | 55 | 64 | 64 | 65 |
| | d | 60 | 60 | 60 | 60 | 60 | 60 |
| | e | 60 | 60 | 60 | 60 | 60 | 60 |
| | f | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 |
| | g. | 8 | 8 | 8 | 8 | 8 | 8 |
| | g.1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | h | 75 | 80 | 83 | 89 | 89 | 100 |
| | h1 | | 6 | 8 | 11 | 11 | 12 |
| | k | 31 | 32 | 32 | 39 | 39 | 39 |
| | l | 43 | 52 | 54 | 58 | 58 | 62 |
| Terminal for cond. cross section (mm²) min.-max. | | 1.5 —4 | 1.5 —4 | 1.5 —4 | 2.5 —10 | 2.5 —10 | 2.5 —10 |

| Drawing 1 MB 211 | Amp. / Poles | 63 / 3 | 63 / 4 | 63 / 5 |
|---|---|---|---|---|
| Dim. in mm | a | 107 | 107 | 107 |
| | b | 100 | 100 | 100 |
| | c | 80 | 80 | 80 |
| | d | 85 | 85 | 85 |
| | e | 77 | 77 | 77 |
| | f | 6. | 6. | 6. |
| | g. | 12 | 12 | 12 |
| | g.1 | 2 | 2 | 2 |
| | h | 113 | 113 | 113 |
| | k | 55 | 55 | 55 |
| | l | 88 | 88 | 88 |
| Terminal for cond. cross section (mm²) min.-max. | | 6 —25 | 6 —25 | 6 —25 |

| Drawing 1 MB 468 | Amp. / Poles | 16 / 3 | 32 / 3 | 32 / 4 | 32 / 5 |
|---|---|---|---|---|---|
| Dim. in mm | a | 69 | 81 | 81 | 81 |
| | b | 57 | 71 | 71 | 80 |
| | c | 55 | 66 | 66 | 64 |
| | k | max. 30 | max. 39 | max. 39 | max. 39 |
| | h | 87 | 101 | 101 | 108 |
| | l | 61 | 70 | 70 | 70 |
| | l1 | 33,25 | 37,75 | 37,75 | 37,75 |
| | t | 2-9 | 2-9 | 2-9 | 2-9 |
| Terminal for cond. cross section (mm²) min.-max. | | 1,5 —4 | 2,5 —10 | 2,5 —10 | 2,5 —10 |

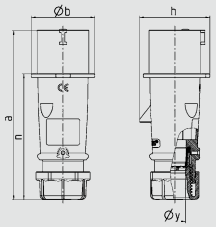
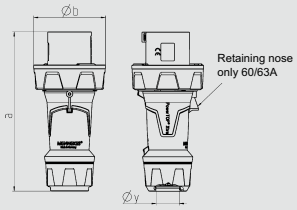
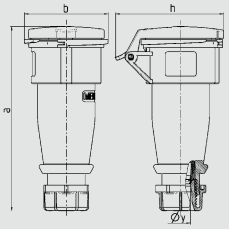
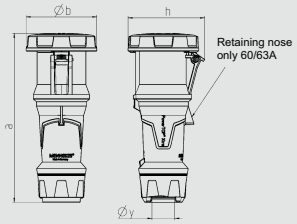
| Drawing 2 MB 68 | Amp. / Poles | 16 / 5 | 32 / 5 |
|---|---|---|---|
| Dim. in mm | a | 66 | 72 |
| | a1 | 69 | 78 |
| | b | 66 | 72 |
| | c | 43 | 52 |
| | d | 52 | 60 |
| | e | 52 | 60 |
| | f | 4,5 | 4,5 |
| | g. | 4,5 | 4,5 |
| | g.1 | 2 | 2 |
| | k | 27 | 32 |
| | l | 59 | 63 |
| Terminal for cond. cross section (mm²) min.-max. | | 1 —2,5 | 2,5 —6 |

Enclosure and insert made of AMAPLAST. All visible plastic parts in black or dark-grey colour.

| Image | Title | Description |
|---|---|---|
|  | **Plug AM-TOP®**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 2141.<br>Image 21421ZA. | ■ screw terminals<br>■ single part body<br>■ cable gland and sealing<br>■ strain relief and protection against kinking |
|  | **Plug PowerTOP® Xtra**<br><br>**IP 67**<br><br>Std. Pack. Qty: 5<br><br>Product group 2216.<br>Image 13261. | ■ screw terminals<br>■ rubberised grip area<br>■ frame terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ cable gland and sealing<br>■ strain relief and protection against kinking<br>■ enclosure with thread lock<br>■ two safety slides |
|  | **Connector AM-TOP®**<br><br>**IP 44**<br><br>Std. Pack. Qty: 10<br><br>Product group 3141.<br>Image 21422ZB. | ■ screw terminals<br>■ single part body<br>■ cable gland and sealing<br>■ strain relief and protection against kinking |
|  | **Connector PowerTOP® Xtra**<br><br>**IP 67**<br><br>Std. Pack. Qty: 5<br><br>Product group 3216.<br>Image 14261. | ■ screw terminals<br>■ rubberised grip area<br>■ frame terminals<br>■ 63A: SoftCONTACT, 125A: TorsionSpringCONTACT<br>■ highly heat resistant contact carrier<br>■ cable gland and sealing<br>■ strain relief and protection against kinking<br>■ enclosure with thread lock<br>■ two safety slides |

# IP 44 and IP 67

Other voltages and frequencies available on request.

| Ampere | Poles | 110V 50 a. 60 Hz<br>3p 4p 5p<br>4h 4h 4h | 230V 50 a. 60 Hz<br>3p 4p 5p<br>6h 9h 9h | 400V 50 a. 60 Hz<br>3p 4p 5p<br>9h 6h 6h | Drawing |
|---|---|---|---|---|---|
| | | Part number | | | |
| 16 | 3 | 22737ZA | 22302ZC | |  |
| 16 | 4 | | | 22289ZC | |
| 16 | 5 | | | 21421ZA | |
| 32 | 3 | | 260ZD | | |
| 32 | 5 | | | 21428ZA | |
| 63 | 5 | | | 13260 |  |
| 125 | 5 | | | 13261 | |
| 16 | 3 | 509ZC | 21877ZC | |  |
| 16 | 4 | | | 21021ZB | |
| 16 | 5 | | | 21422ZB | |
| 32 | 3 | | 522ZB | | |
| 32 | 5 | | | 21039ZB | |
| 63 | 5 | | | 14260 |  |
| 125 | 5 | | | 14261 | |

| Drawing 2 MB 217 | Amp. / Poles | 16 3 | 16 4 | 16 5 | 32 3 | 32 4 | 32 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 142 | 147 | 147 | 186 | 186 | 180 |
| | b | 53 | 59 | 67 | 70 | 70 | 77 |
| | h | 59 | 69,4 | 76 | 81 | 81 | 89,5 |
| | n | 105,2 | 110,5 | 110,5 | 141 | 141 | 135 |
| | y | 14,5 | 16 | 16 | 22 | 22 | 22 |
| Terminal for cond. cross | | 1 | 1 | 1 | 2,5 | 2,5 | 2,5 |
| section (mm²) min.-max. | | —2,5 | —2,5 | —2,5 | —6 | —6 | —6 |

| Drawing 2 MB 225 | Amp. / Poles | 63 3 | 63 4 | 63 5 | 125 3 | 125 4 | 125 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 250 | 250 | 250 | 290 | 290 | 290 |
| | b | 114 | 114 | 114 | 130 | 130 | 130 |
| | y | 36 | 36 | 36 | 49 | 49 | 49 |
| Terminal for cond. cross | | 6 | 6 | 6 | 25 | 25 | 25 |
| section (mm²) min.-max. | | —16 | —16 | —16 | —50 | —50 | —50 |

| Drawing 3 MB 63 | Amp. / Poles | 16 3 | 16 4 | 16 5 | 32 3 | 32 4 | 32 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 162 | 165 | 167 | 209 | 209 | 208 |
| | b | 60 | 68 | 76 | 82 | 82 | 89 |
| | h | 83 | 92 | 98 | 100 | 100 | 108 |
| | y | 14,5 | 16 | 16 | 22 | 22 | 22 |
| Terminal for cond. cross | | 1 | 1 | 1 | 2,5 | 2,5 | 2,5 |
| section (mm²) min.-max. | | —2,5 | —2,5 | —2,5 | —6 | —6 | —6 |

| Drawing 3 MB 68 | Amp. / Poles | 63 3 | 63 4 | 63 5 | 125 3 | 125 4 | 125 5 |
|---|---|---|---|---|---|---|---|
| Dim. in mm | a | 270 | 270 | 270 | 310 | 310 | 310 |
| | b | 113 | 113 | 113 | 125 | 125 | 125 |
| | h | 123 | 123 | 123 | 135 | 135 | 135 |
| | y | 36 | 36 | 36 | 49 | 49 | 49 |
| Terminal for cond. cross | | 6 | 6 | 6 | 25 | 25 | 25 |
| section (mm²) min.-max. | | —16 | —16 | —16 | —50 | —50 | —50 |

**Notice:**
If, for plugs and sockets the rated operating voltage, except on the rating plate, should also be marked through a colour code, then the colour code must be selected in accordance with IEC 60309. However, this colour code should only be used if it can easily be distinguished from the colour of the enclosure. For MENNEKES products for the entertainment industry the black enclosure colour is not an code colour!

**Enclosure made of solid rubber or AMAPLAST, protection type IP 44[1)]**

pre-wired for installation, black RAL 9005. Cable entries and dimensions of depth for solid rubber combinations can be found on page 210 and 214 and for receptacle strips made of AMAPLAST on page 177. Other combinations on request.

[1)] See comment on page 45 to protection degree IP 44 for portable combination units.



**Fitted with**
3 SCHUKO® 16A, 230V

**Fusing**

**Connection/feeder cable**
1 m H07RN-F3G1.5 with plug SCHUKO®

**Enclosure material**
AMAPLAST

**Part no.**
**9200048**



**Fitted with**
3 SCHUKO® 16A, 230V

**Fusing**

**Connection/feeder cable**
1 x M20 plugged at top,
1 x M20 with gland at bottom

**Enclosure material**
AMAPLAST

**Part no.**
**9203230**



**Fitted with**
1 CEE 16A, 5p, 400V
1 CEE 16A, 3p, 230V
2 SCHUKO® 16A, 230V

**Fusing**

**Connection/feeder cable**
for 1 cable up to
5 x 10 mm²

**Enclosure material**
Solid rubber

**Part no.**
**7106889**



**Fitted with**
1 CEE 16A, 5p, 400V
1 CEE 16A, 3p, 230V
2 british standard 13A, 230V

**Fusing**

**Connection/feeder cable**
for 1 cable up to
5 x 10 mm²

**Enclosure material**
Solid rubber

**Part no.**
**7106783**



**Fitted with**
1 CEE 32A, 5p, 400V
1 CEE 16A, 5p, 400V
4 SCHUKO® 16A, 230V

**Fusing**
1 MCB 16A ,3p, C
4 MCB´s 16A, 1p, C
1 RCD 40A, 4p, 0.03A

**Connection/feeder cable**
2 m H07RN-F5G4 with CEE-plug 32A, 5p, 400V

**Enclosure material**
Solid rubber

**Part no.**
**7408884**



**Fitted with**
1 CEE 32A, 5p, 400V
1 CEE 16A, 5p, 400V
4 british standard13A, 230V

**Fusing**
1 MCB 16A ,3p, C
4 MCB´s 16A, 1p, C
1 RCD 40A, 4p, 0.03A

**Connection/feeder cable**
2 m H07RN-F5G4 with CEE-plug 32A, 5p, 400V

**Enclosure material**
Solid rubber

**Part no.**
**7408884GB**



**Fitted with**
1 CEE 63A, 5p, 400V
1 CEE 32A, 5p, 400V
1 CEE 16A, 5p, 400V
4 SCHUKO® 16A, 230V

**Fusing**
1 MCB 32A ,3p, C
1 MCB 16A, 3p, C
2 MCB´s 16A, 1p, C
1 RCD 63A, 4p, 0.03A

**Connection/feeder cable**
2 m H07RN-F5G10 with CEE-plug 63A, 5p, 400V

**Enclosure material**
Solid rubber

**Part no.**
**7513001**



**Fitted with**
1 CEE 63A, 5p, 400V
1 CEE 32A, 5p, 400V
1 CEE 16A, 5p, 400V
4 british standard 16A, 230V

**Fusing**
1 MCB 32A ,3p, C
1 MCB 16A, 3p, C
2 MCB´s 16A, 1p, C
1 RCD 63A, 4p, 0.03A

**Connection/feeder cable**
2 m H07RN-F5G10 with CEE-plug 63A, 5p, 400V

**Enclosure material**
Solid rubber

**Part no.**
**7513001GB**

**Enclosure made of solid rubber or AMAPLAST, protection type IP 44[1)]**
pre-wired for installation, black RAL 9005, hinged to the side. Fusing under transparent cover. For drawings and dimensions see page 167. Other combinations on request.

[1)] See comment on page 45 to protection degree IP 44 for portable combination units.



**CEE receptacles**
1 CEE 16A, 5p, 400V

**CEE receptacles**

**Receptacles SCHUKO®**
2 SCHUKO® 16A, 230V

**Fusing**
1 RCD 40A, 4p, 0.03A
1 MCB 16A, 3p, C
2 MCB´s 16A, 1p, C

**Connection**
For 1 cable up to
5 x 10 mm²

**Enclosure size**
260 x 225 mm (H x W)

**Part no.**
**920009SW**



**CEE receptacles**
1 CEE 32A, 5p, 400V
1 CEE 16A, 5p, 400V

**CEE receptacles**

**Receptacles SCHUKO®**
2 SCHUKO® 16A, 230V

**Fusing**
1 RCD 40A, 4p, 0.03A
1 MCB 32A, 3p, C
1 MCB 16A, 3p, C
2 MCB´s 16A, 1p, C

**Connection**
For 2 cables up to
5 x 25 mm²

**Enclosure size**
390 x 225 mm (H x W)

**Part no.**
**930278SW**



**CEE receptacles**
1 CEE 32A, 5p, 400V
1 CEE 16A, 5p, 400V

**CEE receptacles**

**Receptacles SCHUKO®**
4 SCHUKO® 16A, 230V

**Fusing**
1 RCD 63A, 4p, 0.03A
1 MCB 32A, 3p, C
1 MCB 16A, 3p, C
4 MCB´s 16A, 1p, C

**Connection**
For 2 cables up to
5 x 25 mm²

**Enclosure size**
520 x 225 mm (H x W)

**Part no.**
**940280SW**



**CEE receptacles**
1 CEE 32A, 5p, 400V
1 CEE 16A, 5p, 400V

**CEE receptacles**

**Receptacles SCHUKO®**
2 SCHUKO® 16A, 230V

**Fusing**
1 RCD 40A, 4p, 0.03A
1 MCB 32A, 3p, C
1 MCB 16A, 3p, C
2 MCB´s 16A, 1p, C

**Connection**
2 m H07RN-F5G4 with
CEE-plug 32A, 5p, 400V

**Enclosure size**
390 x 225 mm (H x W)

**Part no.**
**934851SW**

# Special plugs and sockets ■ Fire brigade and civil protection,

to DIN 49442/43 and DIN VDE 0620. Colour: electric grey and blue. Enclosure and insert made of AMAPLAST. 16A, 2p+E, 230V.

| Image | Title | Description |
|---|---|---|
|  | **Wall mounted receptacle SCHUKO®**<br>**IP 68**<br>Std. Pack. Qty: 10<br>**Part no. 10863** | ■ screw terminals<br>■ hinged bayonet lock lid<br>■ one threaded M 20 cable entry at top and one blind M 20 cable entry (can be cut out) at bottom |
|  | **Panel mounted receptacle SCHUKO®**<br>**IP 68**<br>Std. Pack. Qty: 10<br>**Part no. 10805** | ■ screw terminals<br>■ bayonet lock lid attached by a strap<br>■ oval flange<br>■ two fixing holes<br>■ connecting protective cap, part no. 19027706, available on request |
|  | **Panel mounted receptacle SCHUKO®**<br>**IP 68**<br>Std. Pack. Qty: 10<br>**Part no. 10810** | ■ screw terminals<br>■ bayonet lock lid attached by a strap<br>■ rectangular flange<br>■ four fixing holes<br>■ connecting protective cap, part no. 19027706, available on request |
|  | **Panel mounted receptacle SCHUKO®**<br>**IP 68**<br>Std. Pack. Qty: 10<br>**Part no. 10808** | ■ screw terminals<br>■ hinged bayonet lock lid<br>■ rectangular flange<br>■ four fixing holes<br>■ connecting protective cap, part no. 19027706, available on request |



Dimensions and drawings can be found in chapter 5 "Grounding-type plugs and sockets".

# IP 66 to pressure watertight IP 68

Other versions available on request.

| Image | Title | Description |
|---|---|---|
|  | **Plug SCHUKO®**<br>**IP 68**<br>Std. Pack. Qty: 5<br>**Part no. 10828** | ■ screw terminals<br>■ with combined PE-conductor acc. to german and french-belgian standard<br>■ with bayonet ring<br>■ protective cap attached by a strap<br>■ for cables up to 3 x 2.5 mm², up to H07RN-F<br>Design-Innovationen Auszeichnung für hohe Design-Qualität Haus Industrieform Essen HiF |
|  | **Angled plug SCHUKO®**<br>**IP 66**<br>Std. Pack. Qty: 10<br>**Part no. 10818** | ■ screw terminals<br>■ with cable gland<br>■ for cables up to 3 x 2.5 mm², up to H07RN-F |
|  | **Inlet SCHUKO®**<br>**IP 68**<br>Std. Pack. Qty: 10<br>**Part no. 10864** | ■ screw terminals<br>■ with combined PE-conductor acc. to german and french-belgian standard<br>■ with bayonet ring<br>■ protective cap attached by a strap<br>■ one threaded M 20 cable entry at top and one blind M 20 cable entry (can be cut out) at bottom |
|  | **Panel mounted inlet SCHUKO®**<br>**IP 68**<br>Std. Pack. Qty: 10<br>**Part no. 10852** | ■ screw terminals<br>■ with combined PE-conductor acc. to german and french-belgian standard<br>■ with bayonet ring<br>■ protective cap attached by a strap |
|  | **Connector SCHUKO®**<br>**IP 68**<br>Std. Pack. Qty: 5<br>**Part no. 10833** | ■ screw terminals<br>■ bayonet lock lid attached by a strap<br>■ for cables up to 3 x 2.5 mm², up to H07RN-F<br>Design-Innovationen Auszeichnung für hohe Design-Qualität Haus Industrieform Essen HiF |

# Special plugs and sockets ■ Fire brigade and civil protection,

Devices of page 340 DIN VDE 0623, EN 60309-2. Colour: electric grey and/or colour code. Enclosure made of AMAPLAST

| Image | Title | Description |
|---|---|---|
|  | **Panel mounted receptacle with TwinCONTACT**<br>IP 67<br>Std. Pack. Qty: 10<br>**Part no. 1708** 16A, 3p, 230V<br>**Part no. 1131** 16A, 5p, 400V | ■ screwless spring terminals<br>■ suitable for through wiring<br>■ straight |
|  | **Panel mounted receptacle with TwinCONTACT**<br>IP 67<br>Std. Pack. Qty: 10<br>**Part no. 1701** 16A, 3p, 230V<br>**Part no. 3485** 16A, 5p, 400V<br>**Part no. 1808** 32A, 5p, 400V | ■ screwless spring terminals<br>■ suitable for through wiring<br>■ 20° inclination<br>■ 32A receptacles are designed for adding an auxiliary contact switch |
|  | **Plug PowerTOP®**<br>IP 67<br>Std. Pack. Qty: 10<br>**Part no. 3796** 16A, 3p, 230V<br>**Part no. 3821** 16A, 5p, 400V<br>**Part no. 3853** 32A, 5p, 400V | ■ screw terminals<br>■ highly heat resistant contact carrier<br>■ nickel plated contacts<br>■ cable gland and external cable grip |
|  | **Connector PowerTOP®**<br>IP 67<br>Std. Pack. Qty: 10<br>**Part no. 3860** 16A, 3p, 230V<br>**Part no. 3881** 16A, 5p, 400V<br>**Part no. 3907** 32A, 5p, 400V | ■ screw terminals<br>■ highly heat resistant contact carrier<br>■ cable gland and external cable grip |
|  | **Protective cover**<br>Std. Pack. Qty: 50<br>**Part no. 40784** for 16A, 3p<br>**Part no. 40785** for 16A, 5p + 7p<br>**Part no. 40786** for 32A, 5p + 7p | ■ for watertight plugs, wall mounted and panel mounted inlets |

Dimensions and drawings for
panel mounted receptacles can be found in chapter 2 "Receptacles",
plugs and connectors in chapter 3 "Plugs / Connectors" and
DELTA-BOXES and EverGUM units in chapter 4 "Receptacle combinations".

or solid rubber, receptacle enclosure and insert made of AMAPLAST. Other versions available on request.

| Image | Title | Description |
|---|---|---|
|  | **DELTA-BOX**<br>**IP 68**<br>Std. Pack. Qty: 5<br>**Part no. 10860** | ■ screw terminals<br>■ 3 SCHUKO® 16A, 230V with hinged bayonet lock lid<br>■ pre-wired for installation<br>■ with internal strain relief and installed hanging hook<br>■ enclosure and insert made of AMAPLAST<br>■ with hanging clip |
|  | **DELTA-BOX**<br>**IP 68**<br>Std. Pack. Qty: 5<br>**Part no. 10859** | ■ screw terminals<br>■ 3 SCHUKO® 16A, 230V with bayonet lock lid attached by a strap<br>■ pre-wired for installation<br>■ with internal strain relief and installed hanging hook<br>■ enclosure and insert made of AMAPLAST<br>■ with hanging clip |
|  | **DELTA-BOX**<br>**IP 68**<br>Std. Pack. Qty: 5<br>**Part no. 92386** | ■ screw terminals<br>■ 3 SCHUKO® 16A, 230V with bayonet lock lid attached by a strap<br>■ pre-wired for installation<br>■ with internal strain relief and installed hanging hook<br>■ enclosure and insert made of AMAPLAST<br>■ with hanging clip<br>■ 1.5 m H07RN-F3G2.5 with plug SCHUKO® incl. protective cap attached by a strap |
|  | **DELTA-BOX**<br>**IP 67**<br>Std. Pack. Qty: 1<br>**Part no. 92909** | ■ screw terminals<br>■ 3 CEE 16A, 5p, 400V with hinged bayonet lock lid<br>■ pre-wired for installation<br>■ with internal strain relief and installed hanging hook<br>■ enclosure and insert made of AMAPLAST<br>■ with hanging clip<br>■ 2 m H07RN-F3G2.5 with CEE-plug 16A, 5p, 400V |

Enclosure and insert made of AMAPLAST. Colour: electric grey (RAL 7035). Protection type IP 44.

**For all blackouts.**
**Save and firm installation instead of insecure provisional arrangements.**

The enclosures of the MENNEKES emergency power infeeds are manufactured of proven materials.

AMAPLAST:
Is the name of the plastic (PA, PC) MENNEKES uses, with these outstanding characteristics: Excellent electrical insulation, break-proof, wear-resistant, abrasion-resistant, dimensionally stable, self-extinguishing, heat-resistant, cold-resistant, stabilised against aging, resistant to seawater, oil, and petrol.

Stainless steel:
Our high-quality stainless steel products are manufactured of rust-free stainless steel 1.4301 (V2A) or 1.4571 (V4A) and thus are optimally suited for continuous use in buildings or outdoors.

There is a potential risk of corrosion in open air and indoor swimming pools, in coastal regions, offshore and in industrial areas with high air pollution. Subject to location and climatic conditions discoloration and corrosion can arise.

Through specific cleaning and maintenance procedures, impairments of the surface can be reduced or avoided.

In particularly aggressive ambient conditions we recommend the use of special stainless steels or coating the surfaces to further increase corrosion resistance.



**Surface mounted distribution board**

as emergency power supply, pre-wired for installation, protection type IP 44. Enclosure from AMAPLAST.
Colour: electric grey (RAL 7035)

**Fitted with**
1 phase inverter designed as CEE panel mounted inlet with hinged cover 16A, 5p, 400V
1 mains reversing switch 63A, 4p (Front panel: mains-0-emergency power)

**Connection/feeder cable**
2 x M 40 at the top (left side open, right side closed)
2 x M 40 at the bottom (closed)

terminal for 2 cables up to 5 x 10 mm²

**Enclosure size**
341 x 172 mm (H x W)

**Part no. 83969**



**Surface mounted distribution board**

as emergency power supply, pre-wired for installation, protection type IP 44. Enclosure from AMAPLAST.
Colour: electric grey (RAL 7035)

**Fitted with**
1 phase inverter designed as CEE panel mounted inlet with hinged cover 32A, 5p, 400V
1 mains reversing switch 63A, 4p (AC-3 18.5 kW) (Front panel: mains-0-emergency power)

**Connection/feeder cable**
2 x M 40 at the top (left side open, right side closed)
2 x M 40 at the bottom (closed)

terminal for 1 cable up to 5 x 16 mm²

terminal for 1 outgoing line up to 5 x 16 mm² (consumer)

**Enclosure size**
341 x 172 mm (H x W)

**Part no. 83718**

Enclosure: stainless steel (material 1.4301). Protection type IP 43 or IP 44 with closed door.
Surface flat finished (K240). Material 1.4571 on request.



**Surface mounted distribution board**

as emergency power supply, pre-wired for installation, protection type IP 44 with closed door. Enclosure: stainless steel (material 1.4301), flat finished (K240). Material 1.4571 on request.

**Fitted with**
1 CEE-inlet
63A, 5p, 400V
1 terminal strip
5 x 50 mm²

**Connection/feeder cable**
2 cable entry bushings at the bottom, prepared for cable diameter from 13 up to 49 mm
1 brass locking screw M 20 at the bottom front door with turning lever and profile cylinder, lockable with the connector
1 earthing screw M 6 on the inside
1 set of wall fastening straps

**Enclosure size**
700 x 300 x 310 mm (H x W x D)

**Part no. 83691**



**Surface mounted distribution board**

as emergency power supply, pre-wired for installation, protection type IP 44 with closed door. Enclosure: stainless steel (material 1.4301), flat finished (K240). Material 1.4571 on request.

**Fitted with**
1 CEE-inlet
125A, 5p, 400V
1 terminal strip
5 x 50 mm²

**Connection/feeder cable**
2 cable entry bushings at the bottom, prepared for cable diameter from 13 up to 49 mm
1 brass locking screw M 20 at the bottom front door with turning lever and profile cylinder, lockable with the connector
1 earthing screw M 6 on the inside
1 set of wall fastening straps

**Enclosure size**
700 x 300 x 310 mm (H x W x D)

**Part no. 83692**



**Flush mounted distribution board**

as emergency power supply, pre-wired for installation, protection type IP 43 with closed door. Enclosure: front door and trim frame stainless steel (material 1.4301), flat finished (K240). Material 1.4571 on request. Flush mounted enclosure: stainless steel (material 1.4301) bright finish. Dimensions flush mounted enclosure:
520 x 360 x 200 mm
(H x W x D)

**Fitted with**
1 CEE-inlet 16A, 5p, 400V
1 mains reversing switch 63A, 4p
1 front panel: mains-0-emergency power

**Connection/feeder cable**
3 cable entry bushings at the top with 2 at the bottom, prepared for cable diameter from 13 up to 49 mm, terminal for 2 cables up to 5 x 16 mm²

**Enclosure size**
580 x 420 x 200 mm (H x W x D)

**Part no. 83968A**



**Weather shield**

flat finished stainless steel, for surface mounted distribution boards
700 x 300 x 310 mm

**Part no. 18438**


MENNEKES
Made in Germany
DIN 43628
Typ 10907

## Cable connection boxes



**cable connection boxes**
and external strain relief

Pages 348 - 349

**Product information**
Page 346

## Switch disconnectors



**switch disconnectors with high resistance to chemicals**
690V, 25A - 80A, IP 67

Pages 350 - 351

**Product information**
Page 347

## Hinged windows



**hinged windows**
and accessories, IP 44 and IP 67

Pages 352- 353

**Product information**
Page 347

## Cable connection boxes for lamp posts.




Protection type IP 44.
Dimensions in accordance with DIN 43628.
Protection class II. Shock hazard protected for finger touch by a latching cover in accordance with BGV A3 (formerly VBG4).
Cable connection boxes may be fitted with either one or two fuse bases D 01/E 14 and 5 connection terminals, rated for 2 x 16 $mm^2$ or 3 x 10 $mm^2$.
The fuse elements are factory wired.
Suitable for installation in lamp posts with an internal diameter of 82 mm or more and a door aperture of 75 x 250 mm or more. The cable connection boxes are generally supplied pre-wired, which results in a significant reduction of costs.
The transparent cover of the casing can be easily removed for access to the fuses.

**External strain relief.**

The external strain relief for earth-cable transition boxes can be ordered as an accessory. It offers more safety and offloads the enclosure.

The functionality is identifiable at a glance from the outside.



## Switch disconnectors.

The load disconnect switches from MENNEKES have a watertight enclosure in the protection rating IP 67 are manufactured of the material, AMELAN®, which is particularly resistant to chemicals.




**2 enclosure sizes.**
Two different enclosure sizes fitted with switch disconnectors are available.

**Standard types.**
All models are equipped as standard with three switched poles, a non-switched neutral and a safety earth contact.

**Auxiliary contacts**.
Disconnectors with additional auxiliary contact (1 x NO and 1 x NC) are also available.

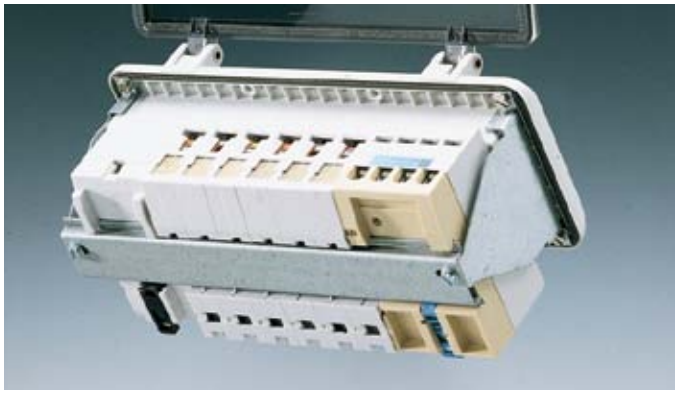
**Further variations.**
e.g., switched neutral or early break / late make NO or NC contacts on request.

## Hinged windows.



Hinged windows are suitable for fitting in enclosures (e.g. MENNEKES enclosures), machines, cable ducts and switchgear cabinets.

Using angle plates and mounting rails, the hinged windows together with built-in modules can be fitted into enclosures or the doors of switchgear cabinets.

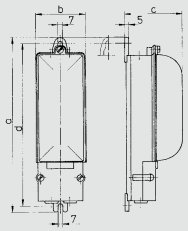
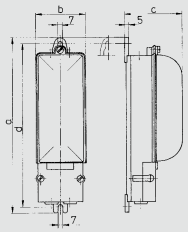
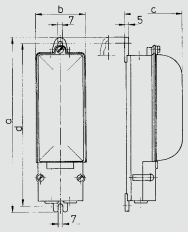
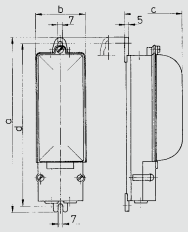


Hinged windows with or without protective cover can be supplied to fit module spacing of 2, 5, 6, 8 and 12. Optionally lockable with bracket and padlock.

# Special devices ■ Cable connection boxes

Dimensions to DIN 43628. Enclosure made of AMAPLAST. Other versions, e.g. 4 pole design, are available on request.

| Image | Title | Description |
|---|---|---|
|  | **Cable connection box**<br><br>**IP 44**<br><br>Std. Pack. Qty: 15<br><br>Product group 9812.<br>Image 10895. | ■ for lamp posts with an internal Ø of 82 mm<br>■ with smoked glass cover<br>■ with cable bushings for 1 or 2 entries of Ø 17 to 24 mm or 3 entries of Ø 15 to 19 mm<br>■ 5 sheath terminals of 2 x 16 mm²<br>■ with 1 open 1 closed M 20 gland<br>■ wired ready for connection |
|  | **Cable connection box**<br><br>**IP 44**<br><br>Std. Pack. Qty: 15<br><br>Product group 9812.<br>Image 10896. | ■ for lamp posts with an internal Ø of 82 mm<br>■ with smoked glass cover<br>■ with cable bushings for 1 or 2 entries of Ø 17 to 24 mm or 3 entries of Ø 15 to 19 mm<br>■ 5 sheath terminals of 2 x 16 mm²<br>■ with 1 open 1 closed M 20 gland<br>■ wired ready for connection |
|  | **Cable connection box**<br><br>**IP 44**<br><br>Std. Pack. Qty: 15<br><br>Product group 9812.<br>Image 10906. | ■ for lamp posts with an internal Ø of 82 mm<br>■ with smoked glass cover<br>■ with cable bushings for 1 or 2 entries of Ø 17 to 24 mm or 3 entries of Ø 15 to 19 mm<br>■ 5 sheath terminals of 2 x 16 mm²<br>■ with 1 open 1 closed M 20 gland<br>■ wired ready for connection<br>■ with fuse cartridges 10A |
|  | **Cable connection box**<br><br>**IP 44**<br><br>Std. Pack. Qty: 15<br><br>Product group 9812.<br>Image 10907. | ■ for lamp posts with an internal Ø of 82 mm<br>■ with smoked glass cover<br>■ with cable bushings for 1 or 2 entries of Ø 17 to 24 mm or 3 entries of Ø 15 to 19 mm<br>■ 5 sheath terminals of 2 x 16 mm²<br>■ with 1 open 1 closed M 20 gland<br>■ wired ready for connection<br>■ with fuse cartridges 10A |
|  | **Strain relief**<br><br>Std. Pack. Qty: 20<br><br>Product group 9812.<br>Image 41495. | ■ external<br>■ for cable connection boxes |

| D-type fuse sockets | up to 400V<br>Part number | Drawing |
|---|---|---|
| 1 x D 01 (E 14) | 10895 |  Drawing 8 MB 119<br>Dim. in mm a 250<br>b 72<br>c 75<br>d 232 |
| 2 x D 01 (E 14) | 10896 |  Drawing 8 MB 119<br>Dim. in mm a 250<br>b 72<br>c 75<br>d 232 |
| 1 x D 01 (E 14) | 10906 |  Drawing 8 MB 119<br>Dim. in mm a 250<br>b 72<br>c 75<br>d 232 |
| 2 x D 01 (E 14) | 10907 |  Drawing 8 MB 119<br>Dim. in mm a 250<br>b 72<br>c 75<br>d 232 |
| | 41495 | |

Colour: grey (RAL 7000). Enclosure made of AMELAN®.

| Image | Title | Description |
|---|---|---|
|  | **Switch disconnector**<br><br>**IP 67**<br><br>Std. Pack. Qty: 6<br><br>Product group 5992.<br>Image 52241. | ■ rigid enclosures with ample space for wiring<br>■ lockable with a padlock in the OFF-position<br>■ excellent switching capacity<br>■ disconnecting property in accordance with IEC 60947-3 (up to 690V)<br>■ finger protection in accordance with DIN 57106 / VDE 0106 T.100<br>■ open terminals and captive terminal screws<br>■ option for additional contacts |

**Data sheet switch disconnector**

| | | | without aux. contact | with aux. contact | without aux. contact | with aux. contact | without aux. contact | with aux. contact |
|---|---|---|---|---|---|---|---|---|
| **Part no.** | | | **52241** | **52242** | **52243** | **52244** | **52245** | **52246** |
| **Rated operational voltage $U_e$** | | | | | | | | |
| IEC /EN / VDE / SEV | | | 690V | | 690V | | 690V | |
| Main switch: Isol. voltage up to | | | 690V | | 690V | | 690V | |
| **Rated continuous current $I_u$** | | | | | | | | |
| IEC / EN / VDE | | | 25A | | 40A | | 80A | |
| **Rated operational current $I_e$** | | | | | | | | |
| IEC / EN | | | 25A | | 40A | | 80A | |
| **Rated operational power at 50 to 60 Hz** | | | | | | | | |
| AC-23A | IEC / EN / VDE | | | | | | | |
| | 3 phase | 220-240V | 5.5 kW | | 11.0 kW | | 18.5 kW | |
| | 3 pole | 380-440V | 11.0 kW | | 22.0 kW | | 18.5 kW | |
| | | 600-690V | 11.0 kW | | 18.5 kW | | 22.0 kW | |
| AC-3 | IEC / EN / VDE | | | | | | | |
| | 3 phase | 220-240V | 4.0 kW | | 7.5 kW | | 15.0 kW | |
| | 3 pole | 380-440V | 7.5 kW | | 18.5 kW | | 30.0 kW | |
| | | 600-690V | 7.5 kW | | 15.0 kW | | 22.0 kW | |
| **Rated breaking capacity** | | | | | | | | |
| AC-23A / AC-3 motor switch | | 220-240V | 220A | | 350A | | 550A | |
| | | 380-440V | 220A | | 350A | | 550A | |
| | | 600-690V | 135A | | 190A | | 285A | |
| **Maximum fuse size (gL)** | | | 35A | | 63A | | 80A | |
| **Terminal cross section** | | | | | | | | |
| Single / multiple wire | | min. | 1.0 mm² | | 4.0 mm² | | 6.0 mm² | |
| | | max. | 6.0 mm² | | 16.0 mm² | | 35.0 mm² | |
| Multi-strand wire with sleeve | | min. | 0.75 mm² | | 2.5 mm² | | 6.0 mm² | |
| | | max. | 4.0 mm² | | 10.0 mm² | | 25.0 mm² | |

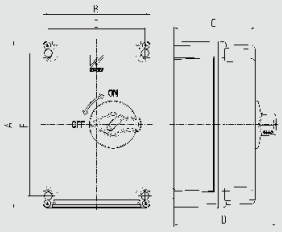
**Data sheet auxiliary contacts**

| | | | | | |
|---|---|---|---|---|---|
| **Part no.** | | | **52242** | **52244** | **52246** |
| **Rated operational voltage $U_e$** | | | 500V | 690V | 690V |
| **Rated continuous current $I_u$** | | AC-21A | 10A | 16A | 12A |
| **Rated operational current $I_e$** | | 220-240V | 2,5A | 6A | 6A |
| AC-15 | IEC / EN | 380-440V | 1.5A | 3A | 4A |
| **Terminal cross section** | | | | | |
| Single / multiple wire | | max. | 1.5 mm² | 2.5 mm² | 2.5 mm² |
| Multi-strand wire with sleeve | | max. | 1.5 mm² | 2.5 mm² | 2.5 mm² |

Further variations e.g., switched neutral or early break / late make NO or NC contacts on request.

| Rated current Ampere | Poles | Auxiliary contact | BS Motor rating AC3/440V Kilowatt | Part no. |
|---|---|---|---|---|
| 25 | 3 | | 7.5 | 52241 |
| 25 | 3 | ✓ | 7.5 | 52242 |
| 40 | 3 | | 18.5 | 52243 |
| 40 | 3 | ✓ | 18.5 | 52244 |
| 80 | 3 | | 30.0 | 52245 |
| 80 | 3 | ✓ | 30.0 | 52246 |

**Drawing**



| Drawing 1 MB 412/3 | Amp. Pole | 25 3/3+HS | 40 3/3+HS | 80 3/3+HS |
|---|---|---|---|---|
| Dim. in mm | A | 170 | 263 | 263 |
| | B | 118 | 168,5 | 168,5 |
| | C | 98 | 130 | 130 |
| | D | 131 | 161 | 161 |



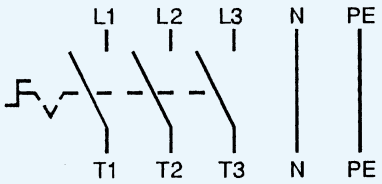
**Set of external mounting feet**

Std. Pack. Qty: 10

Product group 8300.
Image 41450.

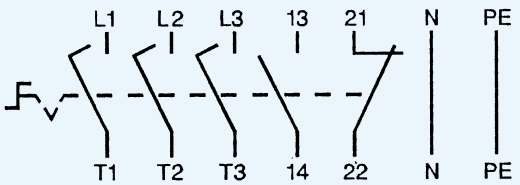
- set (4 pcs.) feet for external fixing with screws

enclosure size 170 x 118 mm **Part no. 41450**
enclosure size 263 x 168,5 mm **Part no. 41449**



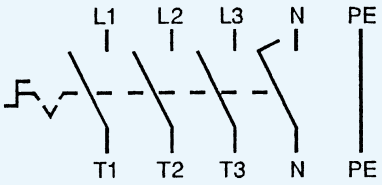

**Standard types**

All models are equipped as standard with three switched poles, a non-switched neutral and a safety earth contact.




**Auxiliary contacts**

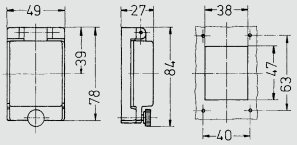
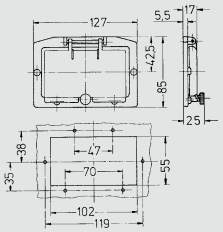
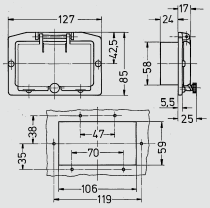
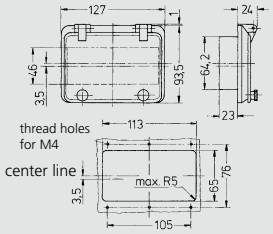
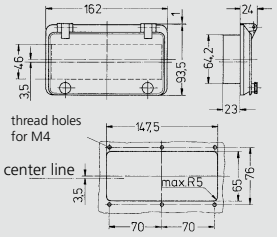
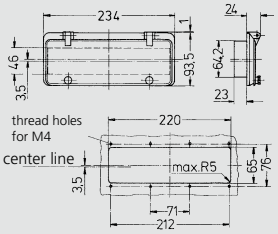
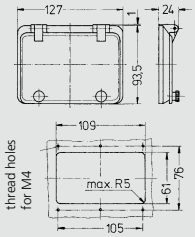
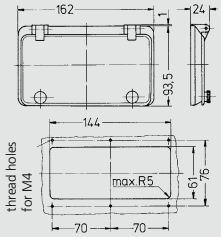
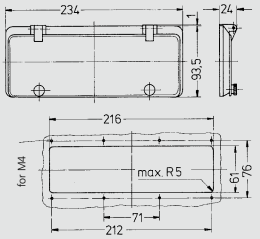
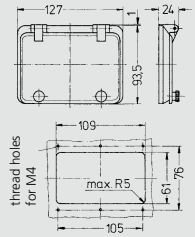
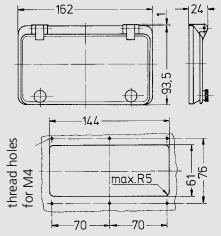
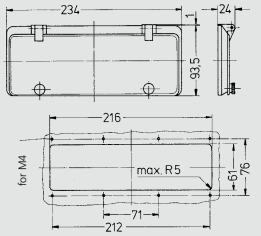
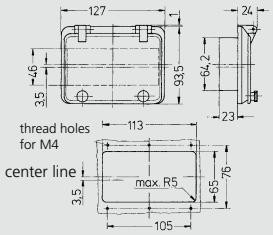
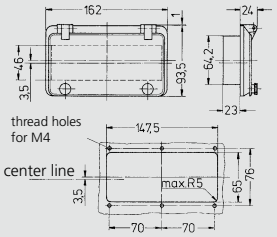
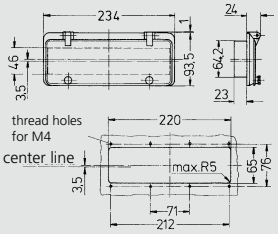
Disconnectors with additional auxiliary contact (1 x NO and 1 x NC) are also available.



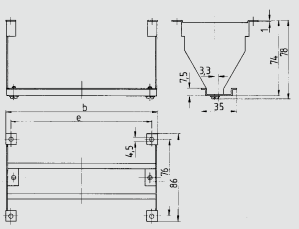

**Further variations**

e.g., switched neutral or early break / late make NO or NC contacts on request.

| Image | Title | Description |
|---|---|---|
|  | **Hinged window**<br><br>IP 44<br><br>Product group 8222. | ■ without protective cover<br>■ with knurled screws<br>■ frame colour electric grey<br>■ window smoked glass |
|  | **Hinged window**<br><br>IP 44<br><br>Product group 8222.<br>Image 40986ZA. | ■ with protective cover<br>■ with hexagonal screws made of stainless steel<br>■ frame colour electric grey<br>■ window smoked glass |
|  | **Hinged window**<br><br>IP 67<br><br>Product group 8222. | ■ without protective cover<br>■ with knurled screws<br>■ frame colour electric grey<br>■ window smoked glass |
|  | **Hinged window**<br><br>IP 67<br><br>Product group 8222. | ■ without protective cover<br>■ with knurled screws<br>■ frame colour black<br>■ window smoked glass |
|  | **Hinged window**<br><br>IP 67<br><br>Product group 8222. | ■ with protective cover<br>■ with knurled screws<br>■ frame colour electric grey<br>■ window smoked glass |
|  | **Installation kit**<br><br>Product group 8222. | ■ for hinged window with protective cover<br>■ for fitting modules in doors and enclosure covers |

| Part no. | Drawing |
|---|---|
| **40444** - 2 modules<br>**40871** - 5 modules / without spring for the window<br>**40243** - 5 modules / without spring for the window | <br>**Part no. 40444 /** Draw. 6 MB 3 / 2 modules |
| | <br>**Part no. 40871 /** Draw. 6 MB 4 / 5 modules |
| | <br>**Part no. 40243 /** Draw. 6 MB 2 / 5 modules |
| **40986ZA** - 6 modules<br>**40979ZA** - 8 modules<br>**40981ZE** - 12 modules | <br>**Part no. 40986ZA /** Draw. 6 MB 17 / 6 modules |
| | <br>**Part no. 40979ZA /** Draw. 6 MB 12 / 8 modules |
| | <br>**Part no. 40981ZE /** Draw. 6 MB 13 / 12 modules |
| **40985** - 6 modules<br>**40978** - 8 modules<br>**40980** - 12 modules | <br>**Part no. 40985 /** Draw. 6 MB 16 / 6 modules |
| | <br>**Part no. 40978 /** Draw. 6 MB 15 / 8 modules |
| | <br>**Part no. 40980 /** Draw. 6 MB 14 / 12 modules |
| **40985ZB** - 6 modules<br>**40978ZA** - 8 modules<br>**40980ZC** - 12 modules | <br>**Part no. 40985ZB /** Draw. 6 MB 16 / 6 modules |
| | <br>**Part no. 40978ZA /** Draw. 6 MB 15 / 8 modules |
| | <br>**Part no. 40980ZC /** Draw. 6 MB 14 / 12 modules |
| **40986** - 6 modules<br>**40979** - 8 modules<br>**40981** - 12 modules | <br>**Part no. 40986 /** Draw. 6 MB 17 / 6 modules |
| | <br>**Part no. 40979 /** Draw. 6 MB 12 / 8 modules |
| | <br>**Part no. 40981 /** Draw. 6 MB 13 / 12 modules |

| | |
|---|---|
| **41431** | for 6 modules<br>for hinged window 40986 |
| **41432** | for 8 modules<br>for hinged window 40979 |
| **41433** | for 12 modules<br>for hinged window 40981 |



**Drawing 6 MB 18**

| Number of spacing modules | | 6 | 8 | 12 |
|---|---|---|---|---|
| Dim. in mm | b | 115 | 150 | 222 |
| | e | 105 | 140 | 212 |


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