

# AMAXX®



Receptacle combinations acc. to IEC 61439

Receptacle combinations for Energy, Industrial Ethernet and Automation.

„This is just perfect for my needs:  
in any variant for any application purpose.“

The right  
combination  
for each  
demand.



# AMAXX® receptacle combinations

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NEW!

# Multitalent

When we have developed a new product, this does not mean that our work is finished. Because only the ongoing development process ensures that you always get the best possible product. Just like with our AMAXX® receptacle combinations. After the successful market introduction in the energy sector, we took things further and developed this program with solutions for the industrial ethernet and automation sector. Therefore, we can now offer you system solutions variably equipped with network and automation components. Everything in one program: AMAXX® in an appealing, distinctive design with numerous variants for most 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.



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 16 A, 3-pole up to 32 A, 5-pole and as AMAXX® DUO switched and interlocked.



Video:  
varieties

**Industrial Ethernet:**

- Protection type IP 44 and IP 67.
- Physical separation between network and energy part.
- Complete solution instead of individual installations.
- Suitable for the industry and safe.

**Automation:**

- Protection type IP 44 and IP 67
- Enclosure solutions ready for the installation of small controls (SPS), actuators, contactors, relays, KNX/EIB, pneumatic controls and/or other electronic components.



# 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.

## 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. MENNEKES 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



The rating plate contains the following information:

- Typ:** I<sub>na</sub>: 40A, U<sub>n</sub>: 230/400V ~, f<sub>n</sub>: 100-300 Hz, Vorsicherung (Fuse): 63 A, IEC 61439-3
- RDF:** 0,8
- I<sub>cc</sub>:** ≤ 10 kA
- IP:** 44
- PNF:** 27
- CE** mark
- Made in Germany**

Callouts from the left side:

- I<sub>na</sub>** Rated current of the switchgear and control gear assembly
- U<sub>n</sub>** Rated voltage
- f<sub>n</sub>** Rated frequency

Callouts from the right side:

- RDF** Rated diversity factor
- I<sub>cc</sub>** Conditional rated short-circuit current
- IP** Ingress protection

### Information to IEC 61439

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 IEC 60349 is valid until 24/09/2014. After this specified date, the use of IEC 61439 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 the following pages. 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.

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

## **Definition – "original manufacturer" and "manufacturer of the switchgear and 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 °C.

► 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 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 $I_{nA}$ , $I_{nc}$ , 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 exceeding the max. temperature limits 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.

**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 / TT
Rated voltage	In accordance with local installation conditions	max. 1000 V AC or 1500 V DC	400 V AC
Transient overvoltages	Determined through the electrical system	Overtoltage category I / II / III / IV	Cat. III / plugs and sockets Cat. II
Occasional overvoltages	Min. rated voltage + 1200 V	See table 8 + 9 or 10 for the values	1890 V (AC)
Rated frequency	In accordance with installation conditions	DC / 50 Hz / 60 Hz	50 Hz
Short circuit resistance	Determined through the system	N + PE max. 60% of the outer conductor values	$I_{cc}$ max. $\leq$ 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

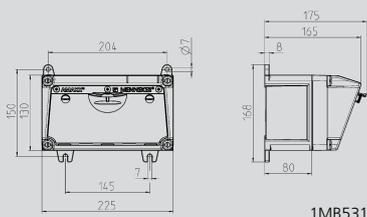
## New standard for low voltage switchgear and control gear assemblies - IEC 61439.

Characteristic	Standard value	Normative option	MENNEKES standard
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 enclosures in outdoor installation	Information on request
Resistance to corrosion	For indoor and outdoor installation	yes / no	Item-dependent
Ambient temperature limit values	Indoors: min. -5 °C Outdoors: min. -25 °C High limit (both): +40 °C max. average value (24h): +35 °C	none	Standard values! see product for deviations
Maximum relative humidity	90%	Outdoors: 100% at max. +25 °C Indoors: 50% bei +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
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

Characteristic	Standard value	Normative option	MENNEKES standard
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	$\varnothing \leq 16 \text{ mm}^2 = 100\%$ $\varnothing > 16 \text{ mm}^2 = 50\%$ (min. 16 mm <sup>2</sup> )	For currents in N to 50% of the outer conductors, otherwise a special agreement is necessary!	Outer conductor = neutral conductor cross-section

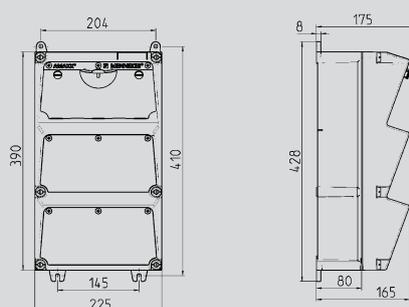
# Dimensions

## AMAXX® with 1 segment



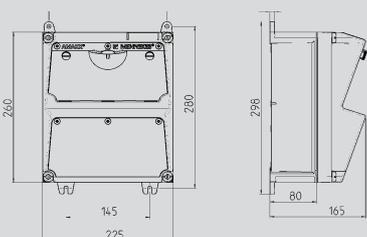
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## AMAXX® with 3 segments



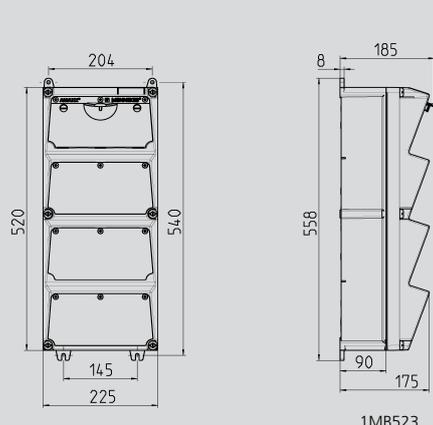
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## AMAXX® with 2 segments



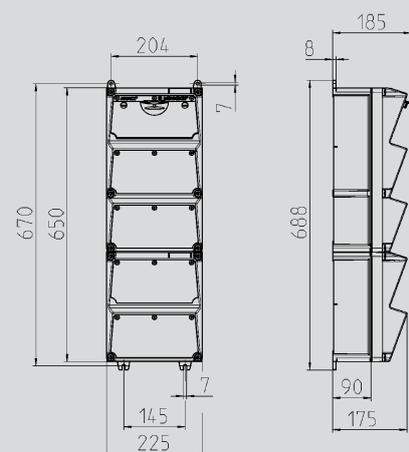
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## AMAXX® with 4 segments



1MB523

## AMAXX® with 5 segments



1MB540

### Depths of the AMAXX® enclosures with 1, 2 or 3 segments, with varying components.

Receptacles	IP-degrees	Depth
SCHUKO® 16 A, 230 V	IP 44	175 mm
	IP 67	194 mm
CEE 16 A, 3 p, 230 V	IP 44	204 mm
	IP 67	205 mm
CEE 16 A, 5 p, 400 V	IP 44	209 mm
	IP 67	213 mm
CEE 32 A, 5 p, 400 V	IP 44	221 mm
	IP 67	227 mm
CEE 63 A, 5 p, 400 V	IP 44	248 mm
	IP 67	248 mm

### Cable entries:

closed for cut out.

**single enclosure** 130 mm x 225 mm:  
2 x M 25 each top and bottom

**double enclosure** 260 mm x 225 mm:  
2 x M 32 each top and bottom

**triple enclosure** 390 mm x 225 mm:  
2 x M 40 each top and bottom

### For all enclosures:

2 x M 20 each on top and bottom for cut out.

### Depths of the AMAXX® enclosures with 4 or 5 segments, with varying components.

Receptacles	IP-degrees	Depth
SCHUKO® 16 A, 230 V	IP 44	186 mm
	IP 67	208 mm
CEE 16 A, 3 p, 230 V	IP 44	216 mm
	IP 67	220 mm
CEE 16 A, 5 p, 400 V	IP 44	222 mm
	IP 67	226 mm
CEE 32 A, 5 p, 400 V	IP 44	231 mm
	IP 67	236 mm
CEE 63 A, 5 p, 400 V	IP 44	260 mm
	IP 67	260 mm

### 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 top and bottom

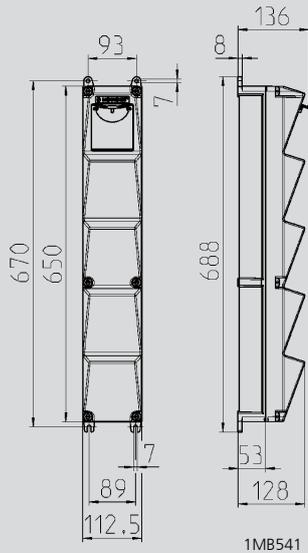
### With both:

2 x M 20 each top and bottom for cut out.

### Fuse elements:

If not stated otherwise, delivery without fuse elements.

### AMAXX® s (5 segments)



#### Depths of the AMAXX® s enclosures with 5 segments and varying components.

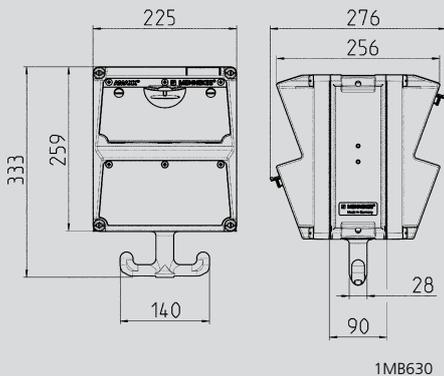
Receptacles	IP-degrees	Depth
SCHUKO® 16 A, 230 V	IP 44	140 mm
	IP 67	157 mm
CEE 16 A, 3 p, 230 V	IP 44	170 mm
	IP 67	169 mm
CEE 16 A, 5 p, 400 V	IP 44	172 mm
	IP 67	174 mm
CEE 32 A, 5 p, 400 V	IP 44	182 mm
	IP 67	188 mm

**Cable entries:**  
closed for cut out.

**AMAXX® s 650 mm x 112.5 mm:**  
1 x M 25 top and 1 x M 25 bottom or  
1 x M 32 top and 1 x M 32 bottom

**In addition:**  
1 x M 20 top and bottom for cut out.

### AMAXX® hanging



#### Depths of the AMAXX® hanging enclosure for identical configuration on both sides.

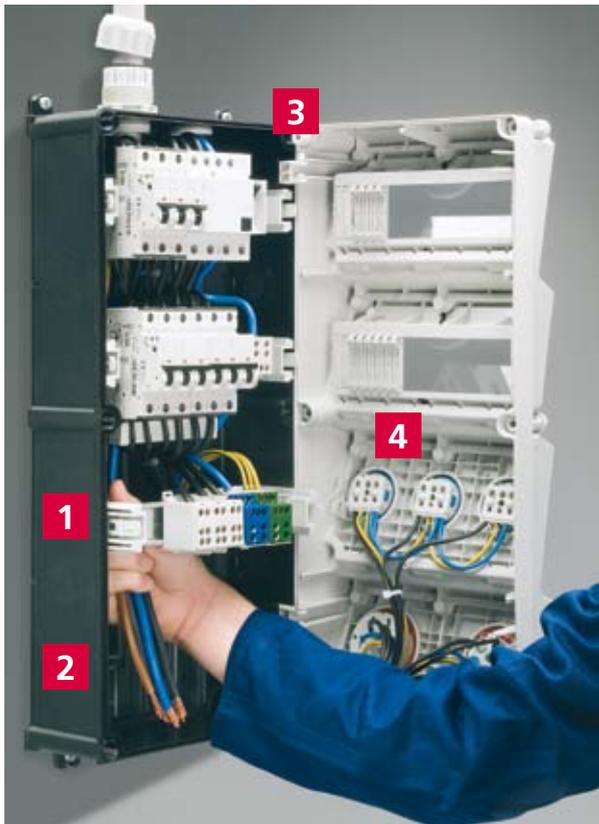
Receptacles	IP-degrees	Depth
SCHUKO® 16 A, 230 V	IP 44	282 mm
	IP 67	326 mm
CEE 16 A, 3 p, 230 V	IP 44	342 mm
	IP 67	350 mm
CEE 16 A, 5 p, 400 V	IP 44	354 mm
	IP 67	362 mm
CEE 32 A, 5 p, 400 V	IP 44	372 mm
	IP 67	382 mm

„If I want the whole program, I opt for AMAXX receptacle combinations.“

The right combination for each application.



# Practice-conform



**1 Lifiable DIN rails.**

Lifiable 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, user-friendly 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.

**MENNEKES quality: tested and certified.**

Like all other MENNEKES combinations, AMAXX® products are also subject to extensive MENNEKES quality control. Each AMAXX® combination is put to the acid test and certified before delivery.



- 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.

„With the suspendable AMAXX combinations, energy is supplied exactly where I need it.“

**New:** The suspendable AMAXX®.



# Compact

The new suspended AMAXX® receptacle combinations by MENNEKES round off a unique variety of the AMAXX® product family and offer even more alternatives for workstation installation in industry, trade and commerce. Wherever a wall or column installation is not possible or desired, the suspended receptacle combinations may be used. The enclosures are equipped with receptacles and protective devices on both sides.

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 chain set is included with each combination.

The combinations are available in various designs and can also be equipped with an additional compressed air connection.



A convenient handle at the bottom allows for easy insertion and removal of the plugs.

„AMAXX s allows you to work optimally,  
even in the smallest spaces.“

Lots of comfort  
even with little  
space.



# The space-saver

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 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 comfort.

**More comfortable working:**

Swivel attachment fitted to the base allows for 90° rotation left or right, with perceivable snap-in positions.

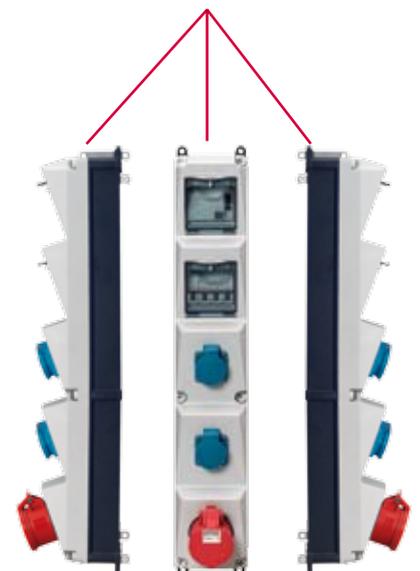


**Application fields:**

In restricted spaces, e.g. niches, double T-bars, etc.

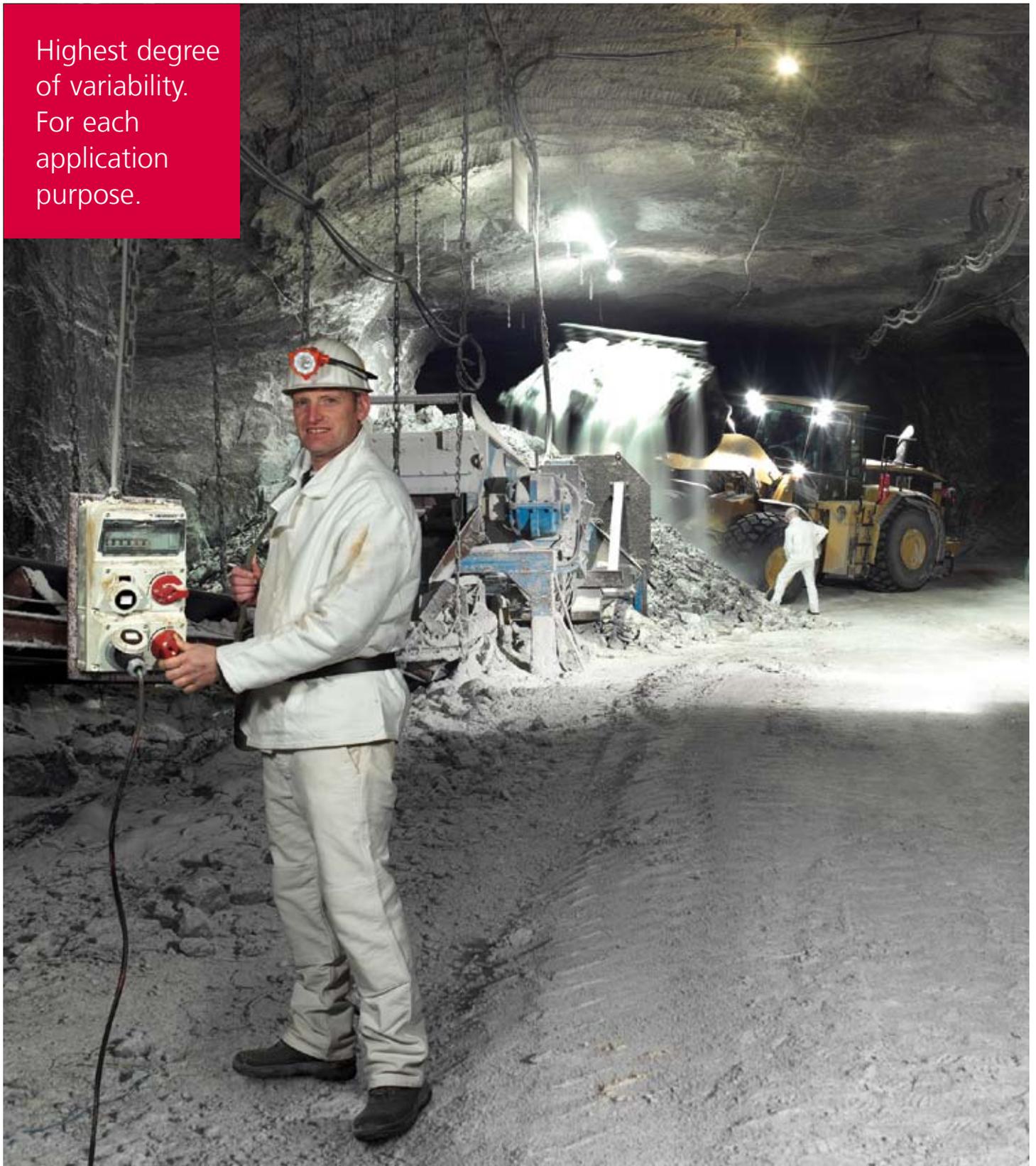
**Flexible application:**

Thanks to the optionally available attachment set, AMAXX® s can be mounted on the left or the right.



„AMAXX DUO provides switched and interlocked safety as multiple distributor.“

Highest degree  
of variability.  
For each  
application  
purpose.



# Interface

With DUO, AMAXX® is 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 130 × 225 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.
- 16 A, 3-pole, up to 63 A, 5-pole.
- Fuse elements like RCD's, MCB's and neozed fuse elements.
- Unique AMAXX® design with one to five segments.
- Also available in container standard 32 A, 4-pole, 400-440 V, 3 h as multiple distributor with or without monitoring receptacles.



„I can count on AMAXX made of AMELAN even in aggressive environments.“

Always on the safe side.



# Guard

AMELAN® is the name of the plastic used by MENNEKES for application in especially aggressive environments. AMELAN® has a high resistance to chemicals, e.g. fuels, diluted acids and bases, most watery saline solutions and aliphatic hydrocarbons. In addition, all AMAXX® receptacle combinations consisting of AMELAN® are equipped with high heat-resistant contact carriers and nickel-plated contacts and have excellent mechanical, thermal and electric properties.

Solutions for all environments where the material comes into contact with aggressive substances, e.g. mines, the chemical industry, food processing industry, abattoirs and refineries. AMAXX® receptacle combinations made of AMELAN® in IP 44 or IP 67 are available in many variations.



## AMELAN® is resistant against:

- Sea water
- Detergents
- Trichlorethylene
- Toluene
- Edible fats
- Aqueous soap solutions
- Caustic soda solutions
- Motor oils
- Milk
- Caustic potash solution
- Fruit juices
- Dishwashing detergent
- Diesel oil
- Gasoline
- Aqueous ammonia solutions



„I rely on the portable safety  
of AMAXX mobile.“

Mobile safety  
in any  
location.



# Range

AMAXX® mobile. For all requiring safe distribution on-site. With cable and plug. With one, two or more segments as well as in an AMAXX® s version.

**Application fields:**

Maintenance work in the industry, retail and crafts sector, temporary buildings, e.g. at fairs, exhibitions, market places and everywhere else where temporary energy supply is required.



# Master of combinations

Boundless  
diversity.

As specialists for receptacle combinations, we have longstanding experience in the development and realisation of individual, customised solutions.



Weather shields made of stainless steel available for all AMAXX® enclosure sizes.



AMAXX® camping combination in a CombiTOWER made of stainless steel.



**AMAXX® is international:**

AMAXX® receptacle combinations are also perfectly suited for the international market with many different standards. For example: British, French/Belgian, Danish

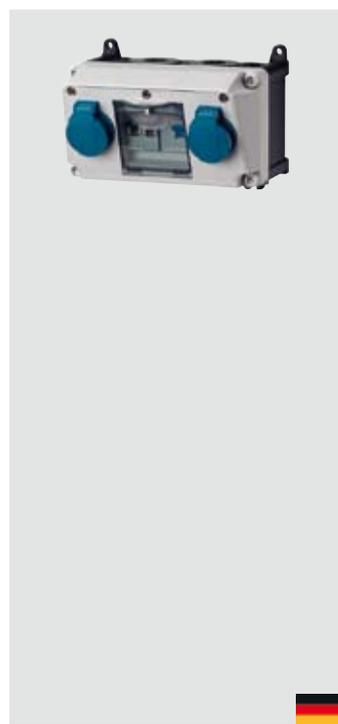
and Swiss standard as well as the NEMA standard (USA and Canada). Ask us.



**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.

Further combinations on request.



**CEE receptacles**

**CEE receptacles**

**Receptacles SCHUKO®**

2 SCHUKO® 16 A, 230 V

**Fusing**

1 RCD 25 A, 2 p, 0.03 A  
2 MCB's 16 A, 1 p, C

**Connection**

For 1 cable up to  
3 x 10 mm<sup>2</sup>

**Connection and load values**

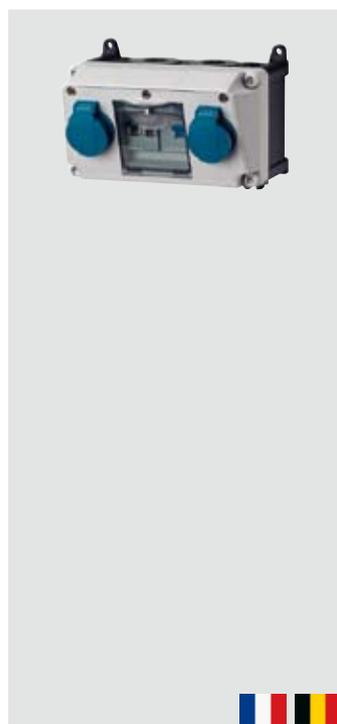
Pre-fuse max. 40 A  
InA 38 A  
RDF 0,8

**Enclosure size**

130 x 225 mm (H x W)

**Part no.**

**910001**



**CEE receptacles**

**CEE receptacles**

**Receptacles NF**

2 NF 16 A, 2 p+E, 230 V

**Fusing**

1 RCD 25 A, 2 p, 0.03 A  
2 MCB's 16 A, 1 p+N, C

**Connection**

For 1 cable up to  
3 x 6 mm<sup>2</sup>

**Connection and load values**

Pre-fuse max. 25 A  
InA 25 A  
RDF 1

**Enclosure size**

130 x 225 mm (H x W)

**Part no.**

**910205**



**CEE receptacles**

**CEE receptacles**

**Receptacles SCHUKO®**

3 SCHUKO® 16 A, 230 V

**Fusing**

1 RCD 40 A, 4 p, 0.03 A  
3 MCB's 16 A, 1 p, C

**Connection**

For 1 cable up to  
5 x 10 mm<sup>2</sup>

**Connection and load values**

Pre-fuse max. 16 A  
InA 16 A  
RDF 1

**Enclosure size**

260 x 225 mm (H x W)

**Part no.**

**920003**



**CEE receptacles**

**CEE receptacles**

**Receptacles NF**

3 NF 16 A, 2 p+E, 230 V

**Fusing**

1 RCD 40 A, 4 p, 0.03 A  
3 MCB's 16 A, 1 p+N, C

**Connection**

For 1 cable up to  
5 x 10 mm<sup>2</sup>

**Connection and load values**

Pre-fuse max. 63 A  
InA 16 A  
RDF 1

**Enclosure size**

260 x 225 mm (H x W)

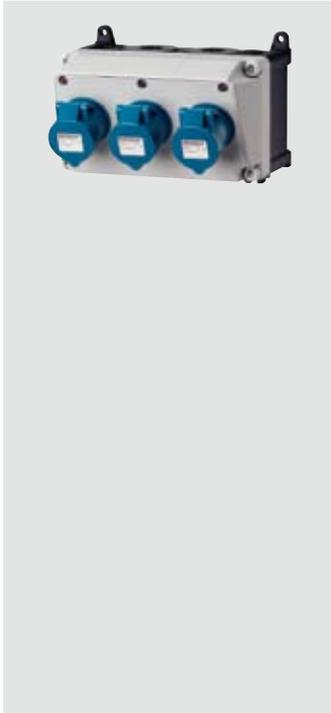
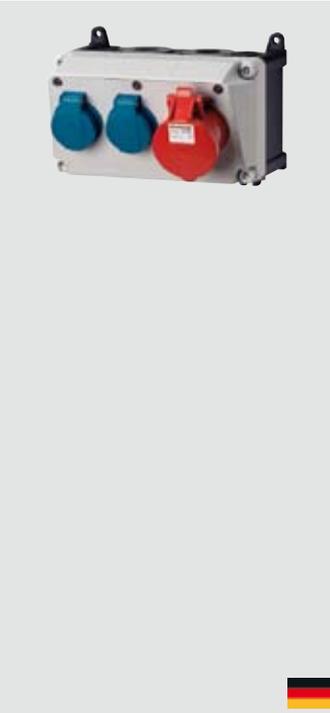
**Part no.**

**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.

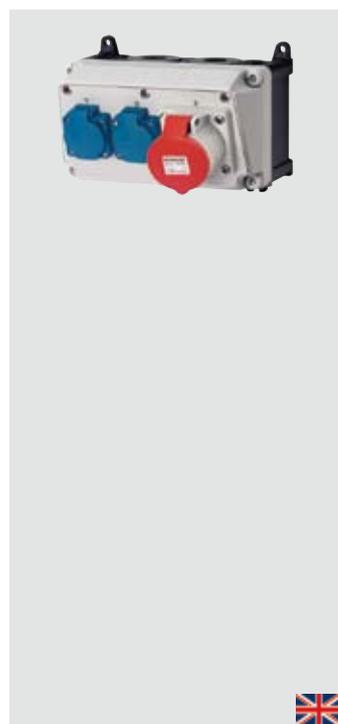
Further combinations on request. Order no. 960051: with swivelling frame, swivable 90° to the right or left.

			
<b>CEE receptacles</b>	<b>CEE receptacles</b>	<b>CEE receptacles</b>	<b>CEE receptacles</b>
		1 CEE 16 A, 5 p, 400 V	1 CEE 16 A, 5 p, 400 V
<b>CEE receptacles</b>	<b>CEE receptacles</b>	<b>CEE receptacles</b>	<b>CEE receptacles</b>
3 CEE 16 A, 3 p, 230 V	3 CEE 16 A, 3 p, 230 V		
<b>Receptacles SCHUKO®</b>	<b>Receptacles SCHUKO®</b>	<b>Receptacles SCHUKO®</b>	<b>Receptacles SCHUKO®</b>
		2 SCHUKO® 16 A, 230 V	2 SCHUKO® 16 A, 230 V
<b>Fusing</b>	<b>Fusing</b>	<b>Fusing</b>	<b>Fusing</b>
1 RCD 40 A, 4 p, 0.03 A 3 MCB's 16 A, 1 p, C		1 RCD 40 A, 4 p, 0.03 A 1 MCB 16 A, 3 p, C 1 MCB 16 A, 1 p, C	
<b>Connection</b>	<b>Connection</b>	<b>Connection</b>	<b>Connection</b>
For 1 cable up to 5 x 10 mm <sup>2</sup>	For 1 cable up to 5 x 10 mm <sup>2</sup>	For 1 flex. cable up to 5 x 10 mm <sup>2</sup>	For 1 cable up to 5 x 10 mm <sup>2</sup>
<b>Connection and load values</b>	<b>Connection and load values</b>	<b>Connection and load values</b>	<b>Connection and load values</b>
Pre-fuse max. 40 A InA 40 A RDF 1	Pre-fuse max. 16 A InA 16 A RDF 1	Pre-fuse max. 63 A InA 32 A RDF 1	Pre-fuse max. 16 A InA 16 A RDF 1
<b>Enclosure size</b>	<b>Enclosure size</b>	<b>Enclosure size</b>	<b>Enclosure size</b>
650 x 112.5 mm (H x W)	130 x 225 mm (H x W)	650 x 112.5 mm (H x W)	130 x 225 mm (H x W)
<b>Part no.</b>	<b>Part no.</b>	<b>Part no.</b>	<b>Part no.</b>
<b>960019</b>	<b>910015</b>	<b>960051</b>	<b>910007</b>

**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.

Further combinations on request.



<b>CEE receptacles</b>
1 CEE 16 A, 5 p, 400 V
<b>CEE receptacles</b>
<b>Receptacles British standard</b>
2 x 13 A, 2 p+E
<b>Fusing</b>
<b>Connection</b>
For 1 cable up to 5 x 6 mm <sup>2</sup>
<b>Connection and load values</b>
Pre-fuse max. 16 A I <sub>nA</sub> 16 A RDF 1
<b>Enclosure size</b>
130 x 225 mm (H x W)
<b>Part no.</b>
<b>910694</b>



<b>CEE receptacles</b>
1 CEE 16 A, 5 p, 400 V
<b>CEE receptacles</b>
<b>Receptacles SCHUKO®</b>
3 SCHUKO® 16 A, 230 V
<b>Fusing</b>
1 MCB 16 A, 3 p, C 1 MCB 16 A, 1 p, C
<b>Connection</b>
For 1 cable up to 5 x 10 mm <sup>2</sup>
<b>Connection and load values</b>
Pre-fuse max. 63 A I <sub>nA</sub> 32 A RDF 1
<b>Enclosure size</b>
650 x 112.5 mm (H x W)
<b>Part no.</b>
<b>960004</b>



<b>CEE receptacles</b>
2 CEE 16 A, 5 p, 400 V switched, with mechanical DUO interlock
<b>CEE receptacles</b>
<b>Receptacles SCHUKO®</b>
<b>Fusing</b>
2 MCB's 16 A, 3 p, C
<b>Connection</b>
For 2 cables up to 5 x 25 mm <sup>2</sup>
<b>Connection and load values</b>
Pre-fuse max. 100 A I <sub>nA</sub> 32 A RDF 1
<b>Enclosure size</b>
390 x 225 mm (H x W)
<b>Part no.</b>
<b>930031</b>



<b>CEE receptacles</b>
2 CEE 16 A, 5 p, 400 V
<b>CEE receptacles</b>
<b>Receptacles SCHUKO®</b>
3 SCHUKO® 16 A, 230 V
<b>Fusing</b>
2 MCB's 16 A, 3 p, C 3 MCB's 16 A, 1 p, C
<b>Connection</b>
For 2 cables up to 5 x 25 mm <sup>2</sup>
<b>Connection and load values</b>
Pre-fuse max. 63 A I <sub>nA</sub> 46 A RDF 0,95
<b>Enclosure size</b>
390 x 225 mm (H x W)
<b>Part no.</b>
<b>930003</b>

**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.

Further combinations on request.



**CEE receptacles**

2 CEE 16 A, 5 p, 400 V

**CEE receptacles**

**Receptacles British standard**

3 x 13 A, 2 p+E

**Fusing**

2 MCB's 16 A, 3 p, C  
3 MCB's 13 A, 1 p, C

**Connection**

For 2 cables up to  
5 x 16 mm<sup>2</sup>

**Connection and load values**

**Enclosure size**

390 x 225 mm (H x W)

**Part no.**

**930734**



**CEE receptacles**

1 CEE 32 A, 5 p, 400 V

**CEE receptacles**

**Receptacles SCHUKO®**

2 SCHUKO® 16 A, 230 V

**Fusing**

1 MCB 32 A, 3 p, C  
2 MCB's 16 A, 1 p, C

**Connection**

For 1 cable up to  
5 x 10 mm<sup>2</sup>

**Connection and load values**

Pre-fuse max. 63 A  
I<sub>nA</sub> 48 A  
RDF 1

**Enclosure size**

260 x 225 mm (H x W)

**Part no.**

**920011**



**CEE receptacles**

1 CEE 32 A, 5 p, 400 V

**CEE receptacles**

**Receptacles NF**

2 NF 16 A, 2 p+E, 230 V

**Fusing**

1 MCB 32 A, 3 p+N, C  
2 MCB's 16 A, 1 p+N, C

**Connection**

For 1 cable up to  
5 x 10 mm<sup>2</sup>

**Connection and load values**

Pre-fuse max. 63 A  
I<sub>nA</sub> 38 A  
RDF 0,8

**Enclosure size**

260 x 225 mm (H x W)

**Part no.**

**920295**



**CEE receptacles**

1 CEE 32 A, 5 p, 400 V  
1 CEE 16 A, 5 p, 400 V

**CEE receptacles**

**Receptacles SCHUKO®**

3 SCHUKO® 16 A, 230 V

**Fusing**

1 RCD 40 A, 4 p, 0.03 A  
1 MCB 32 A, 3 p, C  
1 MCB 16 A, 3 p, C  
3 MCB's 16 A, 1 p, C

**Connection**

For 2 cables up to  
5 x 25 mm<sup>2</sup>

**Connection and load values**

Pre-fuse max. 40 A  
I<sub>nA</sub> 40 A  
RDF 0,8

**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.

Further combinations on request.



**CEE receptacles**

1 CEE 32 A, 5 p, 400 V  
1 CEE 16 A, 5 p, 400 V

**CEE receptacles**

**Receptacles SCHUKO®**

3 SCHUKO® 16 A, 230 V

**Fusing**

1 MCB 32 A, 3 p, C  
1 MCB 16 A, 3 p, C  
3 MCB's 16 A, 1 p, C

**Connection**

For 2 cables up to  
5 x 25 mm<sup>2</sup>

**Connection and load values**

Pre-fuse max. 63 A  
I<sub>nA</sub> 54 A  
RDF 0,85

**Enclosure size**

390 x 225 mm (H x W)

**Part no.**

**930011**



**CEE receptacles**

1 CEE 32 A, 5 p, 400 V  
1 CEE 16 A, 5 p, 400 V

**CEE receptacles**

**Receptacles SCHUKO®**

6 SCHUKO® 16 A, 230 V

**Fusing**

1 RCD 63 A, 4 p, 0.03 A  
1 MCB 32 A, 3 p, C  
1 MCB 16 A, 3 p, C  
6 MCB's 16 A, 1 p, C

**Connection**

For 2 cables up to  
5 x 25 mm<sup>2</sup>

**Connection and load values**

Pre-fuse max. 63 A  
I<sub>nA</sub> 52 A  
RDF 0,65

**Enclosure size**

650 x 225 mm (H x W)

**Part no.**

**950004**



**CEE receptacles**

1 CEE 63 A, 5 p, 400 V  
1 CEE 32 A, 5 p, 400 V  
1 CEE 16 A, 5 p, 400 V

**CEE receptacles**

**Receptacles NF**

4 NF 16 A, 2 p+E, 230 V

**Fusing**

1 RCD 63 A, 4 p, 0.03 A  
1 MCB 32 A, 3 p+N, C  
1 MCB 16 A, 3 p+N, C  
4 MCB's 16 A, 1 p+N, C

**Connection**

For 2 cables up to  
5 x 25 mm<sup>2</sup>

**Connection and load values**

Pre-fuse max. 63 A  
I<sub>nA</sub> 63 A  
RDF 0,5

**Enclosure size**

650 x 225 mm (H x W)

**Part no.**

**950022**



**CEE receptacles**

1 CEE 63 A, 5 p, 400 V  
1 CEE 32 A, 5 p, 400 V  
switched, with mechanical  
DUO interlock

**CEE receptacles**

**Receptacles SCHUKO®**

4 SCHUKO® 16 A, 230 V

**Fusing**

1 RCD 63 A, 4 p, 0.03 A  
1 MCB 32 A, 3 p, C  
4 MCB's 16 A, 1 p, C

**Connection**

For 2 cables up to  
5 x 25 mm<sup>2</sup>

**Connection and load values**

Pre-fuse max. 63 A  
I<sub>nA</sub> 63 A  
RDF 0,75

**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.

Further combinations on request.

			
<p><b>CEE receptacles</b> 1 CEE 16 A, 5 p, 400 V switched, with mechanical DUO interlock</p>	<p><b>CEE receptacles</b> 1 CEE 16 A, 5 p, 400 V</p>	<p><b>CEE receptacles</b> 1 CEE 16 A, 4 p, 400 V</p>	<p><b>CEE receptacles</b> 1 CEE 16 A, 5 p, 400 V</p>
<p><b>CEE receptacles</b></p>	<p><b>CEE receptacles</b></p>	<p><b>CEE receptacles</b></p>	<p><b>CEE receptacles</b></p>
<p><b>Receptacles SCHUKO®</b></p>	<p><b>Receptacles SCHUKO®</b> 3 SCHUKO® 16 A, 230 V</p>	<p><b>Receptacles NF</b> 3 NF 16 A, 230 V</p>	<p><b>Receptacles SCHUKO®</b> 4 SCHUKO® 16 A, 230 V</p>
<p><b>Fusing</b></p>	<p><b>Fusing</b> 1 RCD 40 A, 4 p, 0.03 A 1 MCB 16 A, 3 p, C 3 MCB's 16 A, 1 p, C</p>	<p><b>Fusing</b> 1 RCD 40 A, 4 p, 0.03 A 1 MCB 16 A, 3 p, C 3 MCB's 16 A, 1 p+N, C</p>	<p><b>Fusing</b></p>
<p><b>Connection</b> For 1 cable up to 5 x 10 mm<sup>2</sup></p>	<p><b>Connection</b> For 2 cables up to 5 x 25 mm<sup>2</sup></p>	<p><b>Connection</b> For 2 cables up to 5 x 25 mm<sup>2</sup></p>	<p><b>Connection</b> For 1 cable up to 5 x 10 mm<sup>2</sup></p>
<p><b>Connection and load values</b></p>	<p><b>Connection and load values</b> Pre-fuse max. 100 A I<sub>nA</sub> 32 A RDF 1</p>	<p><b>Connection and load values</b> Pre-fuse max. 100 A I<sub>nA</sub> 26 A RDF 0,8</p>	<p><b>Connection and load values</b></p>
<p><b>Enclosure size</b> 130 x 225 mm (H x W)</p>	<p><b>Enclosure size</b> 390 x 225 mm (H x W)</p>	<p><b>Enclosure size</b> 390 x 225 mm (H x W)</p>	<p><b>Enclosure size</b> 650 x 112.5 mm (H x W)</p>
<p><b>Part no.</b> <b>7626</b></p>	<p><b>Part no.</b> <b>930022</b></p>	<p><b>Part no.</b> <b>930520</b></p>	<p><b>Part no.</b> <b>960031</b></p>

**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.

Further combinations on request.



**CEE receptacles**

2 CEE 16 A, 4 p, 400 V switched, with mechanical DUO interlock

**CEE receptacles**

2 CEE 16 A, 3 p, 230 V switched, with mechanical DUO interlock

**Receptacles SCHUKO®**

**Fusing**

2 MCB's 16 A, 3 p, C  
2 MCB's 16 A, 1 p+N, C

**Connection**

For 2 cables up to 5 x 25 mm<sup>2</sup>

**Connection and load values**

Pre-fuse max. 100 A  
I<sub>nA</sub> 38 A  
RDF 0,8

**Enclosure size**

650 x 225 mm (H x W)

**Part no.**

**950034**



**CEE receptacles**

1 CEE 32 A, 5 p, 400 V  
2 CEE 16 A, 4 p, 400 V

**CEE receptacles**

3 CEE 16 A, 3 p, 230 V

**Receptacles SCHUKO®**

**Fusing**

1 MCB 32 A, 3 p+N, C  
1 MCB 16 A, 3 p, C  
1 MCB 16 A, 1 p+N, C

**Connection**

For 2 cables up to 5 x 25 mm<sup>2</sup>

**Connection and load values**

Pre-fuse max. 100 A  
I<sub>nA</sub> 45 A  
RDF 0,45

**Enclosure size**

520 x 225 mm (H x W)

**Part no.**

**940028**



**CEE receptacles**

2 CEE 32 A, 5 p, 400 V switched, with mechanical DUO interlock  
2 CEE 16 A, 5 p, 400 V

**CEE receptacles**

**Receptacles SCHUKO®**

**Fusing**

1 RCD 63 A, 4 p, 0.03 A  
2 MCB's 32 A, 3 p, C  
2 MCB's 16 A, 3 p, C

**Connection**

For 1 cable up to 5 x 16 mm<sup>2</sup>

**Connection and load values**

Pre-fuse max. 63 A  
I<sub>nA</sub> 58 A  
RDF 0,6

**Enclosure size**

650 x 225 mm (H x W)

**Part no.**

**900946**



**CEE receptacles**

3 CEE 32 A, 4 p, 400 V, 3 h  
For reefer container, switched with mechanical DUO interlock

**CEE receptacles**

**Receptacles SCHUKO®**

**Fusing**

3 MCB's 32 A, 3 p, C  
3 Monitoring Sockets MS3102E 14S2S

**Connection**

For 2 cables up to 4 x 25 mm<sup>2</sup>  
and for 3 monitoring sockets 4 x 4 mm<sup>2</sup>

**Connection and load values**

Pre-fuse max. 100 A  
I<sub>nA</sub> 67 A  
RDF 0,7

**Enclosure size**

520 x 225 mm (H x W)

**Part no.**

**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.

Further combinations on request.



**CEE receptacles**

- 1 CEE 63 A, 5 p, 400 V
- 1 CEE 32 A, 5 p, 400 V
- 1 CEE 16 A, 5 p, 400 V

**CEE receptacles**

**Receptacles SCHUKO®**

- 2 SCHUKO® 16 A, 230 V

**Fusing**

- 1 RCD 63 A, 4 p, 0.03 A
- 1 MCB 32 A, 3 p, C
- 1 MCB 16 A, 3 p, C
- 2 MCB's 16 A, 1 p, C

**Connection**

For 2 cables up to  
5 x 25 mm<sup>2</sup>

**Connection and load values**

Pre-fuse max. 63 A  
I<sub>nA</sub> 63 A  
RDF 0,7

**Enclosure size**

650 x 225 mm (H x W)

**Part no.**

**950031**



**CEE receptacles**

- 1 CEE 63 A, 5 p, 400 V
- 1 CEE 32 A, 5 p, 400 V
- 1 CEE 16 A, 5 p, 400 V

**CEE receptacles**

**Receptacles NF**

- 2 NF 16 A, 2 p+E, 230 V

**Fusing**

- 1 RCD 63 A, 4 p, 0.03 A
- 1 MCB 32 A, 3 p+N, C
- 1 MCB 16 A, 3 p+N, C
- 2 MCB's 16 A, 1 p+N, C

**Connection**

For 2 cables up to  
5 x 25 mm<sup>2</sup>

**Connection and load values**

Pre-fuse max. 63 A  
I<sub>nA</sub> 63 A  
RDF 0,5

**Enclosure size**

650 x 225 mm (H x W)

**Part no.**

**950033**

**Highly resistant to chemicals made of AMELAN®, protection type IP 44**

with highly heat resistant contact carrier and nickel plated contacts.

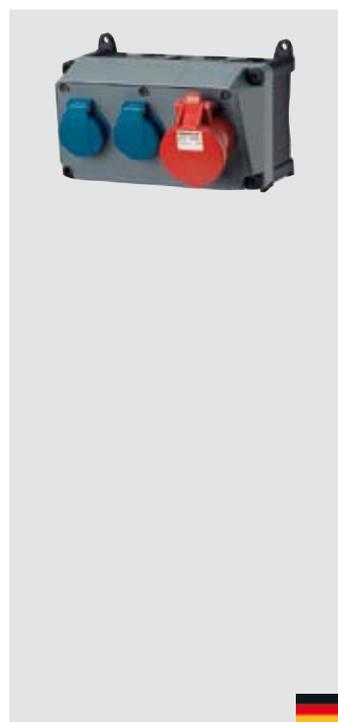
Pre-wired for installation, enclosure front cover grey RAL 7000

Hinged to the side (except enclosure size 130 x 225 mm and 650 x 112.5 mm).

Fusing behind a transparent cover. Further combinations on request.



Energy



<b>CEE receptacles</b>
1 CEE 16 A, 5 p, 400 V
<b>CEE receptacles</b>
<b>Receptacles SCHUKO®</b>
2 SCHUKO® 16 A, 230 V
<b>Fusing</b>
<b>Connection</b>
For 1 cable up to 5 x 10 mm <sup>2</sup>
<b>Connection and load values</b>
<b>Enclosure size</b>
130 x 225 mm (H x W)
<b>Part no.</b>
<b>910020</b>



<b>CEE receptacles</b>
1 CEE 16 A, 5 p, 400 V
<b>CEE receptacles</b>
<b>Receptacles NF</b>
3 NF 16 A, 2 p+E, 230 V
<b>Fusing</b>
1 RCD 40 A, 4 p, 0.03 A
<b>Connection</b>
For 1 cable up to 5 x 10 mm <sup>2</sup>
<b>Connection and load values</b>
Pre-fuse max. 16 A InA 16 A
<b>Enclosure size</b>
650 x 112.5 mm (H x W)
<b>Part no.</b>
<b>960042</b>



<b>CEE receptacles</b>
1 CEE 32 A, 5 p, 400 V 1 CEE 16 A, 5 p, 400 V
<b>CEE receptacles</b>
<b>Receptacles British standard</b>
3 x 13 A, 2 p+E, 230 V
<b>Fusing</b>
1 RCD 63 A, 4 p, 0.03 A 1 MCB 32 A, 3 p, C 1 MCB 16 A, 3 p, C 3 MCB's 13 A, 1 p, C
<b>Connection</b>
For 1 cable up to 5 x 16 mm <sup>2</sup>
<b>Connection and load values</b>
Pre-fuse max. 63 A InA 46 A RDF 0,75
<b>Enclosure size</b>
520 x 225 mm (H x W)
<b>Part no.</b>
<b>941142</b>



<b>CEE receptacles</b>
1 CEE 63 A, 5 p, 400 V 1 CEE 32 A, 5 p, 400 V 1 CEE 16 A, 5 p, 400 V
<b>CEE receptacles</b>
<b>Receptacles SCHUKO®</b>
4 SCHUKO® 16 A, 230 V
<b>Fusing</b>
1 RCD 63 A, 4 p, 0.03 A 1 MCB 32 A, 3 p, C 1 MCB 16 A, 3 p, C 4 MCB's 16 A, 1 p, C
<b>Connection</b>
For 2 cables up to 5 x 25 mm <sup>2</sup>
<b>Connection and load values</b>
Pre-fuse max. 63 A InA 63 A RDF 0,65
<b>Enclosure size</b>
650 x 225 mm (H x W)
<b>Part no.</b>
<b>950041</b>

**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. Further combinations on request.



<b>CEE receptacles</b>
CEE receptacles
2 CEE 16 A, 3 p, 230 V
<b>Receptacles SCHUKO®</b>
Receptacles SCHUKO®
3 SCHUKO® 16 A, 230 V
<b>Fusing</b>
1 RCD 25 A, 2 p, 0.03 A
<b>Connection</b>
For 1 cable up to 3 x 10 mm <sup>2</sup>
<b>Connection and load values</b>
Pre-fuse max. 16 A I <sub>nA</sub> 25 A RDF 1
<b>Enclosure size</b>
260 x 225 mm (H x W)
<b>Part no.</b>
<b>920821</b>



<b>CEE receptacles</b>
CEE receptacles
1 CEE 16 A, 5 p, 400 V
<b>Receptacles SCHUKO®</b>
Receptacles SCHUKO®
3 SCHUKO® 16 A, 230 V
<b>Fusing</b>
1 RCD 40 A, 4 p, 0.03 A 1 MCB 16 A, 3 p, C 3 MCB's 16 A, 1 p, C
<b>Connection</b>
For 2 cables up to 5 x 25 mm <sup>2</sup>
<b>Connection and load values</b>
Pre-fuse max. 100 A I <sub>nA</sub> 30 A RDF 0,95
<b>Enclosure size</b>
390 x 225 mm (H x W)
<b>Part no.</b>
<b>930027</b>



<b>CEE receptacles</b>
CEE receptacles
1 CEE 32 A, 5 p, 400 V
<b>Receptacles SCHUKO®</b>
Receptacles SCHUKO®
3 SCHUKO® 16 A, 230 V
<b>Fusing</b>
1 RCD 40 A, 4 p, 0.03 A 1 MCB 32 A, 3 p, C 3 MCB's 16 A, 1 p, C
<b>Connection</b>
For 2 cables up to 5 x 25 mm <sup>2</sup>
<b>Connection and load values</b>
Pre-fuse max. 400 A I <sub>nA</sub> 36 A RDF 0,75
<b>Enclosure size</b>
390 x 225 mm (H x W)
<b>Part no.</b>
<b>930028</b>



<b>CEE receptacles</b>
CEE receptacles
1 CEE 32 A, 5 p, 400 V 1 CEE 16 A, 5 p, 400 V
<b>Receptacles SCHUKO®</b>
Receptacles SCHUKO®
2 SCHUKO® 16 A, 230 V
<b>Fusing</b>
1 RCD 63 A, 4 p, 0.03 A 1 MCB 32 A, 3 p, C 1 MCB 16 A, 3 p, C 2 MCB's 16 A, 1 p, C
<b>Connection</b>
For 2 cables up to 5 x 25 mm <sup>2</sup>
<b>Connection and load values</b>
Pre-fuse max. 400 A I <sub>nA</sub> 44,8 A RDF 0,7
<b>Enclosure size</b>
520 x 225 mm (H x W)
<b>Part no.</b>
<b>940016</b>

**Standard made of AMAPLAST, protection type IP 44**

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).



**Set of chains**

are provided with each suspendable AMAXX® receptacle combination.



**CEE receptacles**

2 CEE 16 A, 5 p, 400 V

**CEE receptacles**

**Receptacles SCHUKO®**

4 SCHUKO® 16 A, 230 V

**Fusing**

1 RCD 40 A, 4 p, 0.03 A  
2 MCB's 16 A, 3 p, C  
4 MCB's 16 A, 1 p, C

**Connection/feeder cable**

For 1 cable up to  
5 x 10 mm<sup>2</sup>

**Connection and load values**

Pre-fuse max. 40 A  
InA 40 A  
RDF 0,7

**Enclosure size**

260 x 225 mm (H x W)

**Part no.**

**970004\***



**CEE receptacles**

1 CEE 32 A, 5 p, 400 V  
1 CEE 16 A, 5 p, 400 V

**CEE receptacles**

**Receptacles SCHUKO®**

3 SCHUKO® 16 A, 230 V

**Fusing**

1 RCD 40 A, 4 p, 0.03 A  
1 MCB 16 A, 3 p, C  
3 MCB's 16 A, 1 p, C

**Connection/feeder cable**

For 1 cable up to  
5 x 10 mm<sup>2</sup>

**Connection and load values**

Pre-fuse max. 32 A  
InA 32 A  
RDF 1

**Enclosure size**

260 x 225 mm (H x W)

**Part no.**

**970002\***

**Standard made of AMAPLAST, protection type IP 44**

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).



**CEE receptacles**

1 CEE 32 A, 5 p, 400 V  
1 CEE 16 A, 5 p, 400 V

**Data port receptacles**

1 Cepex RJ45, 2 fold Cat.6

**Receptacles SCHUKO®**

3 SCHUKO® 16 A, 230 V

**Fusing**

1 RCD 40 A, 4 p, 0.03 A  
1 MCB 16 A, 3 p, C  
3 MCB's 16 A, 1 p, C

**Connection/feeder cable**

For 1 cable up to  
5 x 10 mm<sup>2</sup>

**Connection and load values**

Pre-fuse max. 32 A  
I<sub>nA</sub> 32 A  
RDF 1

**Enclosure size**

260 x 225 mm (H x W)

**Part no.**

**970005\***



**CEE receptacles**

1 CEE 32 A, 5 p, 400 V  
1 CEE 16 A, 5 p, 400 V

**CEE receptacles**

**Receptacles SCHUKO®**

4 SCHUKO® 16 A, 230 V

**Fusing**

1 RCD 40 A, 4 p, 0.03 A  
1 MCB 32 A, 3 p, C  
1 MCB 16 A, 3 p, C  
4 MCB's 16 A, 1 p, C

**Connection/feeder cable**

For 1 cable up to  
5 x 10 mm<sup>2</sup>

**Connection and load values**

Pre-fuse max. 40 A  
I<sub>nA</sub> 40 A  
RDF 0,7

**Enclosure size**

260 x 225 mm (H x W)

**Part no.**

**970001\***



**CEE receptacles**

1 CEE 32 A, 5 p, 400 V  
1 CEE 16 A, 5 p, 400 V

**CEE receptacles**

**Receptacles SCHUKO®**

4 SCHUKO® 16 A, 230 V

**Fusing**

1 MCB 32 A, 3 p, C  
1 MCB 16 A, 3 p, C  
4 MCB's 16 A, 1 p, C

**Connection/feeder cable**

For 1 cable up to  
5 x 10 mm<sup>2</sup>

**Connection and load values**

Pre-fuse max. 63 A  
I<sub>nA</sub> 63 A  
RDF 0,85

**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**

**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.

Further combinations on request.



<b>CEE receptacles</b>
<b>CEE receptacles</b>
<b>Receptacles NF</b> 5 NF 16 A, 2 p+E, 230 V
<b>Fusing</b> 1 RCD 25 A, 2 p, 0.03 A
<b>Connection</b> 2 m H07RN-F3G2.5 with NF-plug 16 A, 2 p+E, 230 V
<b>Connection and load values</b> Pre-fuse max. 16 A I <sub>nA</sub> 16 A RDF 1
<b>Enclosure size</b> 260 x 225 mm (H x W)
<b>Part no.</b> <b>920046</b>



<b>CEE receptacles</b>
<b>CEE receptacles</b>
<b>Receptacles Danish standard</b> 6 x 13 A, 2 p+E, 230 V
<b>Fusing</b> 1 RCD 40 A, 4 p, 0.03 A 6 MCB's 13 A, 1 p, C
<b>Connection</b> 2 m H07RN-F5G4 with CEE-plug 32 A, 5 p, 400 V
<b>Connection and load values</b> Pre-fuse max. 32 A I <sub>nA</sub> 26 A RDF 1
<b>Enclosure size</b> 390 x 225 mm (H x W)
<b>Part no.</b> <b>931451</b>



<b>CEE receptacles</b>
1 CEE 32 A, 5 p, 400 V 1 CEE 16 A, 5 p, 400 V
<b>CEE receptacles</b>
<b>Receptacles British standard</b> 3 x 13 A, 2 p+E
<b>Fusing</b> 1 RCD 40 A, 4 p, 0.03 A 1 MCB 16 A, 3 p, C 3 MCB's 13 A, 1 p, C
<b>Connection</b> 2 m H07RN-F5G4 with CEE-plug 32 A, 5 p, 400 V
<b>Connection and load values</b> Pre-fuse max. 32 A I <sub>nA</sub> 32 A RDF 1
<b>Enclosure size</b> 390 x 225 mm (H x W)
<b>Part no.</b> <b>931237</b>



<b>CEE receptacles</b>
<b>CEE receptacles</b>
<b>Receptacles SCHUKO®</b> 3 CEE 16 A, 3 p, 230 V switched, with mechanical DUO interlock
<b>Fusing</b> 1 RCD 40 A, 4 p, 0.03 A 1 MCB 16 A, 3 p+N, C
<b>Connection</b> 4 m H07RN-F5G2.5 with CEE-plug 16 A, 5 p, 400 V
<b>Connection and load values</b> Pre-fuse max. 16 A I <sub>nA</sub> 16 A RDF 1
<b>Enclosure size</b> 520 x 225 mm (H x W)
<b>Part no.</b> <b>940030</b>

Accessories for AMAXX® receptacle combinations



**AMAXX® standard cable glands**

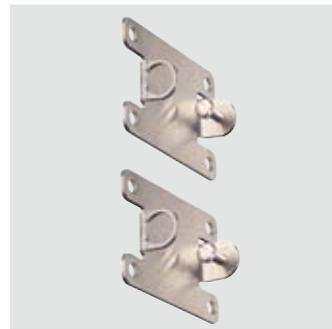
black RAL 9005  
**M 20** - for cable from 6-13 mm  
 IP 44: **Part no. 990607**  
 IP 67: **Part no. 990611**  
**M 25** - for cable from 9-17 mm  
 IP 44: **Part no. 990610**  
**M 32** - for cable from 13-21 mm  
 IP 44: **Part no. 990608**  
 IP 67: **Part no. 990612**  
**M 40** - for cable from 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	Recommendation of usage membrane cable gland*	
with 1 segment Enclosure: 130 x 225 mm (H x W)	top: 2 x M 25 2 x M 20 bottom: 2 x M 25 2 x M 20	1 x M 25	alternative: 1 x M 20
with 2 segments Enclosure: 230 x 225 mm (H x W)	top: 2 x M 32 2 x M 20 bottom: 2 x M 32 2 x M 20	1 x M 32	alternative: 2 x M 20
with 3 segments Enclosure: 390 x 225 mm (H x W)	top: 2 x M 40 2 x M 20 bottom: 2 x M 40 2 x M 20	1 x M 40	alternative: 2 x M 20
with 4 segments Enclosure: 520 x 225 mm (H x W)	top: 2 x M 40 2 x M 20 bottom: 2 x M 40 2 x M 20	1 x M 40 and 1 x M 20	alternative: 3 x M 20
with 5 segments Enclosure: 650 x 225 mm (H x W)	top: 2 x M 40 2 x M 20 bottom: 2 x M 40 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.

# References



**MAN Service-Station**, Braunschweig, Germany



**SIGNAL IDUNA Park**,  
Dortmund, Germany



**Yas Marina Circuit, Abu Dhabi, UAE**



**Bausch & Ströbel Maschinenfabrik (Engineering plant),  
Ilshofen, Germany**

For all solutions.  
At any time.  
All over the  
world.

„Finally, there is a complete solution for local industrial data networks.“

All from  
one source.



# Data transfer

You are familiar with MENNEKES as a competent provider of high-quality industrial plugs and sockets.

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.

## 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 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 separating membrane plate.

- Power supply also possible from the top through an empty tube.

# Industrial network

System solutions suited for industrial needs.

Industrial Ethernet allows the utilization of the Ethernet standard for networking devices in industrial production. With Industrial Ethernet, you can incorporate devices required for coordination and control of production processes into the present Ethernet network.



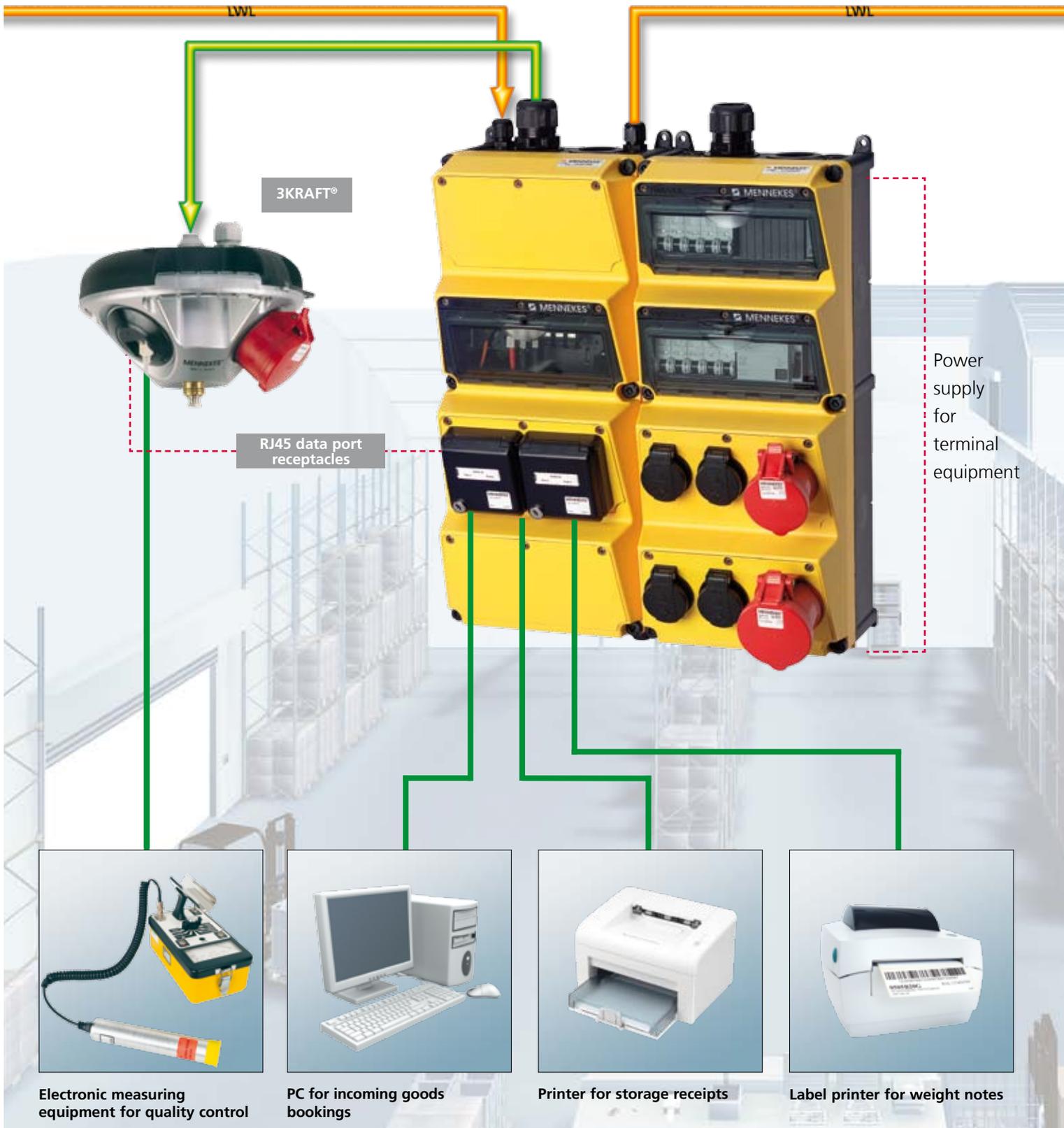
Industrial Ethernet by MENNEKES is optimally suited for establishing local networks or sub-networks in rough industrial environments. Wherever data and electricity are required in production or logistics – for example in the incoming goods department or on field level (machine sector) or in dispatch. And both indoors and outdoors. With industrial ethernet by MENNEKES individual installations, special solutions and overdimensioned distribution cabinets are things of the past.

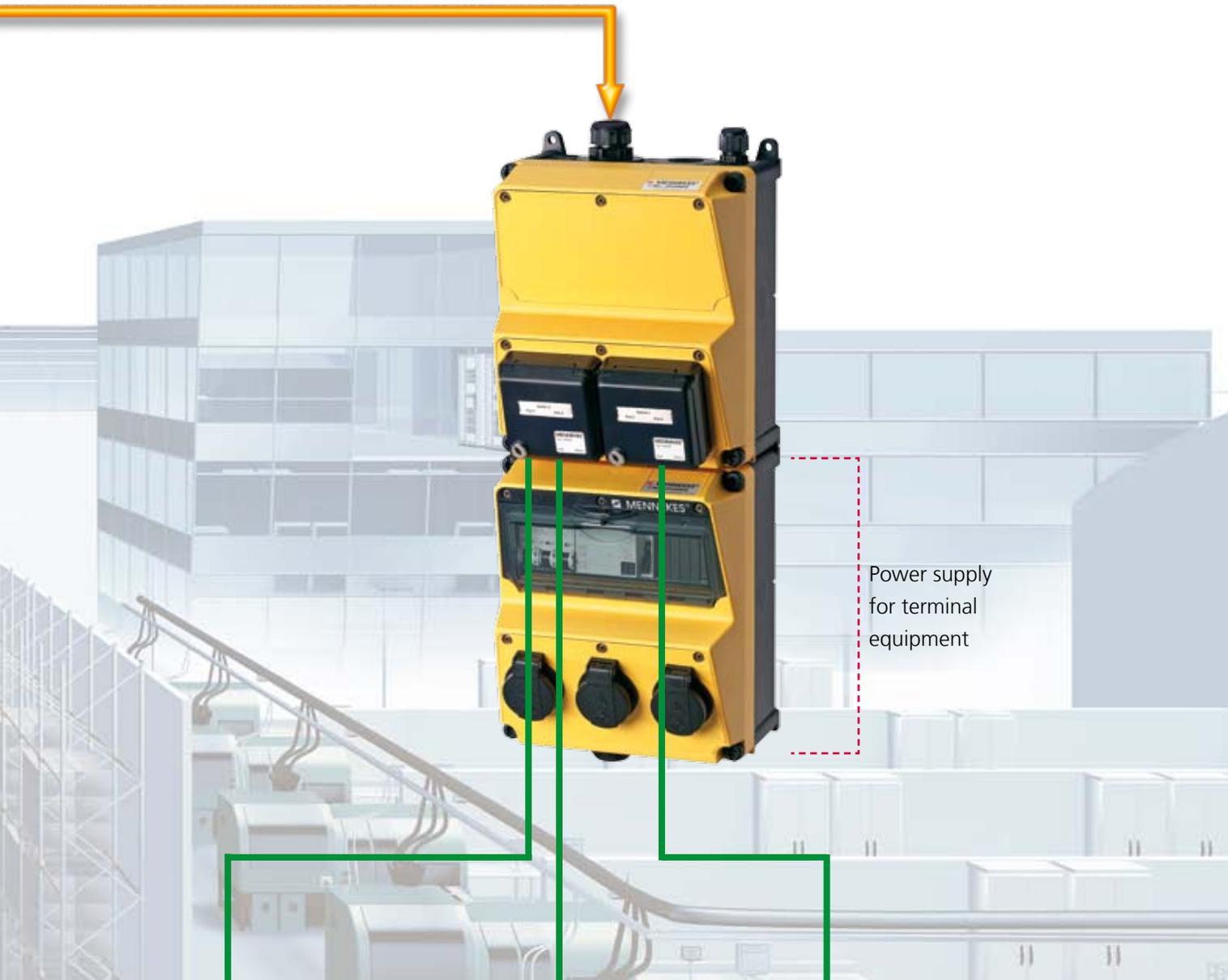
## Administration

Main server



# Industrial network in detail





Power supply  
for terminal  
equipment



Electronic scale with electric supply



Modem for remote machine maintenance



Touch screen BDE terminal

# Application example: Incoming goods

## In the network enclosure:

- Fibre optic cable (OWG) bundles can be connected through the splice cassettes and distributed to 6 OWG couplers SC/ST duplex.
- 1 OWG output is used for additional network enclosures in production.
- 4 OWG outputs free (reserve).
- 6-port Ethernet switch for DIN rail installation with OWG port (ST, MM).
- 1 short-circuit proof switching power supply 24 V for DIN rail installation (power supply for switch).
- 4 RJ45 Cu ports led through via lockable Cepex data port receptacles.
- 1 RJ45 Cu port led through via separate lead for external connection (e.g. AirKRAFT®).



Network enclosure

Energy enclosure

# 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 24 V 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.

You have special wishes and requirements? Please talk to us, we will advise you and configure an appropriate solution for you!

# Application examples

For local networks in any environment.

**Dusty areas:  
Computer-monitored sawmill**

AMAXX® network enclosure 260 x 225 mm (H x W) with 3 RJ45 data port receptacles BTR V4 stiffener wall (IP 67), e.g. for connecting PCs. AMAXX® receptacle combination 130 x 225 mm (H x W) with 2 receptacles SCHUKO® and fuse, e.g. for PC power supply and surveillance monitors.



AMAXX® network enclosure for safe installation in dusty areas.

**Humid areas:  
Air conditioned greenhouse**

AMAXX® network enclosure 260 x 225 mm (H x W) with 2 Cepex RJ45 data port receptacles (IP 44), e.g. for data connection of laptops and telephones. AMAXX® receptacle combination 260 x 225 mm (H x W) with 3 receptacles SCHUKO® and fuses, e.g. for power supply of laptops and electric tools.



AMAXX® network enclosure for safe installation in humid areas.

**Rough operating environment:****Machining industry**

XXL network enclosure 520 x 260 mm (H x W) with a Cepex data port receptacle 2 x RJ45 and a Cepex data port receptacle 2 x ST modules (OWG), for connecting measuring equipment in the test field. An integrated receptacle SCHUKO® supplies the power for network revision.

**Top section:** Power supply stiffener wall.

**Bottom section:**

Splice cassette with 6 OWG connectors E2000 (DIAMOND), 1 stiffener wall for protecting the OWG fibres from contact.

Fast installation of devices with pre-mounted network installation kit with DIN rails and stiffener walls. Due to its universal design and the generous installation depth, the XXL network enclosure allows the installation of varied network components.

With its protection type up to IP 67 and the impact resistant enclosure, the network can also be installed fast and safely in extreme environments!



XXL network enclosure with many different installation options.

**Compact network distributor made of AMAPLAST. Protection type IP 44**

Front cover electric grey RAL 7035.

**You have special wishes and requirements? Please talk to us, we will advise you and configure an appropriate solution for you!**



**Fitted with**

2 SCHUKO® 16 A, 230 V  
 1 Cepex data port receptacle with 2 RJ45 connection module couplings, type E-DAT module, port, cat.6, brand: BTR

**Wiring Cepex data port receptacles**

**Connection**

2 x M 25 at the top (closed)  
 1 x M 25 at the bottom (with cable gland)  
 1 x 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 mm<sup>2</sup>

**Connection and load values**

**Enclosure size**

118 x 170 mm (H x W)

**Part no.**

**25705**



**Fitted with**

4 SCHUKO® 16 A, 230 V  
 1 Cepex data port receptacle with 2 RJ45 connection module couplings, type E-DAT module, port, cat.6, brand: BTR

**Wiring Cepex data port receptacles**

**Connection**

2 x M 25 at the top (closed)  
 1 x M 25 at the bottom (with cable gland)  
 1 x 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 3 x 4 mm<sup>2</sup>

**Connection and load values**

**Enclosure size**

160 x 245 mm (H x W)

**Part no.**

**25715**

**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 650 x 112.5 mm). Fusing behind a transparent cover.

**You have special wishes and requirements? Please talk to us, we will advise you and configure an appropriate solution for you!**



<b>CEE receptacles</b>
1 CEE 16 A, 5 p, 400 V
<b>Data port receptacles</b>
1 Cepex RJ45, 2 fold Cat.6
<b>Receptacles SCHUKO®</b>
3 SCHUKO® 16 A, 230 V
<b>Fusing</b>
<b>Connection</b>
For 1 cable up to 5 x 10 mm <sup>2</sup>
<b>Connection and load values</b>
Pre-fuse max. 16 A I <sub>nA</sub> 16 A
<b>Enclosure size</b>
650 x 112.5 mm (H x W)
<b>Part no.</b>
<b>960005</b>



<b>CEE receptacles</b>
1 CEE 32 A, 5 p, 400 V 1 CEE 16 A, 5 p, 400 V
<b>Data port receptacles</b>
2 Cepex RJ45, 2 fold Cat.6
<b>Receptacles SCHUKO®</b>
2 SCHUKO® 16 A, 230 V
<b>Fusing</b>
1 RCD 40 A, 4 p, 0.03 A 1 MCB 32 A, 3 p, C 1 MCB 16 A, 3 p, C 2 MCB's 16 A, 1 p, C
<b>Connection</b>
For 2 cables up to 5 x 25 mm <sup>2</sup>
<b>Connection and load values</b>
Pre-fuse max. 40 A I <sub>nA</sub> 40 A RDF 1
<b>Enclosure size</b>
520 x 225 mm (H x W)
<b>Part no.</b>
<b>940018</b>

Cepex enclosures

Image	Title / Description	Brand	Type	suitable insert	Part no.	
	<p><b>Cepex enclosure, grey</b></p> <ul style="list-style-type: none"> <li>as wall mounted receptacle</li> <li>for installation of RJ45 data port receptacles</li> <li>2 keys</li> </ul> <p>⚠ IP 44 Product group 1024. Image 4300.</p>	AMP	Twist	1 x 41456	4350 <sup>1)</sup>	
		AMP	Jack	2 x 41457	4360	
		AMP	CO Plus	—	4370 *	
		BTR	E-DAT module	2 x 41455	4340 <sup>3)</sup>	
		Rutenbeck	iso-8/8 Up05	1 x 41492	4320	
		TKM	KDMF	1 x 41452	4300 <sup>1)</sup>	
		Reichle & De-Massari	Modul Real 10	2 x 25056	4375 <sup>2)</sup>	
		with identical locks: part no + index G				
	<p><b>Cepex enclosure, grey</b></p> <ul style="list-style-type: none"> <li>as panel mounted receptacle</li> <li>for installation of RJ45 data port receptacles</li> <li>2 keys</li> </ul> <p>⚠ IP 44 Product group 1020. Image 4302.</p>	AMP	Twist	1 x 41456	4352 <sup>1)</sup>	
		AMP	Jack	2 x 41457	4362	
		AMP	CO Plus	—	4372 *	
		BTR	E-DAT module	2 x 41455	4342 <sup>3)</sup>	
		Rutenbeck	iso-8/8 Up05	1 x 41492	4322	
		TKM	KDMF	1 x 41452	4302 <sup>1)</sup>	
		Reichle & De-Massari	Modul Real 10	2 x 25056	4377 <sup>2)</sup>	
		with identical locks: part no + index G				
	<p><b>Cepex enclosure, alpine white</b></p> <ul style="list-style-type: none"> <li>as panel mounted receptacle</li> <li>for installation of RJ45 data port receptacles</li> <li>2 keys</li> </ul> <p>⚠ IP 44 Product group 1020. Image 4304.</p>	AMP	Twist	1 x 41456	4354 <sup>1)</sup>	
		AMP	Jack	2 x 41457	4364	
		AMP	CO Plus	—	4374 *	
		BTR	E-DAT module	2 x 41455	4344 <sup>3)</sup>	
		Rutenbeck	iso-8/8 Up05	1 x 41492	4324	
		TKM	KDMF	1 x 41452	4304 <sup>1)</sup>	
		with identical locks: part no + index G				

Image	Title / Description	Brand	Type	suitable insert	Part no.
	<p><b>Cepex enclosure, silver</b></p> <ul style="list-style-type: none"> <li>■ as panel mounted receptacle</li> <li>■ for installation of RJ45 data port receptacles</li> <li>■ 2 keys</li> </ul> <p>⚠ IP 44 Product group 1020. Image 4326.</p>	<p>Rutenbeck</p>	<p>iso-8/8 Up05</p>	<p>1 x 41492</p>	<p>4326</p>
with identical locks: part no + index G					
	<p><b>Cepex enclosure, black</b></p> <ul style="list-style-type: none"> <li>■ as panel mounted receptacle</li> <li>■ for installation of RJ45 data port receptacles</li> <li>■ 2 keys</li> </ul> <p>⚠ IP 44 Product group 1020. Image 4345.</p>	<p>BTR Rutenbeck Reichle &amp; De-Massari</p>	<p>E-DAT module iso-8/8 Up05 Modul Real 10</p>	<p>2 x 41455 1 x 41492 2 x 25056</p>	<p>4345 <sup>3)</sup> 4367 4378 <sup>2)</sup></p>
with identical locks: part no + index G					

<sup>1)</sup> 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).

<sup>2)</sup> 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).

<sup>3)</sup> Cepex enclosures also suited for LEONI MegaLine.

\* The data inserts/modules AMP CO Plus are not part of the MENNEKES delivery program!

## Data modules

Image	Title	Description
	<p><b>Data module</b></p> <p><b>Part no. 41455</b></p>	<ul style="list-style-type: none"> <li>■ BTR, type: RJ45 connection module 270° (type E-DAT module 8(8) jack cat.6)</li> <li>■ suitable for Cepex receptacles, part no. 4340, 4342, 4344, 4355</li> <li>■ easy to install connection of data cables</li> <li>■ installation without special tools</li> <li>■ strain relief per locking clip directly on the stuffer cap</li> </ul>
	<p><b>Data module</b></p> <p><b>Part no. 41457</b></p>	<ul style="list-style-type: none"> <li>■ AMP, type: RJ45 connection module (type cat.6 SL Jack)</li> <li>■ suitable for Cepex receptacles, part no. 4360, 4362, 4364</li> </ul>
	<p><b>Data module</b></p> <p><b>Part no. 25056</b></p>	<ul style="list-style-type: none"> <li>■ Reichle + De-Massari, type: data port insert real 10, cat.6, screened, incl. frame for snap-in</li> <li>■ fits Cepex data port receptacle, part no. 4375, 4377, 4378</li> </ul>
	<p><b>Data module</b></p> <p><b>Part no. 41492</b></p>	<ul style="list-style-type: none"> <li>■ Rutenbeck, type: data port insert 2 x RJ45, cat.6, (type UPOS)</li> <li>■ suitable for Cepex receptacles, part no. 4320, 4322, 4324, 4326, 4367</li> </ul>
	<p><b>Data module</b></p> <p><b>Part no. 41456</b></p>	<ul style="list-style-type: none"> <li>■ AMP, type: data port insert 2 x RJ45, cat.6, (type AMP Twist Dual/Outlet)</li> <li>■ suitable for Cepex receptacles, part no. 4350, 4352, 4354</li> </ul>

Image	Title	Description
	<p><b>Data module</b></p> <p><b>Part no. 41452</b></p>	<ul style="list-style-type: none"> <li>■ TKM, type: data port insert 2 x RJ45, cat.6, type KDMF</li> <li>■ suitable for Cepex receptacles, part no. 4300, 4302, 4304</li> </ul>
	<p><b>Data module</b></p> <p><b>Part no. 25042</b></p>	<ul style="list-style-type: none"> <li>■ for Cepex data port receptacles</li> <li>■ RJ45 connection module, type E-DAT module connector 8(8) 90°, cat.6 (recommended for improved cable routing)</li> </ul>

Industrial Ethernet accessories

Image	Title	Description
	<p><b>Flush mounted installation box</b></p> <p><b>Part no. 41404</b></p>	<ul style="list-style-type: none"> <li>■ for Cepex CEE receptacles 16 A and 32 A and Cepex receptacles SCHUKO®</li> <li>■ can be combined with all Cepex panel mounted receptacles</li> </ul>
	<p><b>Spacer frame</b></p> <p><b>Part no. 4191</b> grey</p>	<ul style="list-style-type: none"> <li>■ to compensate for unequal heights</li> <li>■ matching all Cepex surface mounted receptacles SCHUKO® as well as all Cepex CEE surface mounted 16 A and 32 A receptacles</li> </ul>
	<p><b>AMAXX® DIN-rail adapter</b></p> <p><b>Part no. 25058</b></p>	<ul style="list-style-type: none"> <li>■ for installation of switches, power units and relays</li> <li>■ material: galvanized sheet steel</li> <li>■ for DIN-rail and floor installation</li> </ul>

Image	Title	Description
	<p><b>Cable gland</b></p> <p><b>Part no. 41453</b></p>	<ul style="list-style-type: none"> <li>■ grey</li> <li>■ M 25</li> <li>■ 2 x 8, for 2 cables 3-8 mm</li> <li>■ matching all Cepex wall mounted receptacles</li> </ul>
	<p><b>AMAXX® cable gland set</b></p> <p><b>Part no. 25023</b> M 25 - 3 openings  <b>Part no. 25024</b> M 32 - 4 openings  <b>Part no. 25025</b> M 40 - 7 openings</p>	<ul style="list-style-type: none"> <li>■ black</li> <li>■ 1 screw gland, 1 multi-seal with openings for cable diameters from 5 to 7 mm and blind plugs</li> <li>■ 1 seal (perforation by the customer)</li> </ul>
	<p><b>Cable gland</b></p> <p><b>Part no. 990607</b> M 20 for cable from 6-13 mm, IP 44  <b>Part no. 990611</b> M 20 for cable from 6-13 mm, IP 67  <b>Part no. 990610</b> M 25 for cable from 9-17 mm, IP 44  <b>Part no. 990608</b> M 32 for cable from 13-21 mm, IP 44  <b>Part no. 990612</b> M 32 for cable from 13-21 mm, IP 67  <b>Part no. 990609</b> M 40 for cable from 14-28 mm, IP 67</p>	<ul style="list-style-type: none"> <li>■ black RAL 9005</li> <li>■ individual packed</li> </ul>

# References



Julius Kleemann GmbH & Co. KG, Metallverpackungen, Karlstein, Germany



Gildemeister  
Drehmaschinen GmbH,  
Bielefeld, Germany

Data and  
Energy.



**Meyer Werft (Shipyard),** Papenburg, Germany



**TKMS Blohm + Voss  
Nordseewerke GmbH,**  
Emden, Germany

# AMAXX<sup>®</sup> Automation

Energy and automation components in one enclosure.



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.

**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:**

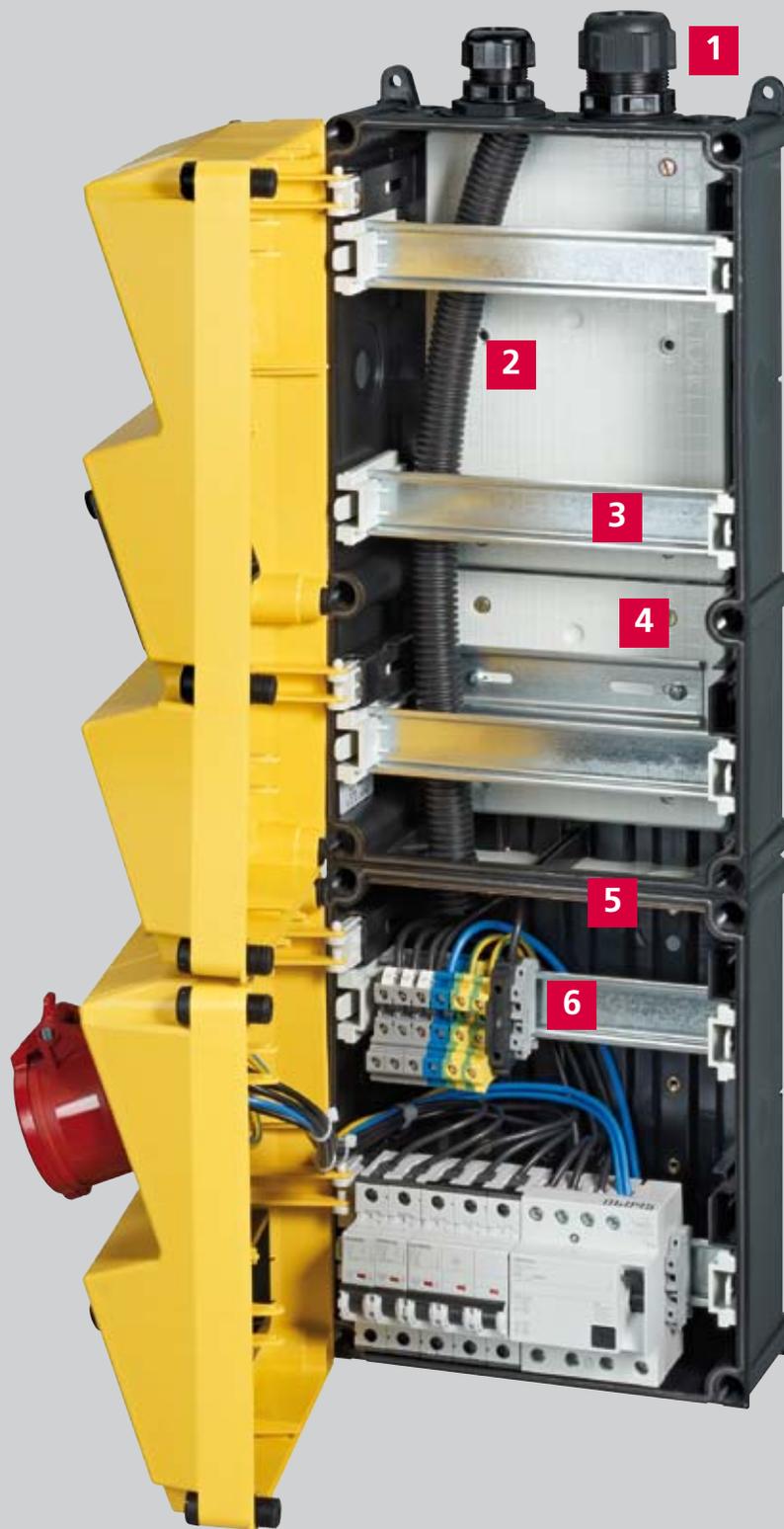
- Protection type IP 44 and IP 67.
- Protected against dust, moisture and other environmental influences.

**Physical separation of network and energy enclosure with separating membrane plate:**

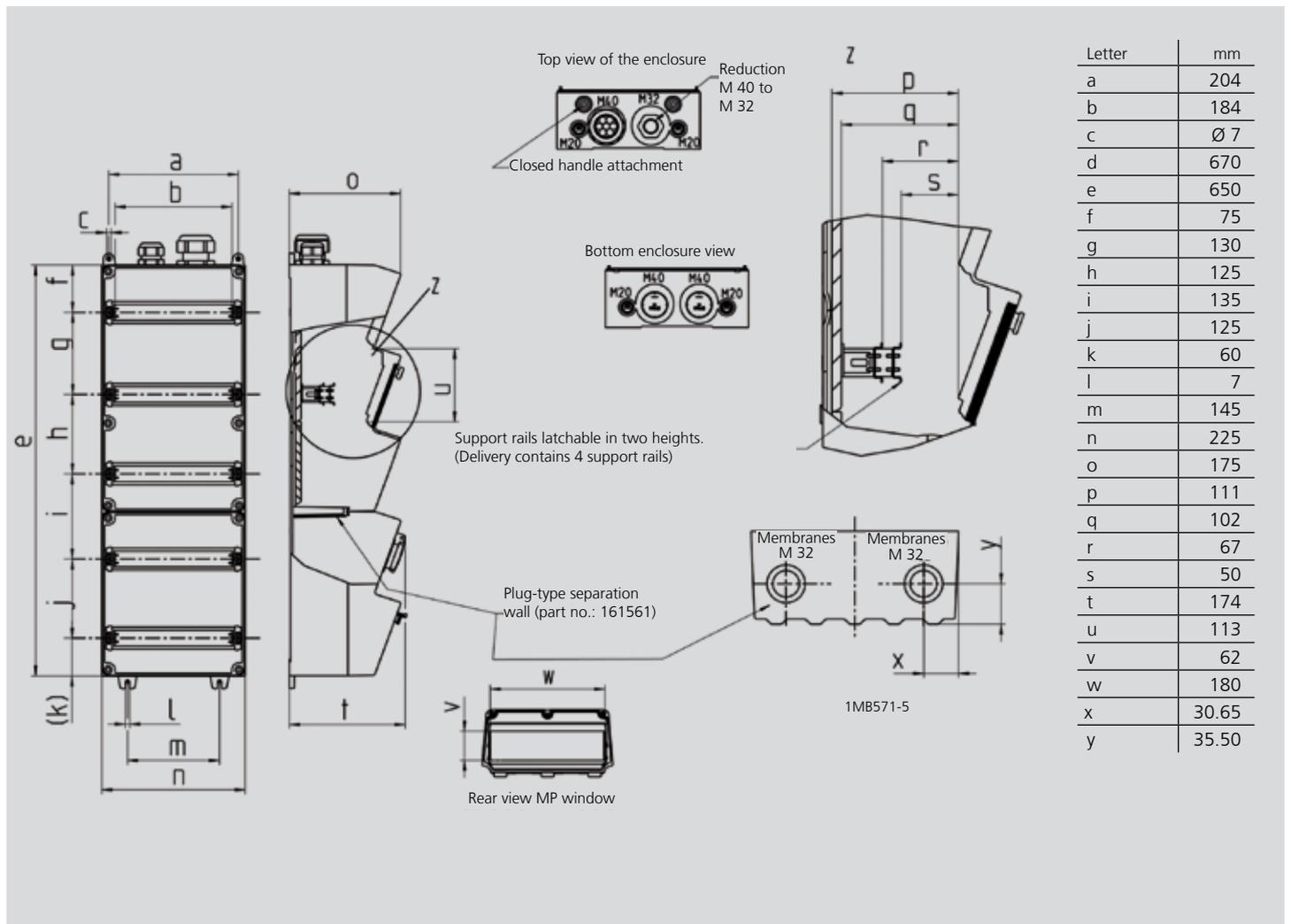
- Power supply also possible from the top through an empty tube.

# Flexibility

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 glass tube fuse T 6.3 A



# Electronic counter. Pneumatics. SPS.

Application example with a small control and a pneumatic valve.

## 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



Transparent operating window, secured with screws, can only be opened with a tool.



The modulplates can be fitted with push buttons or indicating lamps with 22.3 mm diameter.



The emergency stop button is well visible on the yellow enclosure and easy to actuate.

# Examples of possible combinations



### Triple data enclosure

- with transparent operating window (lockable)
- 3 × liftable DIN-rails
- 1 × mounting plate 230 × 166 mm, mounted
- 1 × mounting plate 130 × 166 mm, mounted
- 1 × empty tube with 19 mm diameter (for separation of supply cable)
- 1 × separation plate with 2 membranes M 32

### CEE receptacles

### Receptacles SCHUKO®

2 SCHUKO® 16 A, 230 V

### Fusing

- 1 RCD 25 A, 2 p, 0.03 A
- 2 MCB's 16 A, 1 p, C
- 1 glas tube fuse T 6.3 A

### Enclosure size

650 x 225 mm (H x W)



### Triple data enclosure

- with transparent operating window (lockable)
- 3 × liftable DIN-rails
- 1 × mounting plate 230 × 166 mm, mounted
- 1 × mounting plate 130 × 166 mm, mounted
- 1 × empty tube with 19 mm diameter (for separation of supply cable)
- 1 × separation plate with 2 membranes M 32

### CEE receptacles

1 CEE 16 A, 5 p, 400 V

### Receptacles SCHUKO®

2 SCHUKO® 16 A, 230 V

### Fusing

- 1 RCD 40 A, 4 p, 0.03 A
- 1 MCB 16 A, 3 p, C
- 2 MCB's 16 A, 1 p, C
- 1 glas tube fuse T 6.3 A

### Enclosure size

650 x 225 mm (H x W)

AMAXX® made of AMAPLAST, protection type IP 44. Front cover electric grey RAL 7035 or yellow RAL 1021, hinged to one side, 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.

**You have special wishes and requirements? Please talk to us, we will advise you and configure an appropriate solution for you!**

# Application examples: Sewage treatment plant

Sewage treatment plant  
Sachtleben GmbH,  
Meggen, Germany



## Harsh environment: Local sewage treatment plant

The transmission of process data from overflow protectors, level sensors and separators to the control room is realised with a small control with GSM module.

The laptop is connected to the SPS with a patch cable and an RJ45 plug directly from outside via the operating window.

# Quarry



**Grevenbrücker Kalkwerk GmbH & Co.KG, a company of Schaeferkalk Group, Grevenbrück, Germany**



## Harsh environment

The motor is pre-heated electrically to start the 60 t dump truck. This prevents long warm-up times of the engine and the dump truck is ready for operation right after starting up.

The drivers should be able to start and monitor the heating process at anytime, anywhere via the mobile phone network. Outside temperatures are thus considered in realtime.

To safely protect the sensitive GSM module and the load relay from strong dust impact and moisture, the devices were installed in a dust and spray water-protected AMAXX® enclosure. Thanks to the yellow signal colour, the drivers can already detect the enclosure from afar. In addition, it is protected from passing vehicles in the T-bar.

Remote control via mobile phone.

Plugs for the world

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