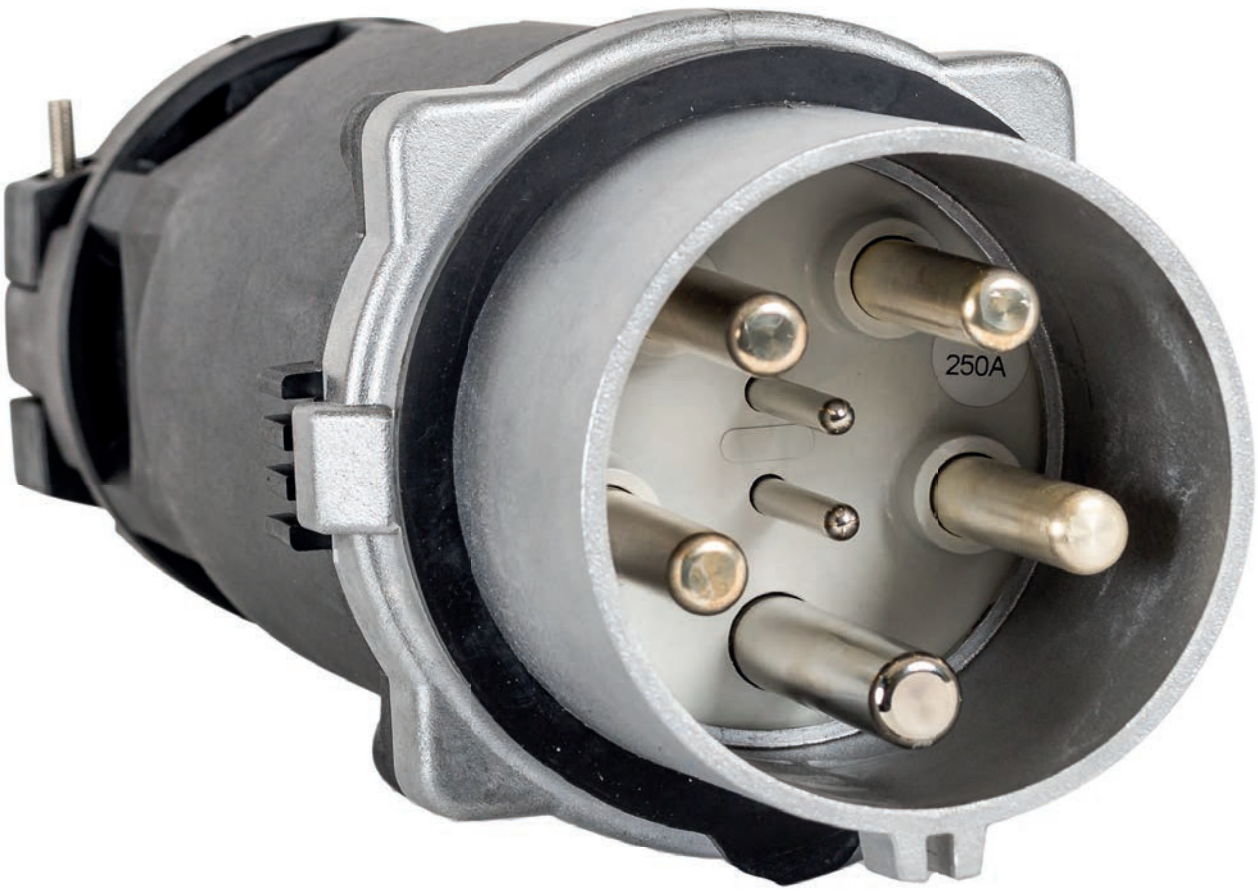
High current plugs and sockets 160A-600A



Bals

High current connectors

Made in Switzerland

Characteristics:

- 160 A - 600 A
- Robust housing
- 4- and 5-poles
- High reliability
- Compact design
- IP67
- Finger touch protection
- Designed for high temperatures
- Vibration resistent

Applications:

- Tunnel construction
- Marine
- Railway
- Military
- Industry
- Construction site
- Event technology
- Mining
- Chemistry

High current connectors

Developed for eternity

Knowledge of the entire electrical industry combined.

Connectors for challenging applications

In applications where high current connectors are used, safety, quality and reliability are the top priorities for customers. In order to fulfill this task, all these properties were bundled into one product range. Thus, all customers receive a product with the highest degree of performance.

Whether in tunnel construction, where extremely mechanical strength is required or railway applications where vibration-proof is of highest importance, the Rauscher & Stoecklin connectors are always the right choice.

Customized solutions

If standard solutions do not meet all the requirements of an application, customer-specific solutions are made upon request.

In doing so, the customer is involved in each development step, thus enabling us to come up with a perfect solution. In this area, Rauscher & Stoecklin has extensive know-how and numerous reference projects.

MC D-Line

MC C-Line

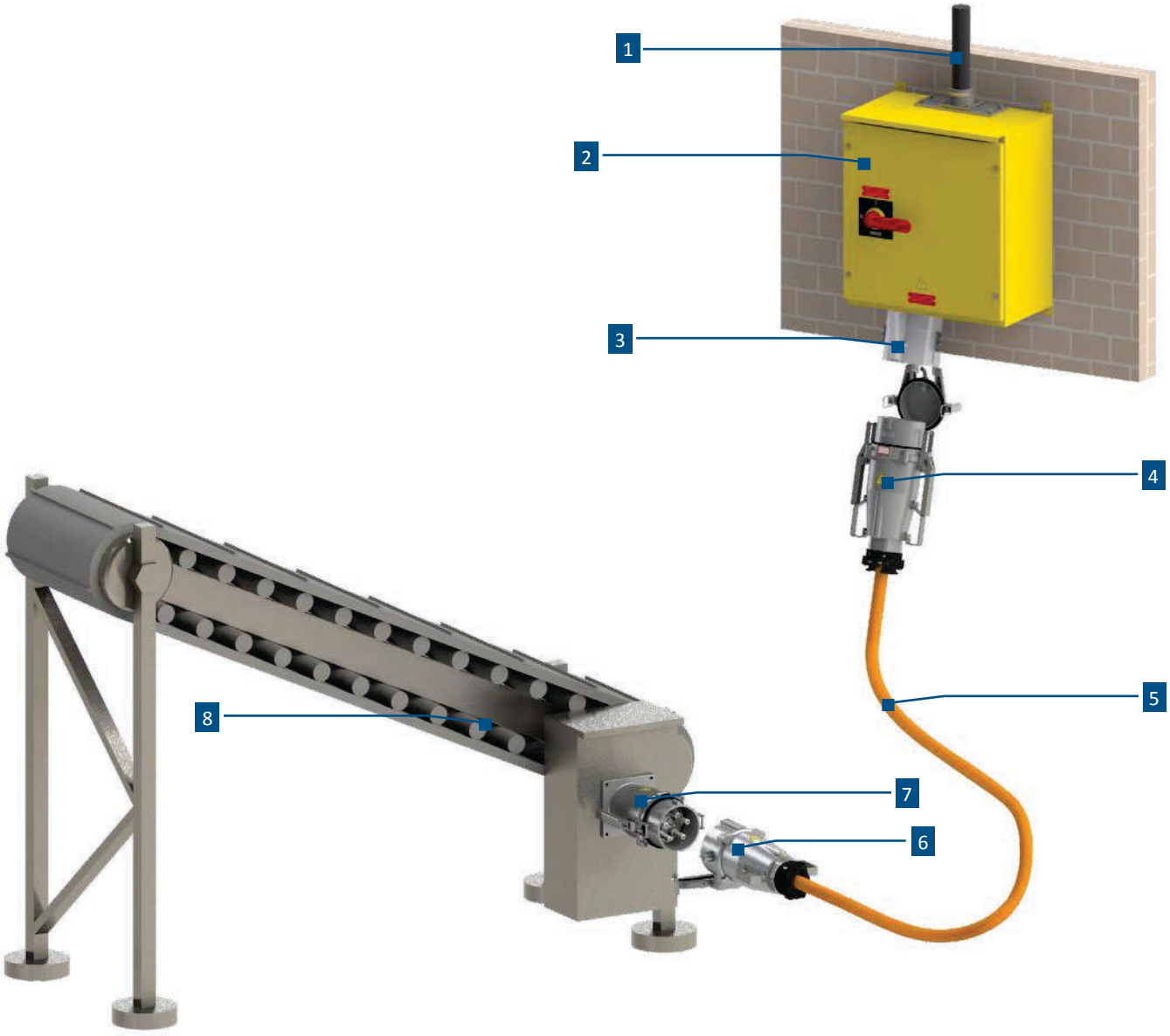
MC B-Line

MC A-Line

Connector
Terminology

Structure of an electrical connection

1.Power source
2.Connector unit
3.Panel mounted socket angled
4.Plug
5.Cable
6.Coupling
7.Panel mounted inlet
8.Machine / Electrical consumer

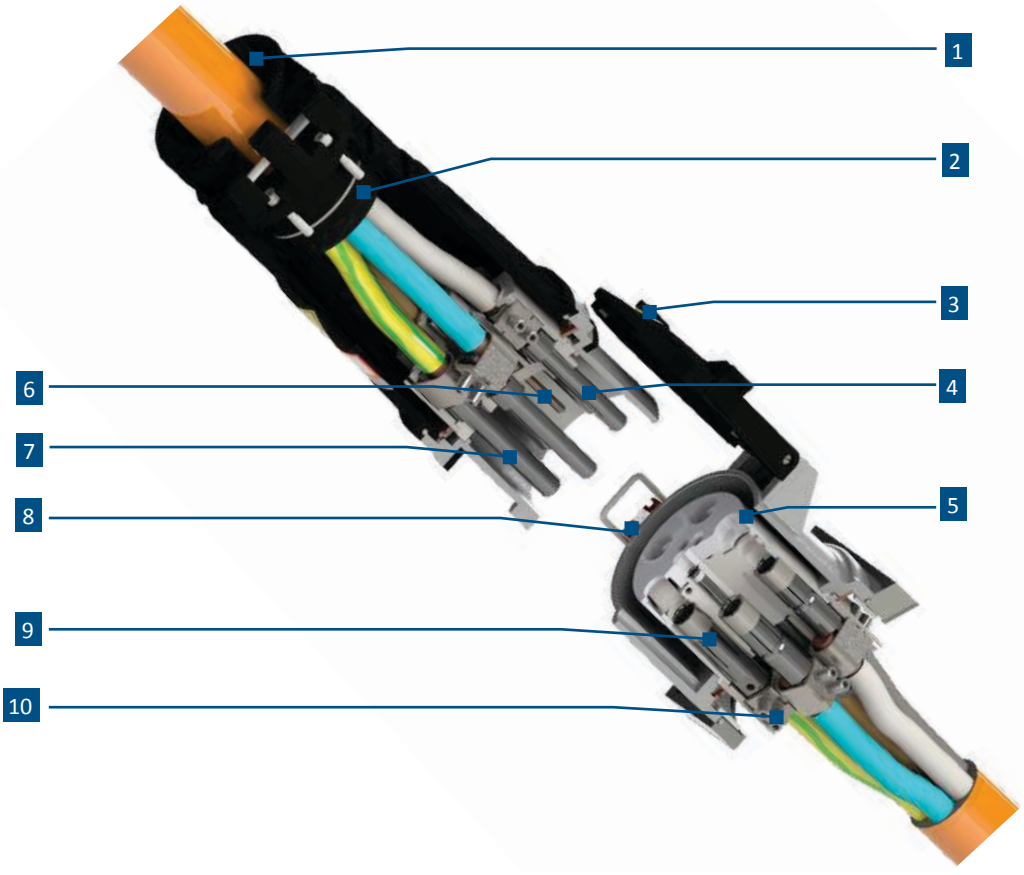


Structure of a connector

Perfection down to the smallest detail

Structure of a connector

1. Cable gland IP67, bell shaped entry for easy assembly
2. Rubber sealing ring, protection from water and dust
3. Cover coupling, protection from dirt
4. Power pins, silver-plated contacts for enhanced energy transmission
5. Finger touch protection, maximum safety for user
6. Pilot contact, implemented as standard
7. Earthing pin, earhing of housing
8. Clamping bracket, mechanical closing operation
9. Segmented contact socket, segmented contact system for all weather conditions
10. Connections terminals, easy cabling



Product portfolio

The right solution for every application

The connector product portfolio covers almost all applications in the defined high current range.

D-Line - 160 A

The state-of-the-art D-Line connectors are very often used in applications where standard 125 A CEE connectors reach their technical limits.

C-Line - 200 A / 250 A

The compact C-Line connectors have a robust plastic housing and are perfect for applications with limited space conditions as well as for certain industries (chemistry, food industry). Additional options allow use in a variety of applications.

B-Line - 250 A / 315 A / 400 A

The robust B-Line connectors are ideal for applications (tunneling, mining), where high mechanical loads may arise. Furthermore, numerous options, such as the saltwater-resistant housing, make the connectors also suitable for marine applications.

A-Line - 500 A / 600 A

The A-Line connectors beautifully complete the portfolio of 4- and 5-pole connectors with a high current range up to 600 A. These connectors are used in mines, airports and larger infrastructure projects, where very high levels of currents are required.

Connector units 160 A - 600 A

To ensure maximum safety for users, Rauscher & Stoecklin offers special connector units:

- CUMI (connector unit with mechanical interlock)
- CUBC (connector unit with block contactor)
- CUCB (connector unit with circuit breaker)

Product Overview*

Male connector

MC
Plug

MCP
Panel Mounted Inlet

MCPA
Panel Mounted Inlet Angled

MCW
Wall Mounted Inlet

Female Connector

FC
Coupling

FCP
Panel Mounted Receptacle

FCPA
Panel Mounted Receptacle Angled

FCW
Wall Mounted Receptacle

* Product overview using the example of the B-Line

Energy Transmission
Efficient and reliable

Segmented contact system
The enlarged contact surfaces enable an efficient energy transfer.

Furthermore, low energy costs are achieved due to the silver-plated contacts, which have a low resistance and minimal power losses. The precise contact system is fully functional, even under severe vibrations.

- Low resistance
- Silver plated contacts
- Minimum power losses
- Self-cleaning contacts

Pilot contacts
The pilot contacts act as auxiliary contacts. They close lagging when inserting and open leading when removing the connector, thus providing an electrical interlocking, i.e. it prevents the plugging and pulling under load in the connector units.

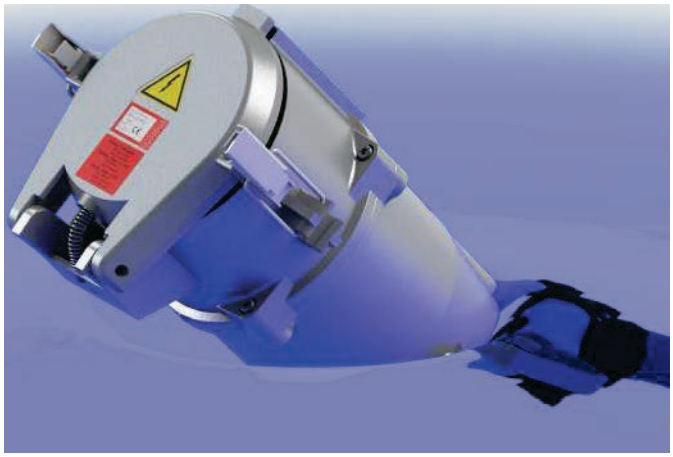
The pilot contacts are fitted as standard in the entire product range, so there is no need for expensive retrofitting. The pilot contacts further help preserving the main power contacts from mechanical and electrical wear-out.

Segmented contact system

Pilot contacts

Safety

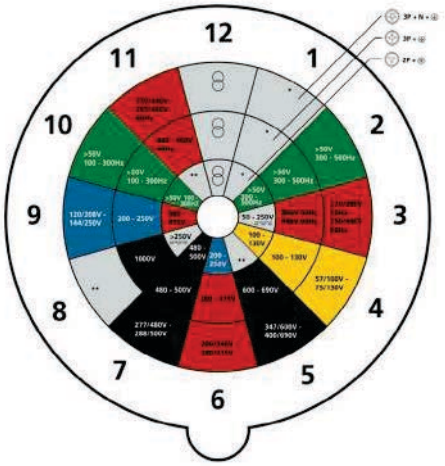
Anytime and everywhere guaranteed



IP 67 / IP 55

The connectors are IP67. They are dust-proof and suitable for temporary immersions under water. The connector units are IP55, which means protected against dust and splashing water.

- Always reliable in adverse environmental conditions
- Suitable for high humidity applications
- Low maintenance (no dust / moisture penetration)
- High security ensured at all times



Voltage coding

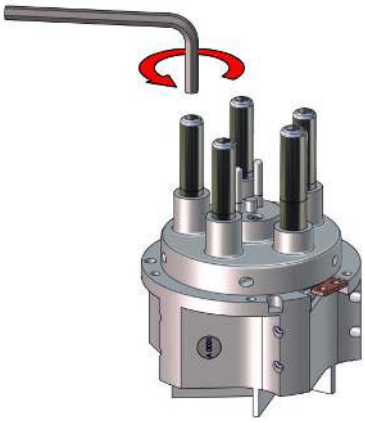
Arrangement of the PE contact pin and bushing to prevent wrong plugging of various voltages and frequencies after the time setting in accordance with table 104 from EN 60309-2. The standard earthing contact specifies the time setting.

Finger touch protection

Each socket is equipped with a finger touch protection in order to safeguard the user against electrical shocks in the event of unintentional contact with live parts.

Maintenance & assembly

Fast and easy



Quick exchanging of contacts

In the case of most conventional connectors, a time-consuming procedure is required to replace contact pins, since these are unnecessarily anchored. With the Rauscher & Stoecklin connectors, the contacts can be exchanged from the front with a simple hexagonal hex wrench. Thus, users can avoid costly and time-consuming maintenance work.

Assembly user-friendly

In order to simplify assembly for all applications, a bell-shaped cable gland with seal is included with each connector. This is extremely simple to install and provides additional help with strain relief.

Conventional tool

The connectors have been designed as uniformly as possible to provide various synergies, e.g. same screws, standard tool.

Developed for toughest conditions

Heat-resistant and robust

Robust housing

The connectors are designed for ambient temperatures from -40° C to + 100 ° C. This ensures full functionality at low and very high temperatures. This leads to significantly fewer plant failures (reduced risk of overheating) and reduced fire risk. Another important aspect for various industries, such as tunnel construction, construction sites, mines is the high robustness of the connectors. These can withstand loads of up to 2 tonnes.

IK code

The IK code is a coding system according to IEC / EN 50102 or IEC / EN 62262, which indicates the degree of protection by a housing against harmful external stresses. Each characteristic number of the IK code represents a stress relief value (see table).

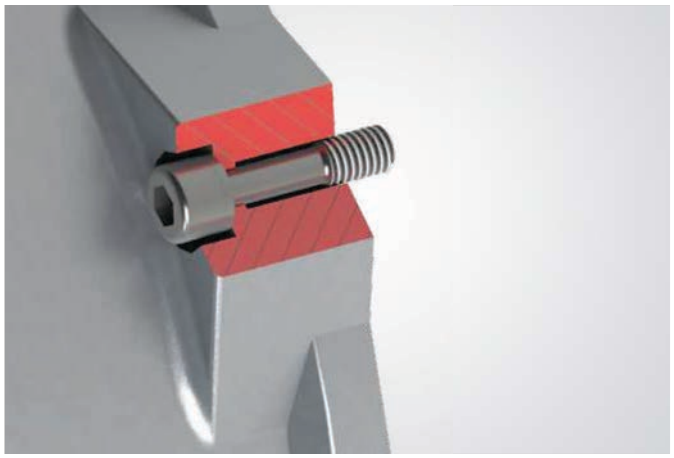
The connectors are IK10 classified.

IK - Code	IK01	IK02	IK03	IK04	IK05	IK06	IK07	IK08	IK09	IK10
Stress energy joule	0.14	0.2	0.35	0.5	0.7	1	2	5	10	20

Special applications

New challenges – New solutions

Customized solutions and accessories fulfill all requirements of the customers.



Vibration resistant screws

Wherever heavy machinery is supplied with electrical energy, strong vibrations are generally generated. For this reason, special vibration-proof connectors are available on request. Especially in the railway sector, in mines and in tunnel construction, this property is often desired by the customer.

Seawater resistant housing

In order to ensure the readiness of the connectors at all times even in salt-laden atmosphere (port), special seawater-resistant versions are available upon request. These are made of anodized aluminum for the plug-in connectors and the stainless steel for the connector units.

Harnessed connectors

On request, the connectors are available pre-harnessed.

Certifications

Marking of our products

All connectors comply with national and international standards.

Certification according to ISO 9001: 2015 & ISO 14001: 2015

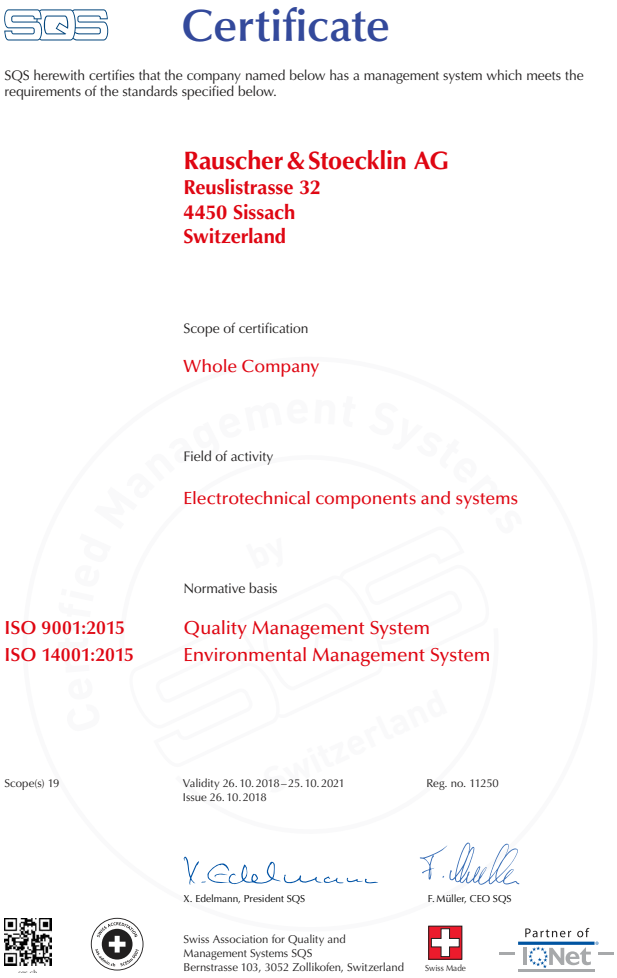
The quality management and environmental management system of Rauscher & Stoecklin AG is certified according to the ISO 9001: 2015 & ISO14001: 2015 standard.

Basic

By means of the CE marking, a manufacturer in the European Union declares that a particular product satisfies the applicable requirements laid down in the relevant harmonization legislation, as demonstrated by the corresponding conformity assessment procedure.

Guidelines

- Low voltage directive 2014/35 / EU
- Electromagnetic compatibility (EMC) 2004/30 / EU
- Low-voltage switchgear combinations EN 61439-1: 2011
- Connectors for industrial applications EN 60309-1: 1999 + A1: 2007 + A2: 2012
- Electromagnetic interference (EMC) EN 61000-6-3/4: 2007 + A1: 2011
- Electromagnetic immunity (EMC) EN 61000-6-1: 2007
- Degree of protection by housing (IP code) EN 60529_1991 + A1_2000 + A2_2013
- wRoHS Directive 2011/65 / EU



SQS

Certificate

SQS herewith certifies that the company named below has a management system which meets the requirements of the standards specified below.

Rauscher & Stoecklin AG
Reuslistrasse 32
4450 Sissach
Switzerland

Scope of certification

Whole Company

Field of activity

Electrotechnical components and systems

Normative basis

ISO 9001:2015 Quality Management System
ISO 14001:2015 Environmental Management System

Scope(s) 19

Validity 26. 10. 2018 – 25. 10. 2021
Issue 26. 10. 2018

Reg. no. 11250

X. Edelmann, President SQS

F. Müller, CEO SQS

Swiss Association for Quality and Management Systems SQS
Bernstrasse 103, 3052 Zollikofen, Switzerland

Swiss Made

Partner of IQNet

D - Line
Technical Data

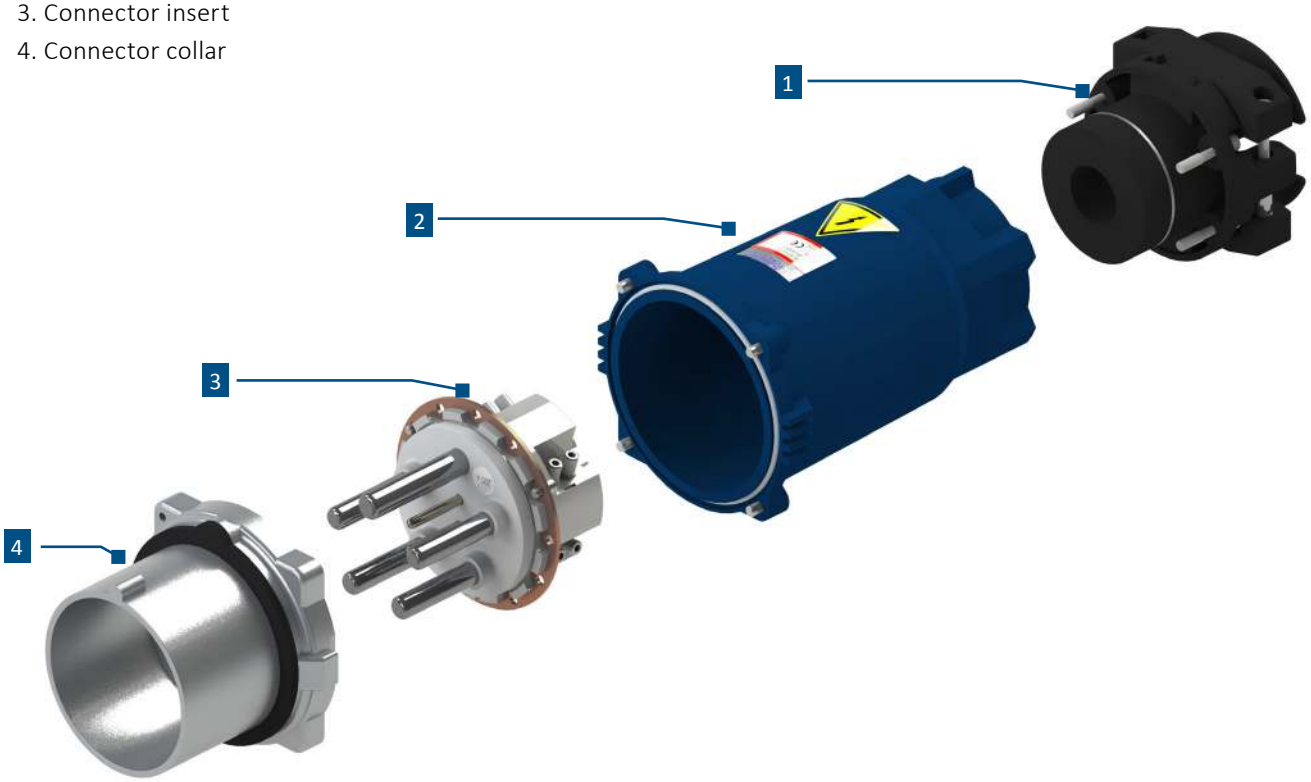
Technical Data	Unit	D - Line
Nominal current	A	160
Rated current	A	180
Rated voltage	V	1.000
Rated frequency	Hz	50 / 60
Withstand voltage (1 min / 50 Hz)	V	4.000
Protection grade		IP 67
Shock resistance		IK 10
Ambient temperature	°C	- 40 / + 100
Insulation resistance (Phase-phase and phase-earth)	MOhm	> 500
Comparative tracking index of the insert	CTI	> 600
Terminal cross-section (EN 60228 Class 5)	mm ²	35 - 150
max. cross section pilot cable, conductor (EN60228 Class 5)	mm ²	4
Diameter of cable	mm	34 - 66
Diameter of cable - separate pilot cable	mm	5 - 10

Technical modifications reserved

Structure

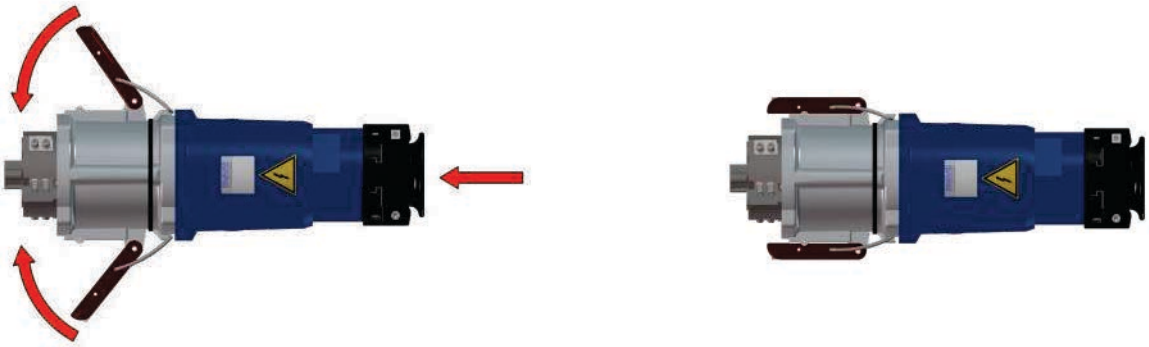
Structure of D-Line connector

1. Cable gland
2. Plastic housing
3. Connector insert
4. Connector collar



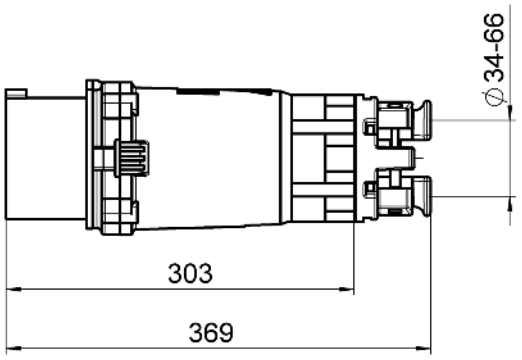
Locking system

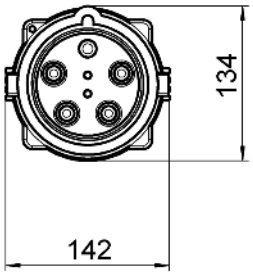
Mechanically easy designed locking system, which reduces the force required during plugging and pulling.



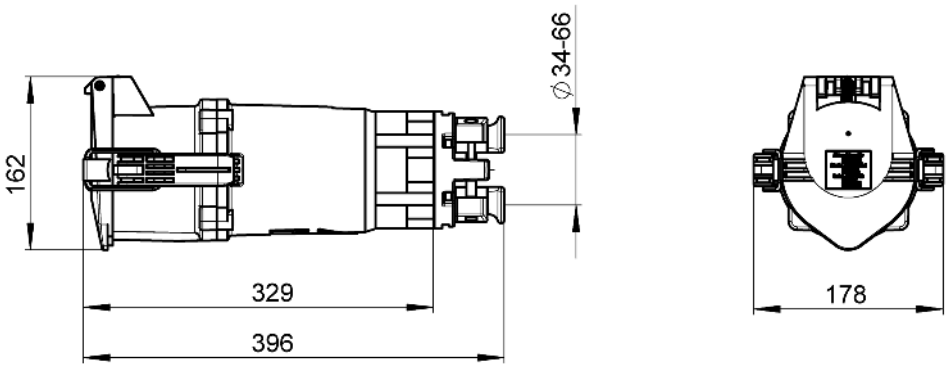
MC

Plug





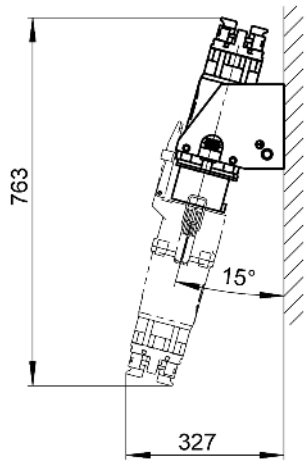
Current	No. of Poles	Voltage	Type designation	Article No.
160 A	4 (3L+PEN)	230V	MC-S4/160 230V-9h	PD025120
		400V	MC-S4/160 400V-6h	PD025121
		500V	MC-S4/160 500V-7h	PD025122
		690V	MC-S4/160 690V-5h	PD025123
		1000V	MC-S4/160 1000V-1h	PD025124
	5 (3L+N+PE)	230V	MC-S5/160 230V-9h	PD025130
		400V	MC-S5/160 400V-6h	PD025131
		500V	MC-S5/160 500V-7h	PD025132
		690V	MC-S5/160 690V-5h	PD025133
		1000V	MC-S5/160 1000V-1h	PD025134

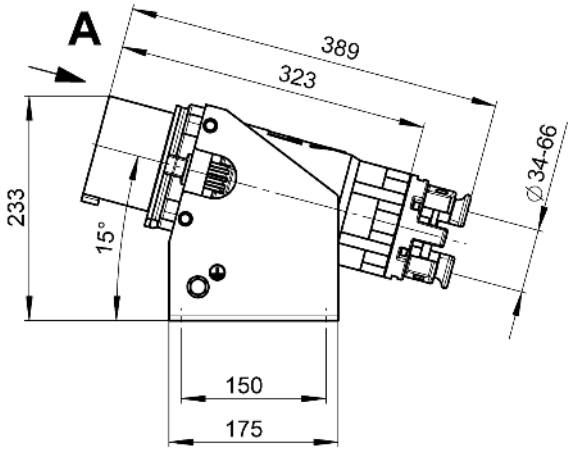


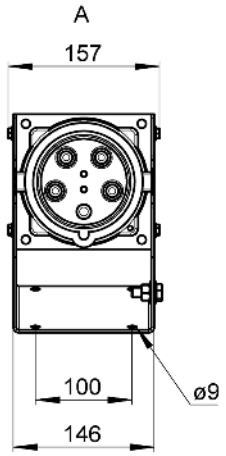
Current	No. of Poles	Voltage	Type designation	Article No.
160 A	4 (3L+PEN)	230V	FC-S4/160 230V-9h	PD025125
		400V	FC-S4/160 400V-6h	PD025126
		500V	FC-S4/160 500V-7h	PD025127
		690V	FC-S4/160 690V-5h	PD025128
		1000V	FC-S4/160 1000V-1h	PD025129
	5 (3L+N+PE)	230V	FC-S5/160 230V-9h	PD025135
		400V	FC-S5/160 400V-6h	PD025136
		500V	FC-S5/160 500V-7h	PD025137
		690V	FC-S5/160 690V-5h	PD025138
		1000V	FC-S5/160 1000V-1h	PD025139

MCW

Wall Mounted Inlet



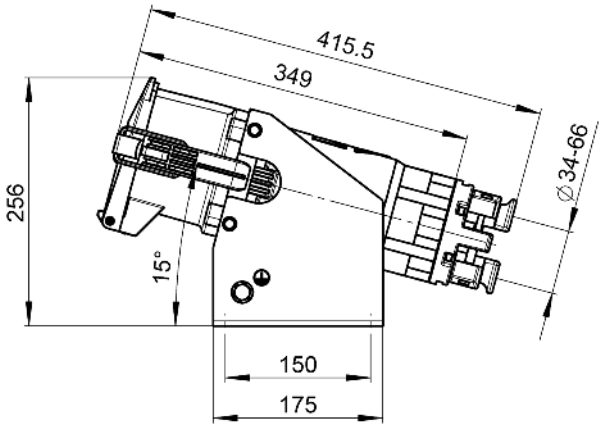


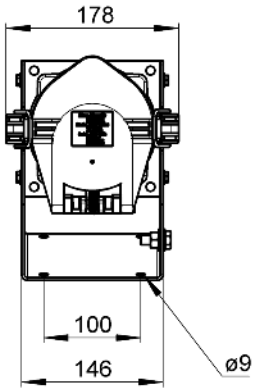


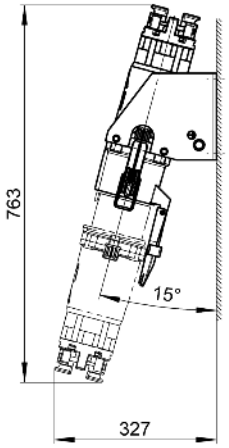
Current	No. of Poles	Voltage	Type designation	Article No.
160 A	4 (3L+PEN)	230V	MCW-S4/160 230V-9h	PD025140
		400V	MCW-S4/160 400V-6h	PD025141
		500V	MCW-S4/160 500V-7h	PD025142
		690V	MCW-S4/160 690V-5h	PD025143
		1000V	MCW-S4/160 1000V-1h	PD025144
	5 (3L+N+PE)	230V	MCW-S5/160 230V-9h	PD025150
		400V	MCW-S5/160 400V-6h	PD025151
		500V	MCW-S5/160 500V-7h	PD025152
		690V	MCW-S5/160 690V-5h	PD025153
		1000V	MCW-S5/160 1000V-1h	PD025154

FCW

Wall Mounted Receptacle







Current	No. of Poles	Voltage	Type designation	Article No.
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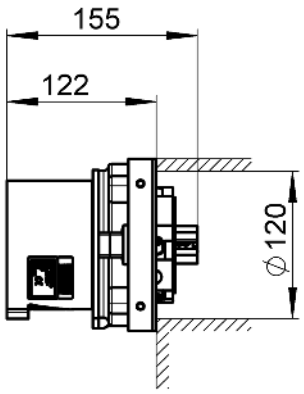
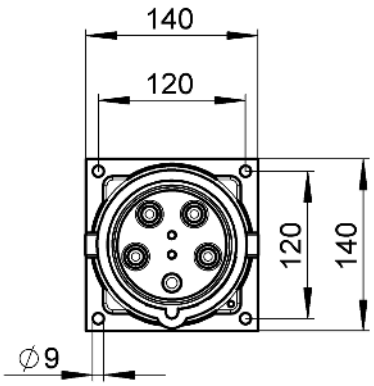
		400V	FCW-S4/160 400V-6h	PD025146
		500V	FCW-S4/160 500V-7h	PD025147
		690V	FCW-S4/160 690V-5h	PD025148
		1000V	FCW-S4/160 1000V-1h	PD025149
	5 (3L+N+PE)	230V	FCW-S5/160 230V-9h	PD025155
		400V	FCW-S5/160 400V-6h	PD025156
		500V	FCW-S5/160 500V-7h	PD025157
		690V	FCW-S5/160 690V-5h	PD025158
		1000V	FCW-S5/160 1000V-1h	PD025159

MCP

Panel Mounted Inlet





Current	No. of Poles	Voltage	Type designation	Article No.
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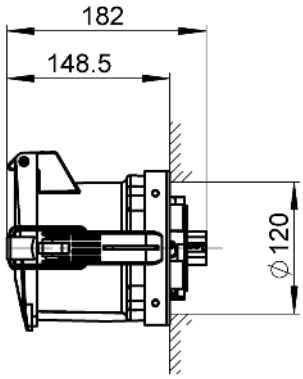
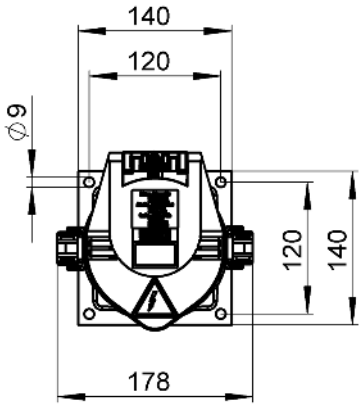
		400V	MCP-S4/160 400V-6h	PD025161
		500V	MCP-S4/160 500V-7h	PD025162
		690V	MCP-S4/160 690V-5h	PD025163
		1000V	MCP-S4/160 1000V-1h	PD025164
	5 (3L+N+PE)	230V	MCP-S5/160 230V-9h	PD025170
		400V	MCP-S5/160 400V-6h	PD025171
		500V	MCP-S5/160 500V-7h	PD025172
		690V	MCP-S5/160 690V-5h	PD025173
		1000V	MCP-S5/160 1000V-1h	PD025174

FCP

Panel Mounted Receptacle

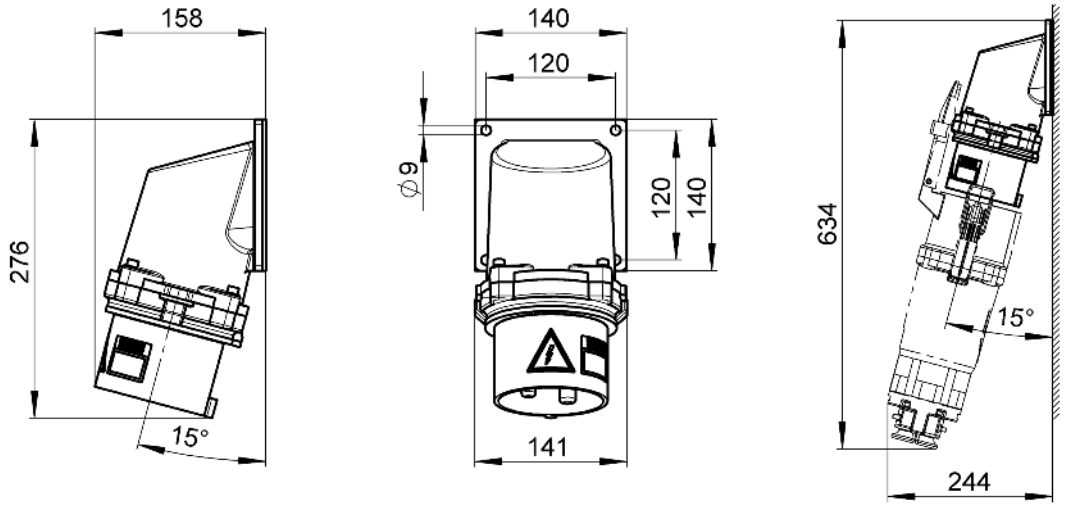




Current	No. of Poles	Voltage	Type designation	Article No.
160 A	4 (3L+PEN)	230V	FCP-S4/160 230V-9h	PD025165
		400V	FCP-S4/160 400V-6h	PD025166
		500V	FCP-S4/160 500V-7h	PD025167
		690V	FCP-S4/160 690V-5h	PD025168
		1000V	FCP-S4/160 1000V-1h	PD025169
	5 (3L+N+PE)	230V	FCP-S5/160 230V-9h	PD025175
		400V	FCP-S5/160 400V-6h	PD025176
		500V	FCP-S5/160 500V-7h	PD025177
		690V	FCP-S5/160 690V-5h	PD025178
		1000V	FCP-S5/160 1000V-1h	PD025179

MCPA

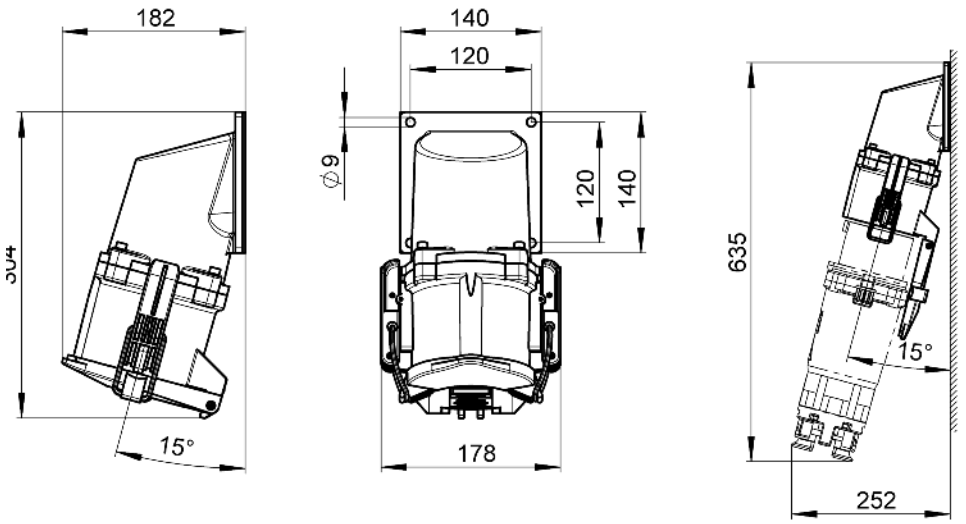
Panel Mounted Inlet Angled



Current	No. of Poles	Voltage	Type designation	Article No.
160 A	4 (3L+PEN)	230V	MCPA-S4/160 230V-9h	PD025180
		400V	MCPA-S4/160 400V-6h	PD025181
		500V	MCPA-S4/160 500V-7h	PD025182
		690V	MCPA-S4/160 690V-5h	PD025183
		1000V	MCPA-S4/160 1000V-1h	2PD05184
	5 (3L+N+PE)	230V	MCPA-S5/160 230V-9h	PD025190
		400V	MCPA-S5/160 400V-6h	PD025191
		500V	MCPA-S5/160 500V-7h	PD025192
		690V	MCPA-S5/160 690V-5h	PD025193
		1000V	MCPA-S5/160 1000V-1h	PD025194

FCPA

Panel Mounted Receptacle Angled



Current	No. of Poles	Voltage	Type designation	Article No.
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		400V	FCPA-S4/160 400V-6h	PD025186
		500V	FCPA-S4/160 500V-7h	PD025187
		690V	FCPA-S4/160 690V-5h	PD025188
		1000V	FCPA-S4/160 1000V-1h	PD025189
	5 (3L+N+PE)	230V	FCPA-S5/160 230V-9h	PD025195
		400V	FCPA-S5/160 400V-6h	PD025196
		500V	FCPA-S5/160 500V-7h	PD025197
		690V	FCPA-S5/160 690V-5h	PD025198
		1000V	FCPA-S5/160 1000V-1h	PD025199

Options

Accessories for every requirement

Seawater resistant connector

For port applications, an option often requested by the customer. The seawater-resistant design prevents oxidation on the housing.

Seawater resistant connectors upon request.

Vibration resistant connectors

On request there are vibration resistant connectors available. This option is frequently asked for railway applications.

Accessories:

- Protective cover aluminium (article number: PD012122)
- Protective cover plastic (article number: PD026263)
- Screwed cable gland for separate pilot cable (article number PD013642)
- Padlock (article number: PD014349)

General information

Plastic housing D-Line

The D-Line connectors have a special plastic housing.
This housing has special properties for applications and is resistant to many chemicals (see table).

- High thermal stability
- Very good insulating properties
- High dielectric strength
- Resistance to many different chemicals
- Compliant with RoHS Directive 2011/65 / EU
- High impact strength and resistance

Plastic housing characteristics

Chemicals	Resistant	Not resistant
Acetic acid	X	
Citric acid solution	X	
Lactic acid	X	
Hydrochloric acid		X
Nitric acid		X
Sulfuric acid		X
Chromic Acid Solution		X
Sodium hydroxide solution	X	
Isopropanol	X	
Methanol	X	
Ethanol	X	
Hydrogen peroxide		X

Chemicals	Resistant	Not resistant
N-hexane	X	
Toluene	X	
Iso-octane	X	
Acetone	X	
Diethyl ether	X	
SAE10W40 Multi-range oil	X	
Diesel oil	X	
Sodium hypochlorite solution		X
Zinc chloride solution		X
Ethyl acetate	X	
Ethylene glycol		X
Water	X	

Weight and packaging-information

Article		Weight (kg)	Packaging Bulk outside (mm)
Plug MC	4-polig	2.7	405 x 190 x 185
	5-polig	2.9	405 x 190 x 185
Panel Mounted Inlet MCP	4-polig	2.2	286 x 204 x 140
	5-polig	2.4	286 x 204 x 140
Panel Mounted Inlet Angled MCPA	4-polig	4.2	462 x 240 x 242
	5-polig	4.4	462 x 240 x 242
Wall Mounted Inlet MCW	4-polig	3.6	360 x 240 x 200
	5-polig	3.8	360 x 240 x 200
Coupling FC	4-polig	3.4	405 x 190 x 185
	5-polig	3.6	405 x 190 x 185
Panel Mounted Receptacle FCP	4-polig	3.2	405 x 190 x 185
	5-polig	3.5	405 x 190 x 185
Panel Mounted Receptacle Angled FCPA	4-polig	4.4	462 x 240 x 242
	5-polig	4.6	462 x 240 x 242
Wall Mounted Receptacle FCW	4-polig	4.3	360 x 240 x 200
	5-polig	4.5	360 x 240 x 200

C - Line
Technical Data

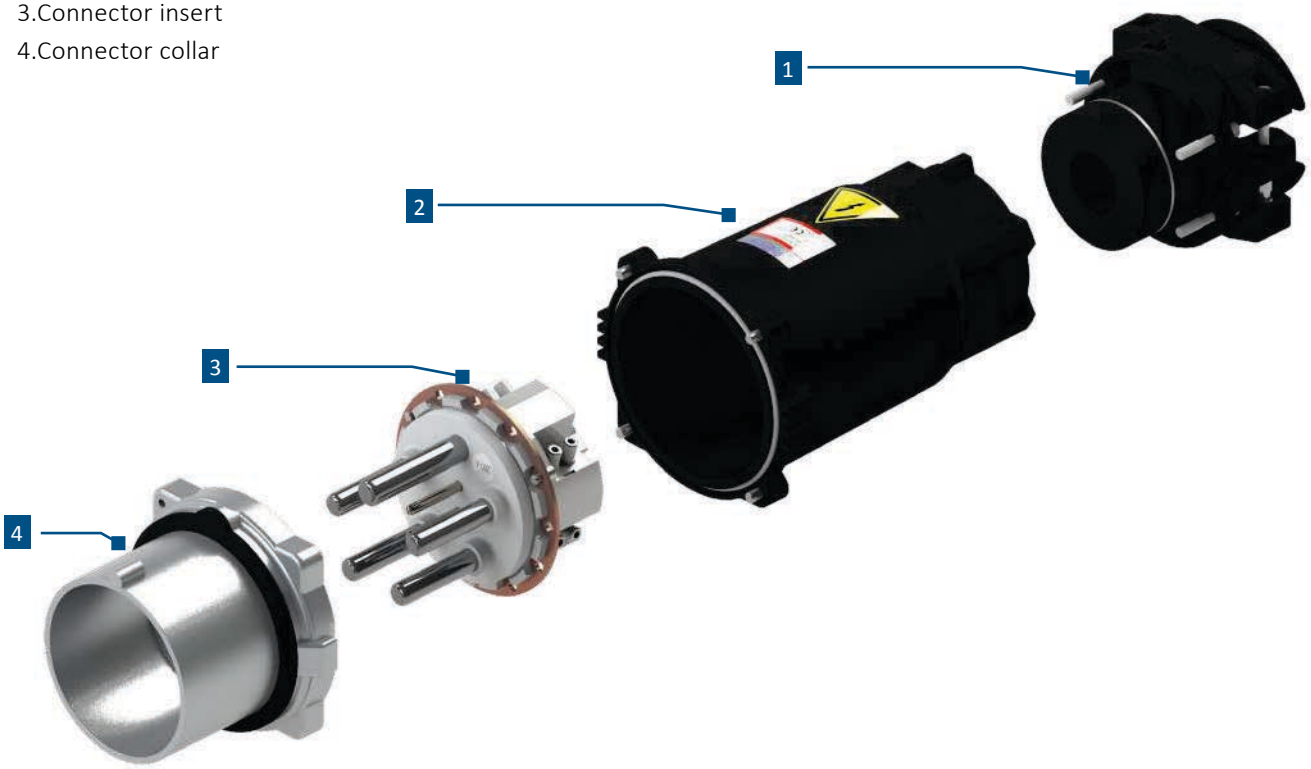
Technical Data	Unit	C - Line	
Nominal current	A	200	250
Rated current	A	250	285
Rated voltage	V	1.000	
Rated frequency	Hz	50 / 60	
Withstand voltage (1 Min / 50 Hz)	V	4.000	
Protection grade		IP 67	
Shock resistance		IK 10	
Ambient temperature	°C	- 40 / + 100	
Insulation resistance (Phase-phase and phase-earth)	MOhm	> 500	
Comparative tracking index of the insert	CTI	> 600	
Terminal cross-section (EN 60228 Class 5)	mm ²	35 - 150	
Max. cross section pilot cable, conductor (EN60228 Class 5)	mm ²	4	
Diameter of cable	mm	34 - 66	
Diameter of cable - separate pilot cable	mm	5 - 10	

Technical modifications reserved

Structure

Structure of C-Line connector

1.Cable gland
2.Plastic housing
3.Connector insert
4.Connector collar

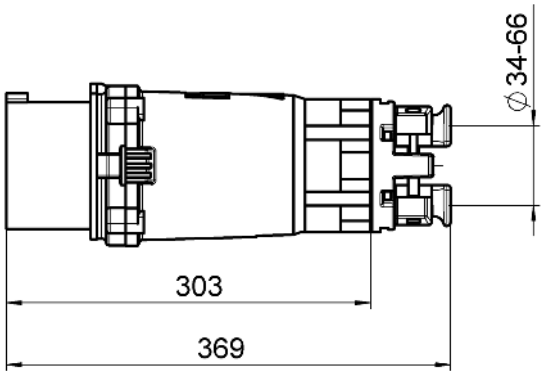


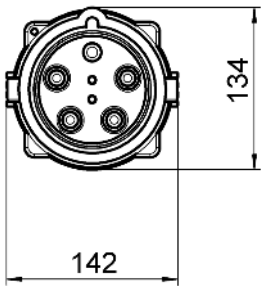
Locking system

Mechanically easy designed locking system, which reduces the force required during plugging and pulling.

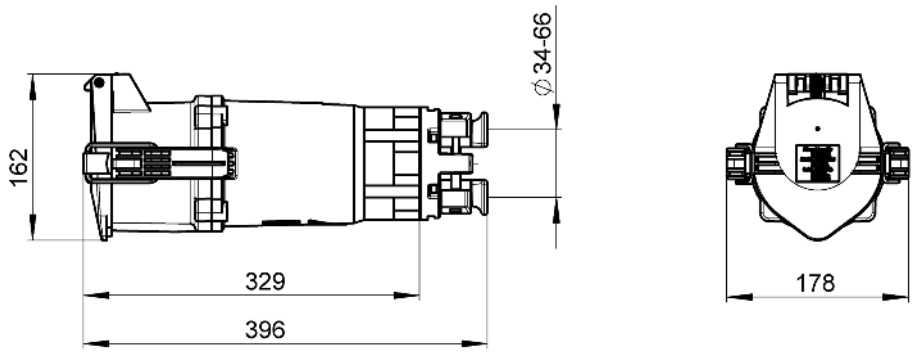
MC

Plug





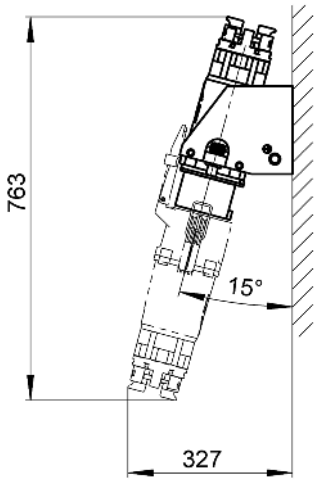
Current	Number of Poles	Voltage	Type designation	Article No.
200 A	4 (3L+PEN)	230V	MC-S4/200 230V-9h	PC011430
		400V	MC-S4/200 400V-6h	PC011431
		500V	MC-S4/200 500V-7h	PC011432
		690V	MC-S4/200 690V-5h	PC011433
		1000V	MC-S4/200 1000V-1h	PC011434
	5 (3L+N+PE)	230V	MC-S5/200 230V-9h	PC011435
		400V	MC-S5/200 400V-6h	PC011436
		500V	MC-S5/200 500V-7h	PC011437
		690V	MC-S5/200 690V-5h	PC011438
		1000V	MC-S5/200 1000V-1h	PC011439
250 A	4 (3L+PEN)	230V	MC-S4/250 230V-9h	PC022080
		400V	MC-S4/250 400V-6h	PC022081
		500V	MC-S4/250 500V-7h	PC022082
		690V	MC-S4/250 690V-5h	PC022083
		1000V	MC-S4/250 1000V-1h	PC022084
	5 (3L+N+PE)	230V	MC-S5/250 230V-9h	PC022085
		400V	MC-S5/250 400V-6h	PC022086
		500V	MC-S5/250 500V-7h	PC022087
		690V	MC-S5/250 690V-5h	PC022088
		1000V	MC-S5/250 1000V-1h	PC022089

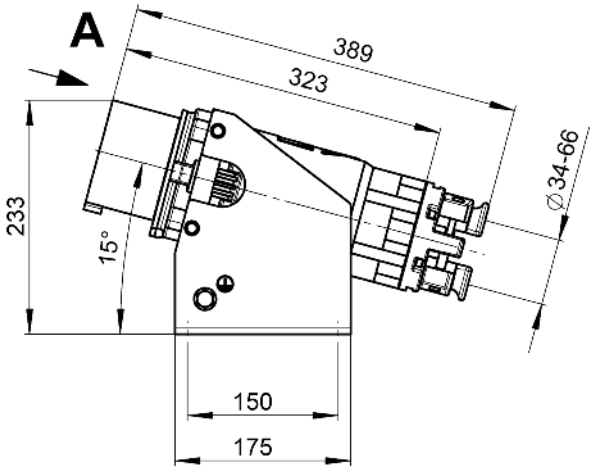


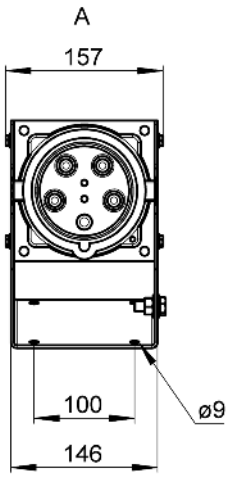
Current	Number of Poles	Voltage	Type designation	Article No.
200 A	4 (3L+PEN)	230V	FC-S4/200 230V-9h	PC011640
		400V	FC-S4/200 400V-6h	PC011641
		500V	FC-S4/200 500V-7h	PC011642
		690V	FC-S4/200 690V-5h	PC011643
		1000V	FC-S4/200 1000V-1h	PC011644
	5 (3L+N+PE)	230V	FC-S5/200 230V-9h	PC011645
		400V	FC-S5/200 400V-6h	PC011646
		500V	FC-S5/200 500V-7h	PC011647
		690V	FC-S5/200 690V-5h	PC011648
		1000V	FC-S5/200 1000V-1h	PC011649
250 A	4 (3L+PEN)	230V	FC-S4/250 230V-9h	PC022120
		400V	FC-S4/250 400V-6h	PC022121
		500V	FC-S4/250 500V-7h	PC022122
		690V	FC-S4/250 690V-5h	PC022123
		1000V	FC-S4/250 1000V-1h	PC022124
	5 (3L+N+PE)	230V	FC-S5/250 230V-9h	PC022125
		400V	FC-S5/250 400V-6h	PC022126
		500V	FC-S5/250 500V-7h	PC022127
		690V	FC-S5/250 690V-5h	PC022128
		1000V	FC-S5/250 1000V-1h	PC022129

MCW

Wall Mounted Inlet



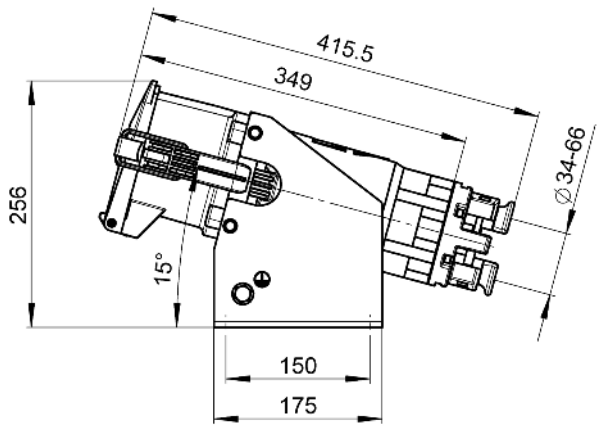


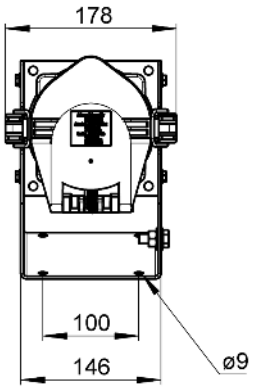


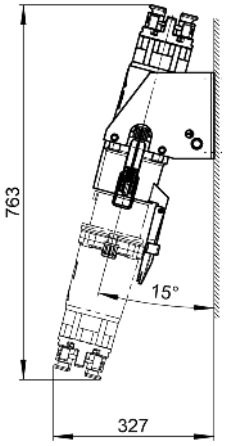
Current	Number of Poles	Voltage	Type designation	Article No.
200 A	4 (3L+PEN)	230V	MCW-S4/200 230V-9h	PC011700
		400V	MCW-S4/200 400V-6h	PC011701
		500V	MCW-S4/200 500V-7h	PC011702
		690V	MCW-S4/200 690V-5h	PC011703
		1000V	MCW-S4/200 1000V-1h	PC011704
	5 (3L+N+PE)	230V	MCW-S5/200 230V-9h	PC011705
		400V	MCW-S5/200 400V-6h	PC011706
		500V	MCW-S5/200 500V-7h	PC011707
		690V	MCW-S5/200 690V-5h	PC011708
		1000V	MCW-S5/200 1000V-1h	PC011709
250 A	4 (3L+PEN)	230V	MCW-S4/250 230V-9h	PC022110
		400V	MCW-S4/250 400V-6h	PC022111
		500V	MCW-S4/250 500V-7h	PC022112
		690V	MCW-S4/250 690V-5h	PC022113
		1000V	MCW-S4/250 1000V-1h	PC022114
	5 (3L+N+PE)	230V	MCW-S5/250 230V-9h	PC022115
		400V	MCW-S5/250 400V-6h	PC022116
		500V	MCW-S5/250 500V-7h	PC022117
		690V	MCW-S5/250 690V-5h	PC022118
		1000V	MCW-S5/250 10000V-1h	PC022119

FCW

Wall Mounted Receptacle



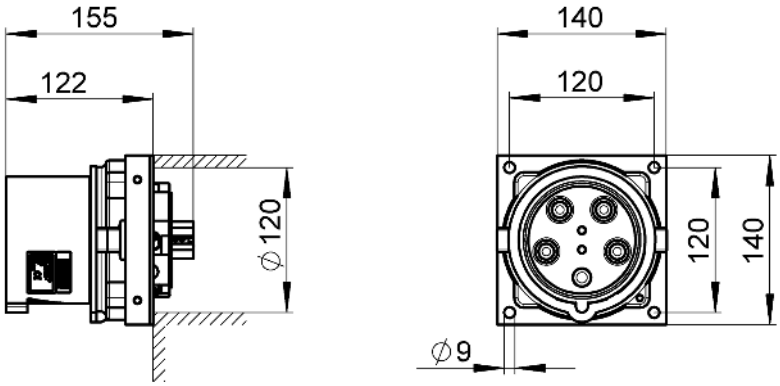




Current	Number of Poles	Voltage	Type designation	Article No.
200 A	4 (3L+PEN)	230V	FCW-S4/200 230V-9h	PC011670
		400V	FCW-S4/200 400V-6h	PC011671
		500V	FCW-S4/200 500V-7h	PC011672
		690V	FCW-S4/200 690V-5h	PC011673
		1000V	FCW-S4/200 1000V-1h	PC011674
	5 (3L+N+PE)	230V	FCW-S5/200 230V-9h	PC011675
		400V	FCW-S5/200 400V-6h	PC011676
		500V	FCW-S5/200 500V-7h	PC011677
		690V	FCW-S5/200 690V-5h	PC011678
		1000V	FCW-S5/200 1000V-1h	PC011679
250 A	4 (3L+PEN)	230V	FCW-S4/250 230V-9h	PC022150
		400V	FCW-S4/250 400V-6h	PC022151
		500V	FCW-S4/250 500V-7h	PC022152
		690V	FCW-S4/250 690V-5h	PC022153
		1000V	FCW-S4/250 1000V-1h	PC022154
	5 (3L+N+PE)	230V	FCW-S5/250 230V-9h	PC022155
		400V	FCW-S5/250 400V-6h	PC022156
		500V	FCW-S5/250 500V-7h	PC022157
		690V	FCW-S5/250 690V-5h	PC022158
		1000V	FCW-S5/250 1000V-1h	PC022159

MCP

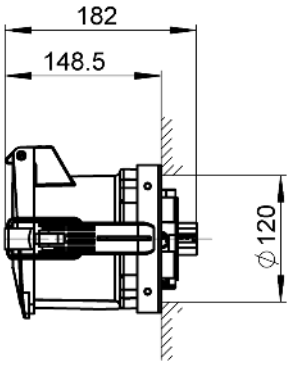
Panel Mounted Inlet

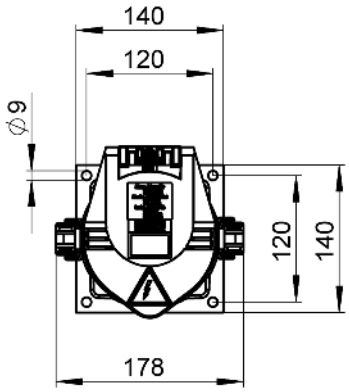


Current	Number of Poles	Voltage	Type designation	Article No.
200 A	4 (3L+PEN)	230V	MCP-S4/200 230V-9h	PC011730
		400V	MCP-S4/200 400V-6h	PC011731
		500V	MCP-S4/200 500V-7h	PC011732
		690V	MCP-S4/200 690V-5h	PC011733
		1000V	MCP-S4/200 1000V-1h	PC011734
	5 (3L+N+PE)	230V	MCP-S5/200 230V-9h	PC011735
		400V	MCP-S5/200 400V-6h	PC011736
		500V	MCP-S5/200 500V-7h	PC011737
		690V	MCP-S5/200 690V-5h	PC011738
		1000V	MCP-S5/200 1000V-1h	PC011739
250 A	4 (3L+PEN)	230V	MCP-S4/250 230V-9h	PC022090
		400V	MCP-S4/250 400V-6h	PC022091
		500V	MCP-S4/250 500V-7h	PC022092
		690V	MCP-S4/250 690V-5h	PC022093
		1000V	MCP-S4/250 1000V-1h	PC022094
	5 (3L+N+PE)	230V	MCP-S5/250 230V-9h	PC022095
		400V	MCP-S5/250 400V-6h	PC022096
		500V	MCP-S5/250 500V-7h	PC022097
		690V	MCP-S5/250 690V-5h	PC022098
		1000V	MCP-S5/250 1000V-1h	PC022099

FCP

Panel Mounted Receptacle

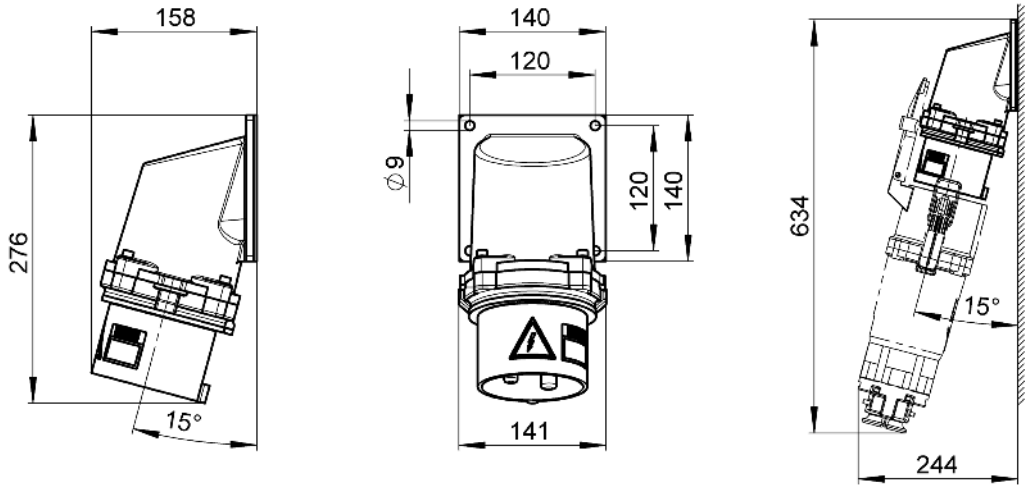




Current	Number of Poles	Voltage	Type designation	Article No.
200 A	4 (3L+PEN)	230V	FCP-S4/200 230V-9h	PC011760
		400V	FCP-S4/200 400V-6h	PC011761
		500V	FCP-S4/200 500V-7h	PC011762
		690V	FCP-S4/200 690V-5h	PCO11763
		1000V	FCP-S4/200 1000V-1h	PC011764
	5 (3L+N+PE)	230V	FCP-S5/200 230V-9h	PC011765
		400V	FCP-S5/200 400V-6h	PC011766
		500V	FCP-S5/200 500V-7h	PC011767
		690V	FCP-S5/200 690V-5h	PC011768
		1000V	FCP-S5/200 1000V-1h	PC011769
250 A	4 (3L+PEN)	230V	FCP-S4/250 230V-9h	PC022130
		400V	FCP-S4/250 400V-6h	PC022131
		500V	FCP-S4/250 500V-7h	PC022132
		690V	FCP-S4/250 690V-5h	PC022133
		1000V	FCP-S4/250 1000V-1h	PC022134
	5 (3L+N+PE)	230V	FCP-S5/250 230V-9h	PC022135
		400V	FCP-S5/250 400V-6h	PC022136
		500V	FCP-S5/250 500V-7h	PC022137
		690V	FCP-S5/250 690V-5h	PC022138
		1000V	FCP-S5/250 1000V-1h	PC022139

MCPA

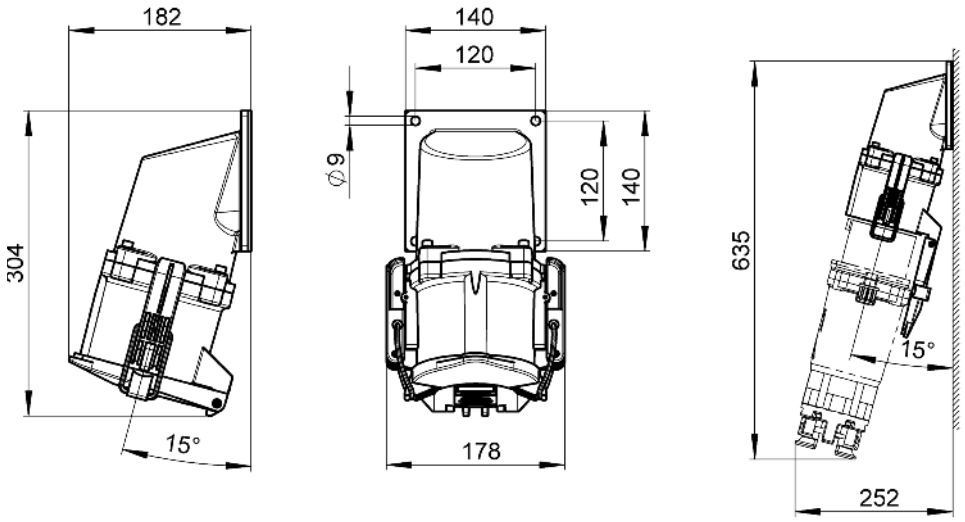
Panel Mounted Inlet Angled



Current	Number of Poles	Voltage	Type designation	Article No.
200 A	4 (3L+PEN)	230V	MCPA-S4/200 230V-9h	PC020578
		400V	MCPA-S4/200 400V-6h	PC020579
		500V	MCPA-S4/200 500V-7h	PC020580
		690V	MCPA-S4/200 690V-5h	PC020581
		1000V	MCPA-S4/200 1000V-1h	PC020582
	5 (3L+N+PE)	230V	MCPA-S5/200 230V-9h	PC020583
		400V	MCPA-S5/200 400V-6h	PC020584
		500V	MCPA-S5/200 500V-7h	PC020585
		690V	MCPA-S5/200 690V-5h	PC020586
		1000V	MCPA-S5/200 1000V-1h	PC020587
250 A	4 (3L+PEN)	230V	MCPA-S4/250 230V-9h	PC022100
		400V	MCPA-S4/250 400V-6h	PC022101
		500V	MCPA-S4/250 500V-7h	PC022102
		690V	MCPA-S4/250 690V-5h	PC022103
		1000V	MCPA-S4/250 1000V-1h	PC022104
	5 (3L+N+PE)	230V	MCPA-S5/250 230V-9h	PC022105
		400V	MCPA-S5/250 400V-6h	PC022106
		500V	MCPA-S5/250 500V-7h	PC022107
		690V	MCPA-S5/250 690V-5h	PC022108
		1000V	MCPA-S5/250 1000V-1h	PC022109

FCPA

Panel Mounted Receptacle Angled



Current	Number of Poles	Voltage	Type designation	Article No.
200 A	4 (3L+PEN)	230V	FCPA-S4/200 230V-9h	PC020608
		400V	FCPA-S4/200 400V-6h	PC020609
		500V	FCPA-S4/200 500V-7h	PC020610
		690V	FCPA-S4/200 690V-5h	PC020611
		1000V	FCPA-S4/200 1000V-1h	PC020612
	5 (3L+N+PE)	230V	FCPA-S5/200 230V-9h	PC020613
		400V	FCPA-S5/200 400V-6h	PC020614
		500V	FCPA-S5/200 500V-7h	PC020615
		690V	FCPA-S5/200 690V-5h	PC020616
		1000V	FCPA-S5/200 1000V-1h	PC020617
250 A	4 (3L+PEN)	230V	FCPA-S4/250 230V-9h	PC022140
		400V	FCPA-S4/250 400V-6h	PC022141
		500V	FCPA-S4/250 500V-7h	PC022142
		690V	FCPA-S4/250 690V-5h	PC022143
		1000V	FCPA-S4/250 1000V-1h	PC022144
	5 (3L+N+PE)	230V	FCPA-S5/250 230V-9h	PC022145
		400V	FCPA-S5/250 400V-6h	PC022146
		500V	FCPA-S5/250 500V-7h	PC022147
		690V	FCPA-S5/250 690V-5h	PC022148
		1000V	FCPA-S5/250 1000V-1h	PC022149

Options

Accessories for every requirement

Seawater resistant connector

For port applications, an option often requested by the customer. The seawater-resistant design prevents oxidation on the housing.

Seawater resistant connectors upon request.

Vibration resistant connectors

On request there are vibration resistant connectors available. This option is frequently asked for railway applications.

Accessories:

- Protective cover aluminium (article number: PC012122)
- Protective cover plastic (article number: PC026263)
- Screwed cable gland for separate pilot cable (article number PC013642)
- Padlock (article number: PC014349)

General information

Plastic housing C-Line

The C-Line connectors have a special plastic housing.
This housing has special properties for applications and is resistant to many chemicals (see table).

- High thermal stability
- Very good insulating properties
- High dielectric strength
- Resistance to many different chemicals
- Compliant with RoHS Directive 2011/65 / EU
- High impact strength and resistance

Plastic housing characteristics

Chemicals	Resistant	Not resistant
Acetic acid	X	
Citric acid solution	X	
Lactic acid	X	
Hydrochloric acid		X
Nitric acid		X
Sulfuric acid		X
Chromic Acid Solution		X
Sodium hydroxide solution	X	
Isopropanol	X	
Methanol	X	
Ethanol	X	
Hydrogen peroxide		X

Chemicals	Resistant	Not resistant
N-hexane	X	
Toluene	X	
Iso-octane	X	
Acetone	X	
Diethyl ether	X	
SAE10W40 Multi-range oil	X	
Diesel oil	X	
Sodium hypochlorite solution		X
Zinc chloride solution		X
Ethyl acetate	X	
Ethylene glycol		X
Water	X	

Weight and packaging-information

Article		Weight (kg)	Packaging Bulk outside (mm)
Plug MC	4-polig	2.7	405 x 190 x 185
	5-polig	2.9	405 x 190 x 185
Panel Mounted Inlet MCP	4-polig	2.2	286 x 204 x 140
	5-polig	2.4	286 x 204 x 140
Panel Mounted Inlet Angled MCPA	4-polig	4.2	462 x 240 x 242
	5-polig	4.4	462 x 240 x 242
Wall Mounted Inlet MCW	4-polig	3.6	360 x 240 x 200
	5-polig	3.8	360 x 240 x 200
Coupling FC	4-polig	3.4	405 x 190 x 185
	5-polig	3.6	405 x 190 x 185
Panel Mounted Receptacle FCP	4-polig	3.2	405 x 190 x 185
	5-polig	3.5	405 x 190 x 185
Panel Mounted Receptacle Angled FCPA	4-polig	4.4	462 x 240 x 242
	5-polig	4.6	462 x 240 x 242
Wall Mounted Receptacle FCW	4-polig	4.3	360 x 240 x 200
	5-polig	4.5	360 x 240 x 200

B - Line
Technical Data

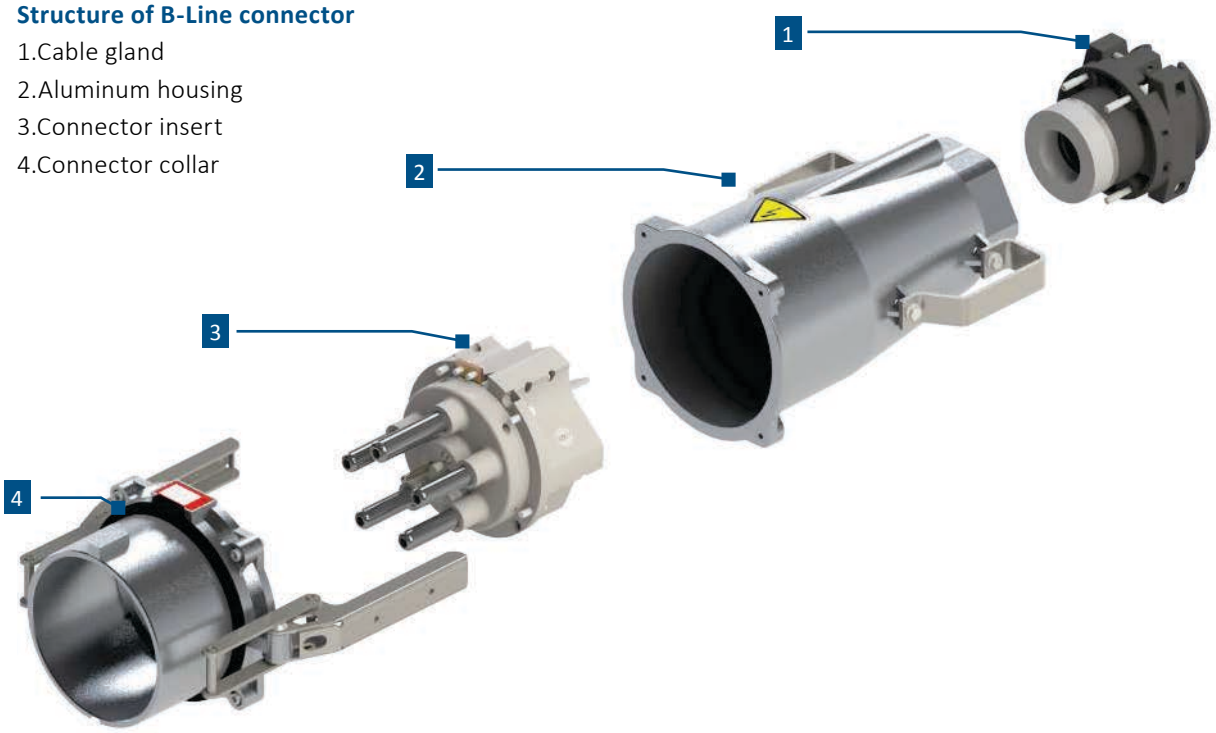
Technical Data	Unit	B - Line		
Nominal current	A	250	315	400
Rated current	A	315	380	450
Rated voltage	V		1’000	
Rated frequency	Hz		50 / 60	
Withstand voltage (1 Min / 50 Hz)	V		4’000	
Protection grade			IP 67	
Shock resistance			IK 10	
Ambient temperature	°C		-40 / +100	
Insulation resistance (Phase-phase and phase-earth)	MOhm		> 500	
Comparative tracking index of the insert	CTI		> 600	
Terminal cross-section (EN 60228 Class 5)	mm ²		70 - 240	
Max. cross section pilot cable, conductor (EN60228 Class 5)	mm ²		4	
Diameter of cable	mm		34 - 66 until 85 on request	
Diameter of cable - separate pilot cable	mm		8 -15	

Technical modifications reserved

Structure

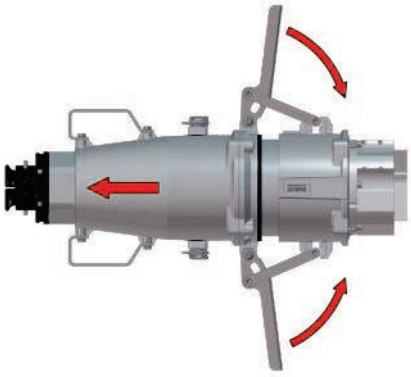
Structure of B-Line connector

1.Cable gland
2.Aluminum housing
3.Connector insert
4.Connector collar



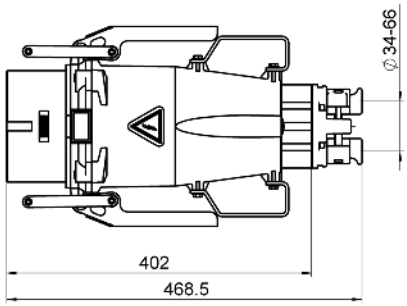
Locking system

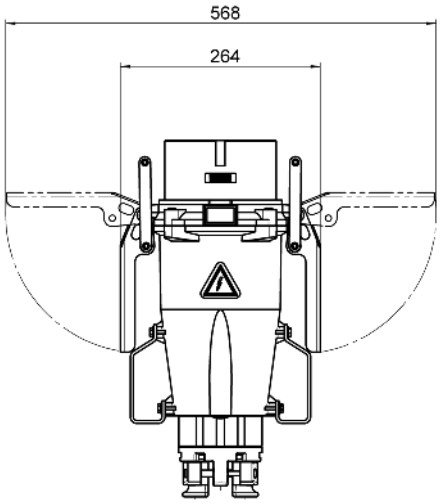
Mechanically easy designed locking system, which reduces the force required during plugging and pulling.



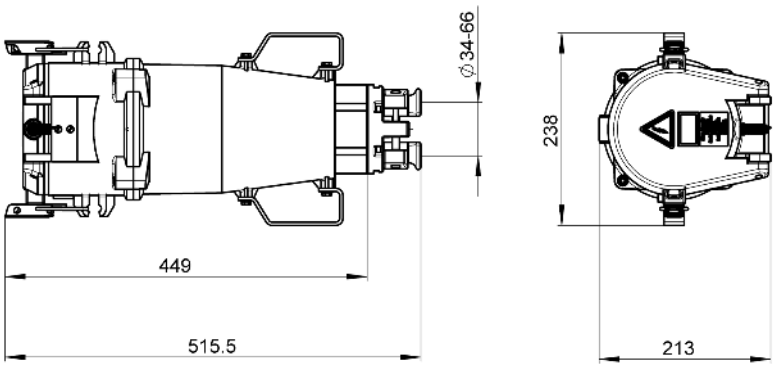
MC

Plug





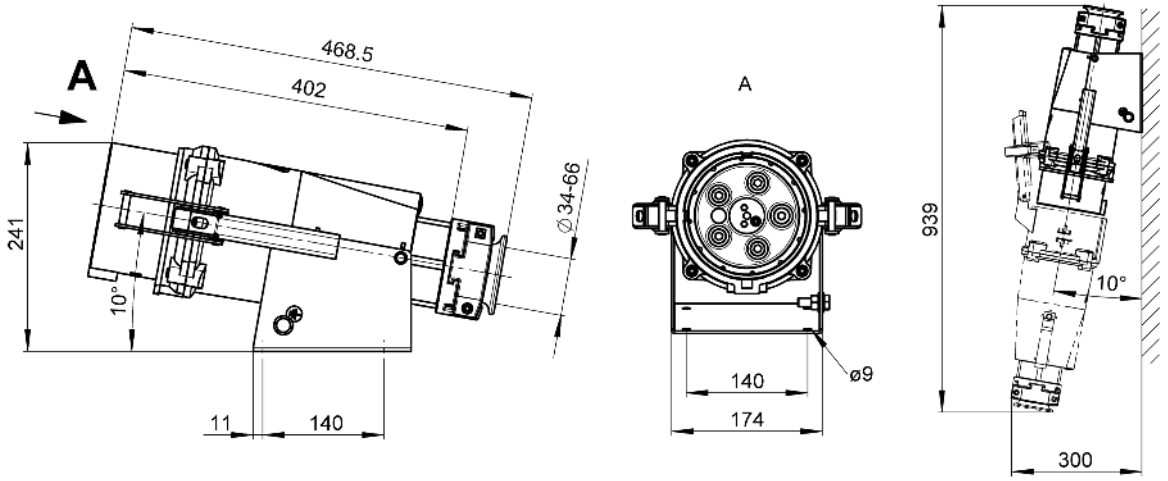
Current	Number of Poles	Voltage	Type designation	Article No.
250A	4 (3L+PEN)	230V	MC-S4/250 230V-9h	PB011440
		400V	MC-S4/250 400V-6h	PB011441
		500V	MC-S4/250 500V-7h	PB011442
		690V	MC-S4/250 690V-5h	PB011443
		1000V	MC-S4/250 1000V-1h	PB011444
	5 (3L+N+PE)	230V	MC-S5/250 230V-9h	PB011445
		400V	MC-S5/250 400V-6h	PB011446
		500V	MC-S5/250 500V-7h	PB011447
		690V	MC-S5/250 690V-5h	PB011448
		1000V	MC-S5/250 1000V-1h	PB011449
315 A	4 (3L+PEN)	230V	MC-S4/315 230V-9h	PB022900
		400V	MC-S4/315 400V-6h	PB022901
		500V	MC-S4/315 500V-7h	PB022902
		690V	MC-S4/315 690V-5h	PB022903
		1000V	MC-S4/315 1000V-1h	PB022904
	5 (3L+N+PE)	230V	MC-S5/315 230V-9h	PB022905
		400V	MC-S5/315 400V-6h	PB022906
		500V	MC-S5/315 500V-7h	PB022907
		690V	MC-S5/315 690V-5h	PB022908
		1000V	MC-S5/315 1000V-1h	PB022909
400 A	4 (3L+PEN)	230V	MC-S4/400 230V-9h	PB011450
		400V	MC-S4/400 400V-6h	PB011451
		500V	MC-S4/400 500V-7h	PB011452
		690V	MC-S4/400 690V-5h	PB011453
		1000V	MC-S4/400 1000V-1h	PB011454
	5 (3L+N+PE)	230V	MC-S5/400 230V-9h	PB011455
		400V	MC-S5/400 400V-6h	PB011456
		500V	MC-S5/400 500V-7h	PB011457
		690V	MC-S5/400 690V-5h	PB011458
		1000V	MC-S5/400 1000V-1h	PB011459



Current	Number of Poles	Voltage	Type designation	Article No.
250A	4 (3L+PEN)	230V	FC-S4/250 230V-9h	PB011650
		400V	FC-S4/250 400V-6h	PB011651
		500V	FC-S4/250 500V-7h	PB011652
		690V	FC-S4/250 690V-5h	PB011653
		1000V	FC-S4/250 1000V-1h	PB011654
	5 (3L+N+PE)	230V	FC-S5/250 230V-9h	PB011655
		400V	FC-S5/250 400V-6h	PB011656
		500V	FC-S5/250 500V-7h	PB011657
		690V	FC-S5/250 690V-5h	PB011658
		1000V	FC-S5/250 1000V-1h	PB011659
315 A	4 (3L+PEN)	230V	FC-S4/315 230V-9h	PB022890
		400V	FC-S4/315 400V-6h	PB022891
		500V	FC-S4/315 500V-7h	PB022892
		690V	FC-S4/315 690V-5h	PB022893
		1000V	FC-S4/315 1000V-1h	PB022894
	5 (3L+N+PE)	230V	FC-S5/315 230V-9h	PB022895
		400V	FC-S5/315 400V-6h	PB022896
		500V	FC-S5/315 500V-7h	PB022897
		690V	FC-S5/315 690V-5h	PB022898
		1000V	FC-S5/315 1000V-1h	PB022899
400 A	4 (3L+PEN)	230V	FC-S4/400 230V-9h	PB011660
		400V	FC-S4/400 400V-6h	PB011661
		500V	FC-S4/400 500V-7h	PB011662
		690V	FC-S4/400 690V-5h	PB011663
		1000V	FC-S4/400 1000V-1h	PB011664
	5 (3L+N+PE)	230V	FC-S5/400 230V-9h	PB011665
		400V	FC-S5/400 400V-6h	PB011666
		500V	FC-S5/400 500V-7h	PB011667
		690V	FC-S5/400 690V-5h	PB011668
		1000V	FC-S5/400 1000V-1h	PB011669

MCW

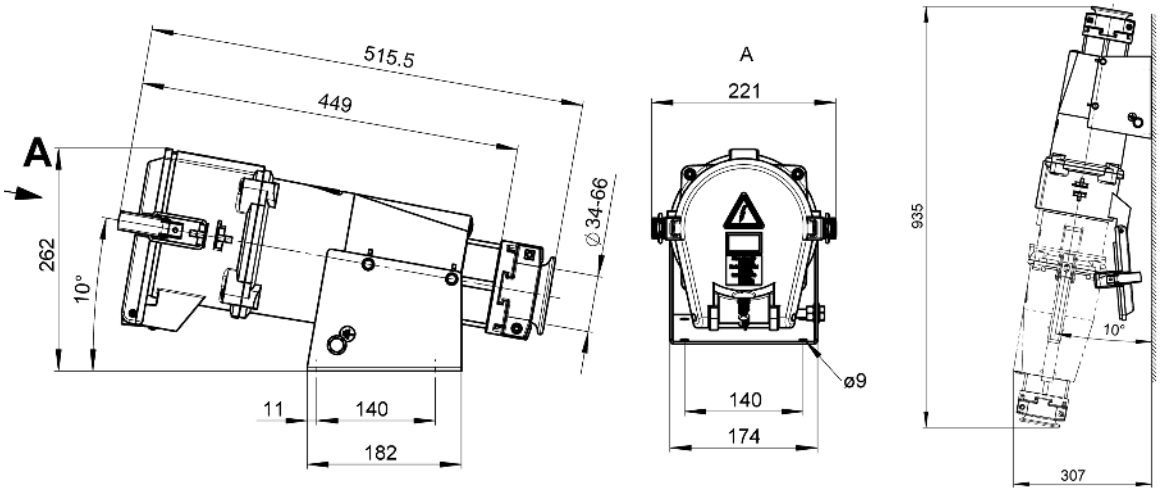
Wall Mounted Inlet



Current	Number of Poles	Voltage	Type designation	Article No.
250A	4 (3L+PEN)	230V	MCW-S4/250 230V-9h	PB011710
		400V	MCW-S4/250 400V-6h	PB011711
		500V	MCW-S4/250 500V-7h	PB011712
		690V	MCW-S4/250 690V-5h	PB011713
		1000V	MCW-S4/250 1000V-1h	PB011714
	5 (3L+N+PE)	230V	MCW-S5/250 230V-9h	PB011715
		400V	MCW-S5/250 400V-6h	PB011716
		500V	MCW-S5/250 500V-7h	PB011717
		690V	MCW-S5/250 690V-5h	PB011718
		1000V	MCW-S5/250 10000V-1h	PB011719
315 A	4 (3L+PEN)	230V	MCW-S4/315 230V-9h	PB022910
		400V	MCW-S4/315 400V-6h	PB022911
		500V	MCW-S4/315 500V-7h	PB022912
		690V	MCW-S4/315 690V-5h	PB022913
		1000V	MCW-S4/315 1000V-1h	PB022914
	5 (3L+N+PE)	230V	MCW-S5/315 230V-9h	PB022915
		400V	MCW-S5/315 400V-6h	PB022916
		500V	MCW-S5/315 500V-7h	PB022917
		690V	MCW-S5/315 690V-5h	PB022918
		1000V	MCW-S5/315 10000V-1h	PB022919
400 A	4 (3L+PEN)	230V	MCW-S4/400 230V-9h	PB011720
		400V	MCW-S4/400 400V-6h	PB011721
		500V	MCW-S4/400 500V-7h	PB011722
		690V	MCW-S4/400 690V-5h	PB011723
		1000V	MCW-S4/400 1000V-1h	PB011724
	5 (3L+N+PE)	230V	MCW-S5/400 230V-9h	PB011725
		400V	MCW-S5/400 400V-6h	PB011726
		500V	MCW-S5/400 500V-7h	PB011727
		690V	MCW-S5/400 690V-5h	PB011728
		1000V	MCW-S5/400 1000V-1h	PB011729

FCW

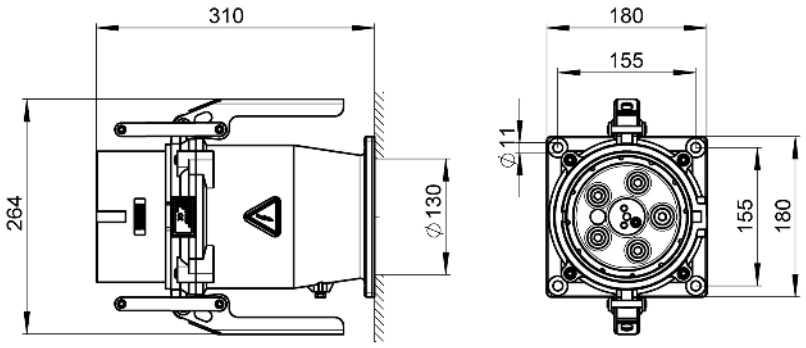
Wall Mounted Receptacle



Current	Number of Poles	Voltage	Type designation	Article No.
250A	4 (3L+PEN)	230V	FCW-S4/250 230V-9h	PB011680
		400V	FCW-S4/250 400V-6h	PB011681
		500V	FCW-S4/250 500V-7h	PB011682
		690V	FCW-S4/250 690V-5h	PB011683
		1000V	FCW-S4/250 1000V-1h	PB011684
	5 (3L+N+PE)	230V	FCW-S5/250 230V-9h	PB011685
		400V	FCW-S5/250 400V-6h	PB011686
		500V	FCW-S5/250 500V-7h	PB011687
		690V	FCW-S5/250 690V-5h	PB011688
		1000V	FCW-S5/250 1000V-1h	PB011689
315 A	4 (3L+PEN)	230V	FCW-S4/315 230V-9h	PB022860
		400V	FCW-S4/315 400V-6h	PB022861
		500V	FCW-S4/315 500V-7h	PB022862
		690V	FCW-S4/315 690V-5h	PB022863
		1000V	FCW-S4/315 1000V-1h	PB022864
	5 (3L+N+PE)	230V	FCW-S5/315 230V-9h	PB022865
		400V	FCW-S5/315 400V-6h	PB022866
		500V	FCW-S5/315 500V-7h	PB022867
		690V	FCW-S5/315 690V-5h	PB022868
		1000V	FCW-S5/315 1000V-1h	PB022869
400 A	4 (3L+PEN)	230V	FCW-S4/400 230V-9h	PB011690
		400V	FCW-S4/400 400V-6h	PB011691
		500V	FCW-S4/400 500V-7h	PB011692
		690V	FCW-S4/400 690V-5h	PB011693
		1000V	FCW-S4/400 1000V-1h	PB011694
	5 (3L+N+PE)	230V	FCW-S5/400 230V-9h	PB011695
		400V	FCW-S5/400 400V-6h	PB011696
		500V	FCW-S5/400 500V-7h	PB011697
		690V	FCW-S5/400 690V-5h	PB011698
		1000V	FCW-S5/400 1000V-1h	PB011699

MCP

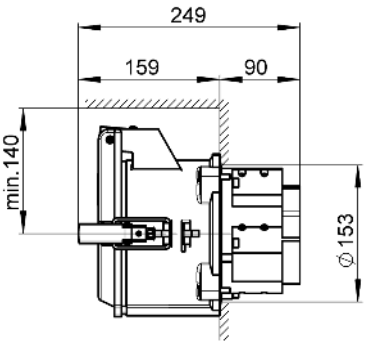
Panel Mounted Inlet

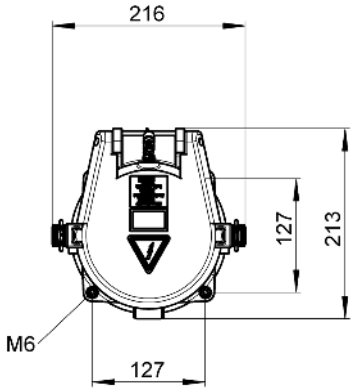


Current	Number of Poles	Voltage	Type designation	Article No.
250A	4 (3L+PEN)	230V	MCP-S4/250 230V-9h	PB011740
		400V	MCP-S4/250 400V-6h	PB011741
		500V	MCP-S4/250 500V-7h	PB011742
		690V	MCP-S4/250 690V-5h	PB011743
		1000V	MCP-S4/250 1000V-1h	PB011744
	5 (3L+N+PE)	230V	MCP-S5/250 230V-9h	PB011745
		400V	MCP-S5/250 400V-6h	PB011746
		500V	MCP-S5/250 500V-7h	PB011747
		690V	MCP-S5/250 690V-5h	PB011748
		1000V	MCP-S5/250 1000V-1h	PB011749
315 A	4 (3L+PEN)	230V	MCP-S4/315 230V-9h	PB022920
		400V	MCP-S4/315 400V-6h	PB022921
		500V	MCP-S4/315 500V-7h	PB022922
		690V	MCP-S4/315 690V-5h	PB022923
		1000V	MCP-S4/315 1000V-1h	PB022924
	5 (3L+N+PE)	230V	MCP-S5/315 230V-9h	PB022925
		400V	MCP-S5/315 400V-6h	PB022926
		500V	MCP-S5/315 500V-7h	PB022927
		690V	MCP-S5/315 690V-5h	PB022928
		1000V	MCP-S5/315 1000V-1h	PB022929
400 A	4 (3L+PEN)	230V	MCP-S4/400 230V-9h	PB011750
		400V	MCP-S4/400 400V-6h	PB011751
		500V	MCP-S4/400 500V-7h	PB011752
		690V	MCP-S4/400 690V-5h	PB011753
		1000V	MCP-S4/400 1000V-1h	PB011754
	5 (3L+N+PE)	230V	MCP-S5/400 230V-9h	PB011755
		400V	MCP-S5/400 400V-6h	PB011756
		500V	MCP-S5/400 500V-7h	PB011757
		690V	MCP-S5/400 690V-5h	PB011758
		1000V	MCP-S5/400 1000V-1h	PB011759

FCP

Panel Mounted Receptacle

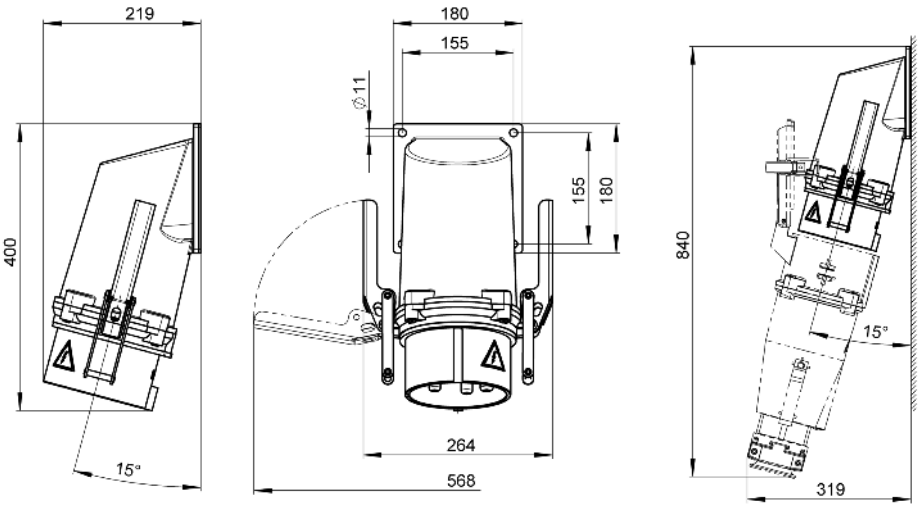




Current	Number of Poles	Voltage	Type designation	Article No.
250A	4 (3L+PEN)	230V	FCP-S4/250 230V-9h	PB011770
		400V	FCP-S4/250 400V-6h	PB011771
		500V	FCP-S4/250 500V-7h	PB011772
		690V	FCP-S4/250 690V-5h	PB011773
		1000V	FCP-S4/250 1000V-1h	PB011774
	5 (3L+N+PE)	230V	FCP-S5/250 230V-9h	PB011775
		400V	FCP-S5/250 400V-6h	PB011776
		500V	FCP-S5/250 500V-7h	PB011777
		690V	FCP-S5/250 690V-5h	PB011778
		1000V	FCP-S5/250 1000V-1h	PB011779
315 A	4 (3L+PEN)	230V	FCP-S4/315 230V-9h	PB022870
		400V	FCP-S4/315 400V-6h	PB022871
		500V	FCP-S4/315 500V-7h	PB022872
		690V	FCP-S4/315 690V-5h	PB022873
		1000V	FCP-S4/315 1000V-1h	PB022874
	5 (3L+N+PE)	230V	FCP-S5/315 230V-9h	PB022875
		400V	FCP-S5/315 400V-6h	PB022876
		500V	FCP-S5/315 500V-7h	PB022877
		690V	FCP-S5/315 690V-5h	PB022878
		1000V	FCP-S5/315 1000V-1h	PB022879
400 A	4 (3L+PEN)	230V	FCP-S4/400 230V-9h	PB011780
		400V	FCP-S4/400 400V-6h	PB011781
		500V	FCP-S4/400 500V-7h	PB011782
		690V	FCP-S4/400 690V-5h	PB011783
		1000V	FCP-S4/400 1000V-1h	PB011784
	5 (3L+N+PE)	230V	FCP-S5/400 230V-9h	PB011785
		400V	FCP-S5/400 400V-6h	PB011786
		500V	FCP-S5/400 500V-7h	PB011787
		690V	FCP-S5/400 690V-5h	PB011788
		1000V	FCP-S5/400 1000V-1h	PB011789

MCPA

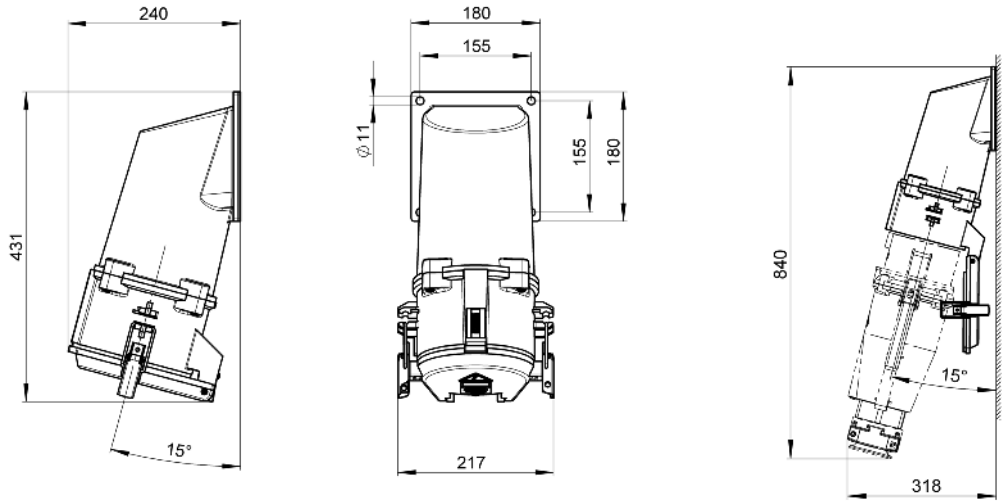
Panel Mounted Inlet Angled



Current	Number of Poles	Voltage	Type designation	Article No.
250A	4 (3L+PEN)	230V	MCPA-S4/250 230V-9h	PB020588
		400V	MCPA-S4/250 400V-6h	PB020589
		500V	MCPA-S4/250 500V-7h	PB020590
		690V	MCPA-S4/250 690V-5h	PB020591
		1000V	MCPA-S4/250 1000V-1h	PB020592
	5 (3L+N+PE)	230V	MCPA-S5/250 230V-9h	PB020593
		400V	MCPA-S5/250 400V-6h	PB020594
		500V	MCPA-S5/250 500V-7h	PB020595
		690V	MCPA-S5/250 690V-5h	PB020596
		1000V	MCPA-S5/250 1000V-1h	PB020597
315 A	4 (3L+PEN)	230V	MCPA-S4/315 230V-9h	PB022930
		400V	MCPA-S4/315 400V-6h	PB022931
		500V	MCPA-S4/315 500V-7h	PB022932
		690V	MCPA-S4/315 690V-5h	PB022933
		1000V	MCPA-S4/315 1000V-1h	PB022934
	5 (3L+N+PE)	230V	MCPA-S5/315 230V-9h	PB022935
		400V	MCPA-S5/315 400V-6h	PB022936
		500V	MCPA-S5/315 500V-7h	PB022937
		690V	MCPA-S5/315 690V-5h	PB022938
		1000V	MCPA-S5/315 1000V-1h	PB022939
400 A	4 (3L+PEN)	230V	MCPA-S4/400 230V-9h	PB020598
		400V	MCPA-S4/400 400V-6h	PB020599
		500V	MCPA-S4/400 500V-7h	PB020600
		690V	MCPA-S4/400 690V-5h	PB020601
		1000V	MCPA-S4/400 1000V-1h	PB020602
	5 (3L+N+PE)	230V	MCPA-S5/400 230V-9h	PB020603
		400V	MCPA-S5/400 400V-6h	PB020604
		500V	MCPA-S5/400 500V-7h	PB020605
		690V	MCPA-S5/400 690V-5h	PB020606
		1000V	MCPA-S5/400 1000V-1h	PB020607

FCPA

Panel Mounted Receptacle Angled



Current	Number of Poles	Voltage	Type designation	Article No.
250A	4 (3L+PEN)	230V	FCPA-S4/250 230V-9h	PB020618
		400V	FCPA-S4/250 400V-6h	PB020619
		500V	FCPA-S4/250 500V-7h	PB020620
		690V	FCPA-S4/250 690V-5h	PB020621
		1000V	FCPA-S4/250 1000V-1h	PB020622
	5 (3L+N+PE)	230V	FCPA-S5/250 230V-9h	PB020623
		400V	FCPA-S5/250 400V-6h	PB020624
		500V	FCPA-S5/250 500V-7h	PB020625
		690V	FCPA-S5/250 690V-5h	PB020626
		1000V	FCPA-S5/250 1000V-1h	PB020627
315 A	4 (3L+PEN)	230V	FCPA-S4/315 230V-9h	PB022880
		400V	FCPA-S4/315 400V-6h	PB022881
		500V	FCPA-S4/315 500V-7h	PB022882
		690V	FCPA-S4/315 690V-5h	PB022883
		1000V	FCPA-S4/315 1000V-1h	PB022884
	5 (3L+N+PE)	230V	FCPA-S5/315 230V-9h	PB022885
		400V	FCPA-S5/315 400V-6h	PB022886
		500V	FCPA-S5/315 500V-7h	PB022887
		690V	FCPA-S5/315 690V-5h	PB022888
		1000V	FCPA-S5/315 1000V-1h	PB022889
400 A	4 (3L+PEN)	230V	FCPA-S4/400 230V-9h	PB020628
		400V	FCPA-S4/400 400V-6h	PB020629
		500V	FCPA-S4/400 500V-7h	PB020630
		690V	FCPA-S4/400 690V-5h	PB020631
		1000V	FCPA-S4/400 1000V-1h	PB020632
	5 (3L+N+PE)	230V	FCPA-S5/400 230V-9h	PB020633
		400V	FCPA-S5/400 400V-6h	PB020634
		500V	FCPA-S5/400 500V-7h	PB020635
		690V	FCPA-S5/400 690V-5h	PB020636
		1000V	FCPA-S5/400 1000V-1h	PB020637

Options

Enchancements for every application

Seawater resistant connector

For port applications, an option often requested by the customer. The seawater-resistant design prevents oxidation on the housing.

Seawater resistant connectors upon request.

Vibration resistant connectors

On request there are vibration resistant connectors available. This option is frequently asked for railway applications.

Accessories:

- Cover cap (article No.: PB012123)
- Padlock (article Nor: PB014349)

General information

Special features for B-Line connectors

Some product features listed in the catalog apply only to the B-Line connectors.

This includes:

- Exchangeable contacts
- Resistant housing up to 2 tons load

Weight and packaging-information

Article		Weight (kg)	Packaging Bulk outside (mm)
Plug MC	4-pole	7.1	462 x 240 x 242
	5-pole	8.6	462 x 240 x 242
Panel Mounted Inlet MCP	4-pole	8.1	275 x 230 x 350
	5-pole	8.6	275 x 230 x 350
Panel Mounted Inlet Angled MCPA	4-pole	9.8	462 x 240 x 242
	5-pole	10.3	462 x 240 x 242
Wall Mounted Inlet MCW	4-pole	10.0	462 x 240 x 242
	5-pole	10.5	462 x 240 x 242
Coupling FC	4-pole	9.4	462 x 240 x 242
	5-pole	9.9	462 x 240 x 242
Panel Mounted Receptacle FCP	4-pole	6.8	275 x 230 x 350
	5-pole	7.3	275 x 230 x 350
Panel Mounted Receptacle Angled FCPA	4-pole	10.3	462 x 240 x 242
	5-pole	10.8	462 x 240 x 242
Wall Mounted Receptacle FCW	4-pole	11.5	462 x 240 x 242
	5-pole	12.0	462 x 240 x 242

A - Line
Technical Data

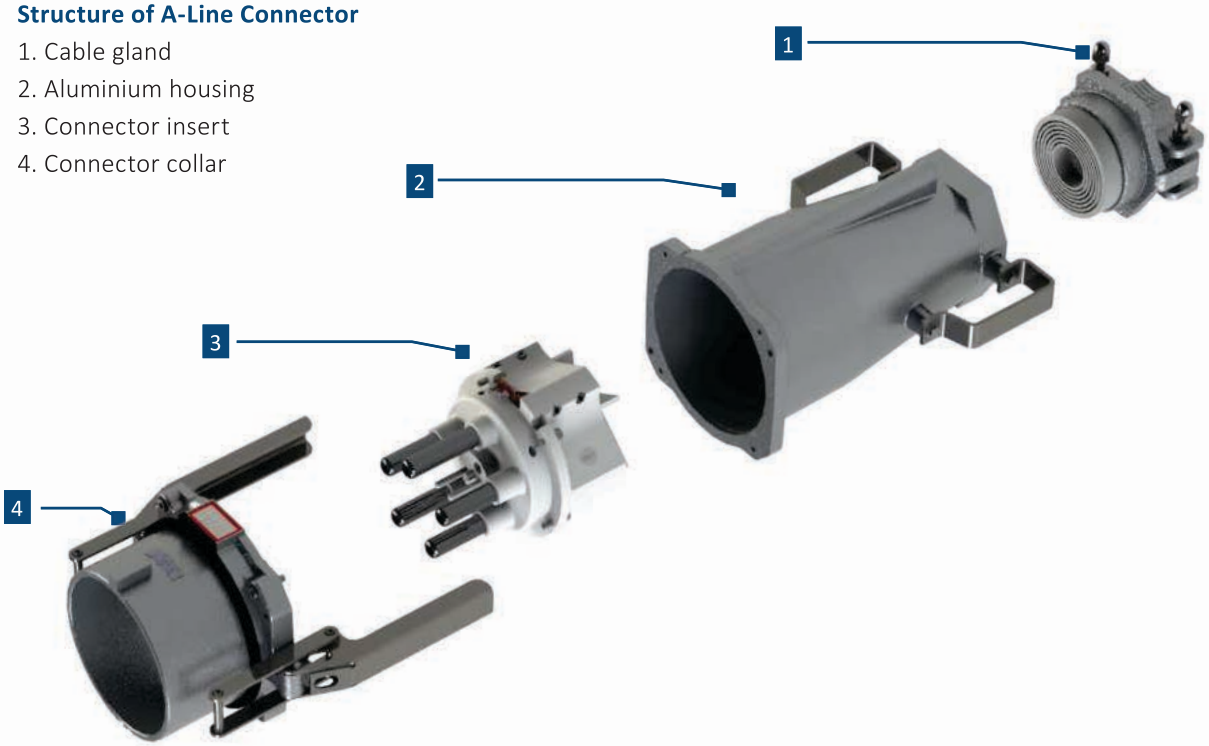
Technical Data	Unit	A - Line	
Nominal current	A	500	600
Rated current	A	500	600
Rated voltage	V	1’000	
Rated frequency	Hz	50 / 60	
Withstand voltage (1 Min / 50 Hz)	V	4’000	
Protection grade		IP 67	
Shock resistance		IK 10	
Ambient temperature	°C	-40 / +80	
Insulation resistance (Phase-phase and phase-earth)	MOhm	> 500	
Comparative tracking index of the insert	CTI	> 600	
Terminal cross-section (EN 60228 Class 5)	mm ²	120 - 300	
Max. cross section pilot cable, conductor (EN 60228 Class 5)	mm ²	4	
Diameter of cable	mm	34 - 66 until 85 on request	
Diameter of cable - separate pilot cable	mm	8 -15	

Technical modifications reserved

Structure

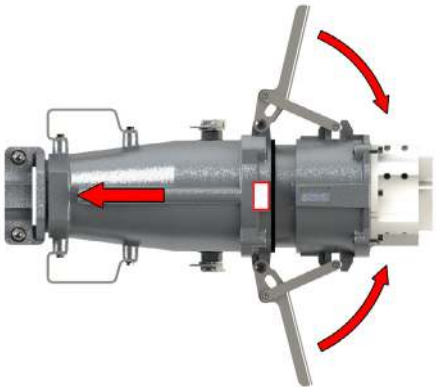
Structure of A-Line Connector

1. Cable gland
2. Aluminium housing
3. Connector insert
4. Connector collar



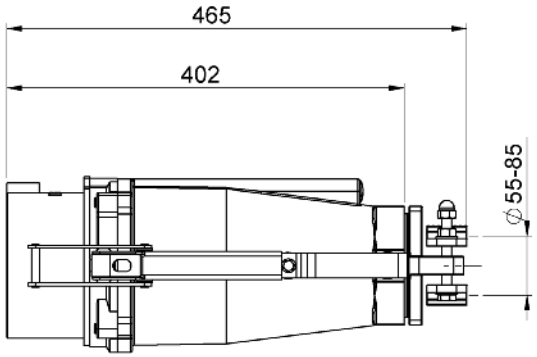
Locking system

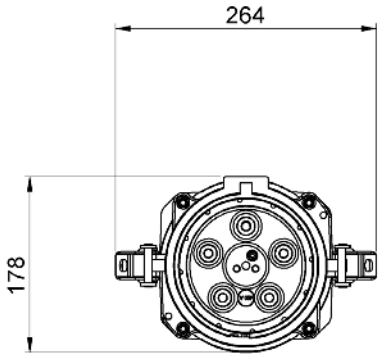
Mechanically easy designed locking system, which reduces the force required during plugging and pulling.



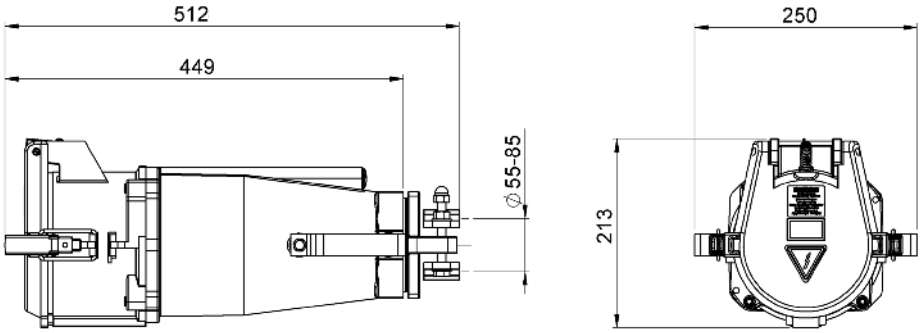
MC

Plug





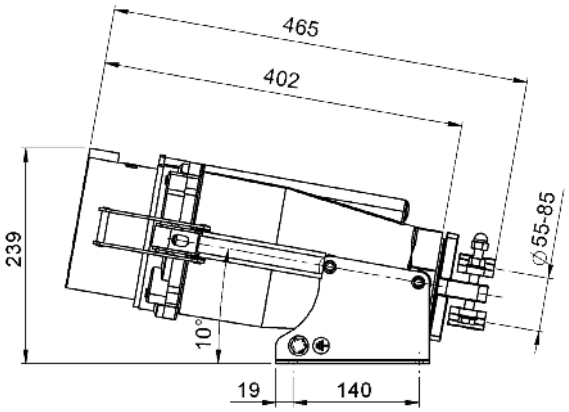
Current	No. of Poles	Voltage	Type designation	Article No.
500 A	4 (3L+PEN)	230V	MC-S4/500 230V-9h	PA025200
		400V	MC-S4/500 400V-6h	PA025201
		500V	MC-S4/500 500V-7h	PA025202
		690V	MC-S4/500 690V-5h	PA025203
		1000V	MC-S4/500 1000V-1h	PA025204
	5 (3L+N+PE)	230V	MC-S5/500 230V-9h	PA025210
		400V	MC-S5/500 400V-6h	PA025211
		500V	MC-S5/500 500V-7h	PA025212
		690V	MC-S5/500 690V-5h	PA025213
		1000V	MC-S5/500 1000V-1h	PA025214
600 A	4 (3L+PEN)	230V	MC-S4/600 230V-9h	PA025280
		400V	MC-S4/600 400V-6h	PA025281
		500V	MC-S4/600 500V-7h	PA025282
		690V	MC-S4/600 690V-5h	PA025283
		1000V	MC-S4/600 1000V-1h	PA025284
	5 (3L+N+PE)	230V	MC-S5/600 230V-9h	PA025290
		400V	MC-S5/600 400V-6h	PA025291
		500V	MC-S5/600 500V-7h	PA025292
		690V	MC-S5/600 690V-5h	PA025293
		1000V	MC-S5/600 1000V-1h	PA025294

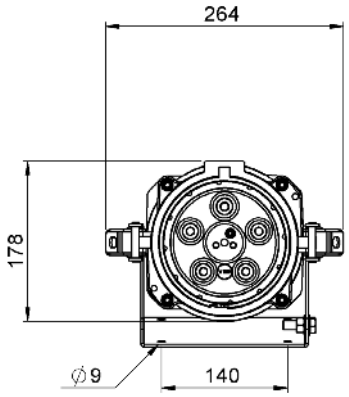


Current	No. of Poles	Voltage	Type designation	Article No.
500 A	4 (3L+PEN)	230V	FC-S4/500 230V-9h	PA025205
		400V	FC-S4/500 400V-6h	PA025206
		500V	FC-S4/500 500V-7h	PA025207
		690V	FC-S4/500 690V-5h	PA025208
		1000V	FC-S4/500 1000V-1h	PA025209
	5 (3L+N+PE)	230V	FC-S5/500 230V-9h	PA025215
		400V	FC-S5/500 400V-6h	PA025216
		500V	FC-S5/500 500V-7h	PA025217
		690V	FC-S5/500 690V-5h	PA025218
		1000V	FC-S5/500 1000V-1h	PA025219
600 A	4 (3L+PEN)	230V	FC-S4/600 230V-9h	PA025285
		400V	FC-S4/600 400V-6h	PA025286
		500V	FC-S4/600 500V-7h	PA025287
		690V	FC-S4/600 690V-5h	PA025288
		1000V	FC-S4/600 1000V-1h	PA025289
	5 (3L+N+PE)	230V	FC-S5/600 230V-9h	PA025295
		400V	FC-S5/600 400V-6h	PA025296
		500V	FC-S5/600 500V-7h	PA025297
		690V	FC-S5/600 690V-5h	PA025298
		1000V	FC-S5/600 1000V-1h	PA025299

MCW

Wall Mounted Inlet

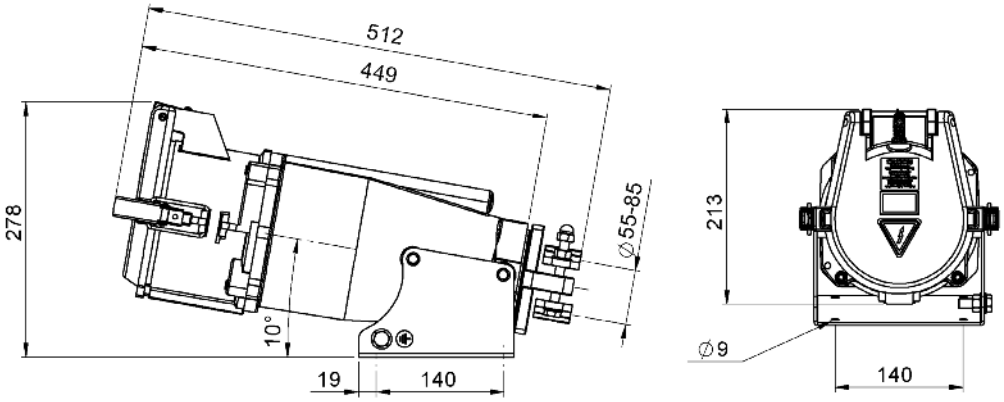




Current	No. of Poles	Voltage	Type designation	Article No.
500 A	4 (3L+PEN)	230V	MCW-S4/500 230V-9h	PA025220
		400V	MCW-S4/500 400V-6h	PA025221
		500V	MCW-S4/500 500V-7h	PA025222
		690V	MCW-S4/500 690V-5h	PA025223
		1000V	MCW-S4/500 1000V-1h	PA025224
	5 (3L+N+PE)	230V	MCW-S5/500 230V-9h	PA025230
		400V	MCW-S5/500 400V-6h	PA025231
		500V	MCW-S5/500 500V-7h	PA025232
		690V	MCW-S5/500 690V-5h	PA025233
		1000V	MCW-S5/500 1000V-1h	PA025234
600 A	4 (3L+PEN)	230V	MCW-S4/600 230V-9h	PA025300
		400V	MCW-S4/600 400V-6h	PA025301
		500V	MCW-S4/600 500V-7h	PA025302
		690V	MCW-S4/600 690V-5h	PA025303
		1000V	MCW-S4/600 1000V-1h	PA025304
	5 (3L+N+PE)	230V	MCW-S5/600 230V-9h	PA025310
		400V	MCW-S5/600 400V-6h	PA025311
		500V	MCW-S5/600 500V-7h	PA025312
		690V	MCW-S5/600 690V-5h	PA025313
		1000V	MCW-S5/600 1000V-1h	PA025314

FCW

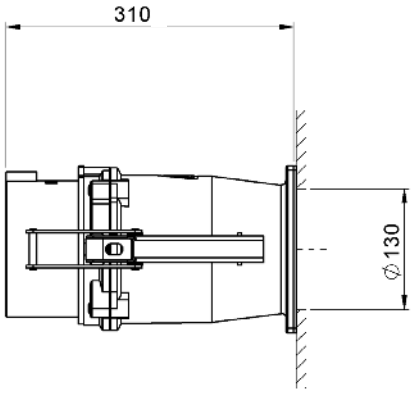
Wall Mounted Receptacle

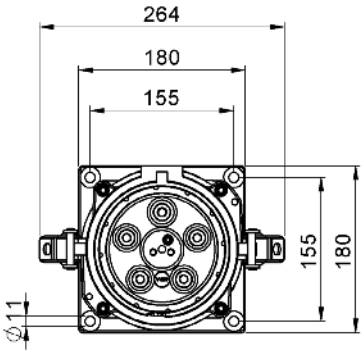


Current	No. of Poles	Voltage	Type designation	Article No.
500 A	4 (3L+PEN)	230V	FCW-S4/500 230V-9h	PA025225
		400V	FCW-S4/500 400V-6h	PA025226
		500V	FCW-S4/500 500V-7h	PA025227
		690V	FCW-S4/500 690V-5h	PA025228
		1000V	FCW-S4/500 1000V-1h	PA025229
	5 (3L+N+PE)	230V	FCW-S5/500 230V-9h	PA025235
		400V	FCW-S5/500 400V-6h	PA025236
		500V	FCW-S5/500 500V-7h	PA025237
		690V	FCW-S5/500 690V-5h	PA025238
		1000V	FCW-S5/500 1000V-1h	PA025239
600 A	4 (3L+PEN)	230V	FCW-S4/600 230V-9h	PA025305
		400V	FCW-S4/600 400V-6h	PA025306
		500V	FCW-S4/600 500V-7h	PA025307
		690V	FCW-S4/600 690V-5h	PA025308
		1000V	FCW-S4/600 1000V-1h	PA025309
	5 (3L+N+PE)	230V	FCW-S5/600 230V-9h	PA025315
		400V	FCW-S5/600 230V-9h	PA025316
		500V	FCW-S5/600 500V-7h	PA025317
		690V	FCW-S5/600 690V-5h	PA025318
		1000V	FCW-S5/600 1000V-1h	PA025319

MCP

Panel Mounted Inlet

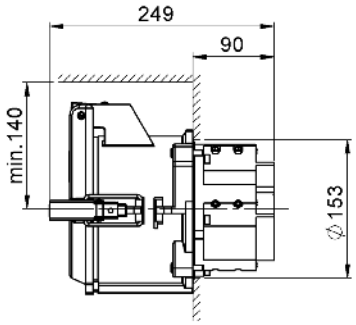


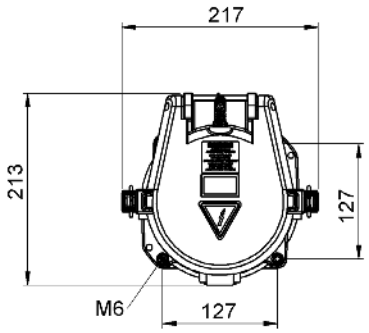


Current	No. of Poles	Voltage	Type designation	Article No.
500 A	4 (3L+PEN)	230V	MCP-S4/500 230V-9h	PA025240
		400V	MCP-S4/500 400V-6h	PA025241
		500V	MCP-S4/500 500V-7h	PA025242
		690V	MCP-S4/500 690V-5h	PA025243
		1000V	MCP-S4/500 1000V-1h	2PA05244
	5 (3L+N+PE)	230V	MCP-S5/500 230V-9h	PA025250
		400V	MCP-S5/500 400V-6h	PA025251
		500V	MCP-S5/500 500V-7h	PA025252
		690V	MCP-S5/500 690V-5h	PA025253
		1000V	MCP-S5/500 1000V-1h	PA025254
600 A	4 (3L+PEN)	230V	MCP-S4/600 230V-9h	PA025320
		400V	MCP-S4/600 400V-6h	PA025321
		500V	MCP-S4/600 500V-7h	PA025322
		690V	MCP-S4/600 690V-5h	PA025323
		1000V	MCP-S4/600 1000V-1h	PA025324
	5 (3L+N+PE)	230V	MCP-S5/600 230V-9h	PA025330
		400V	MCP-S5/600 400V-6h	PA025331
		500V	MCP-S5/600 500V-7h	PA025332
		690V	MCP-S5/600 690V-5h	PA025333
		1000V	MCP-S5/600 1000V-1h	PA025334

FCP

Panel Mounted Receptacle

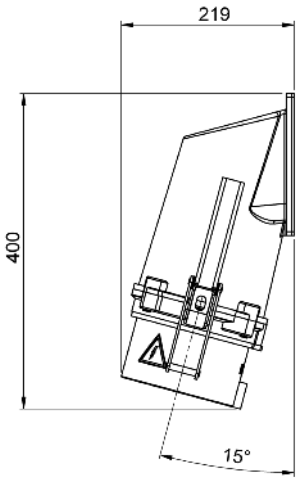


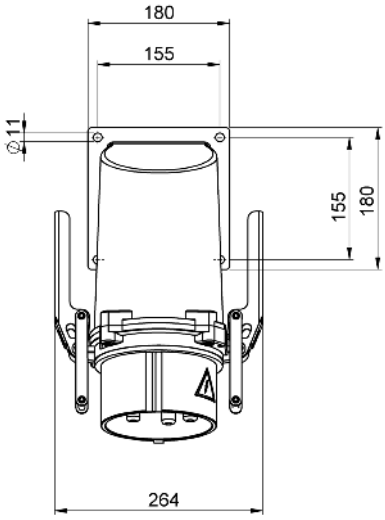


Current	No. of Poles	Voltage	Type designation	Article No.
500 A	4 (3L+PEN)	230V	FCP-S4/500 230V-9h	PA025245
		400V	FCP-S4/500 400V-6h	PA025246
		500V	FCP-S4/500 500V-7h	PA025247
		690V	FCP-S4/500 690V-5h	PA025248
		1000V	FCP-S4/500 1000V-1h	PA025249
	5 (3L+N+PE)	230V	FCP-S5/500 230V-9h	PA025255
		400V	FCP-S5/500 400V-6h	PA025256
		500V	FCP-S5/500 500V-7h	PA025257
		690V	FCP-S5/500 690V-5h	PA025258
		1000V	FCP-S5/500 1000V-1h	PA025259
600 A	4 (3L+PEN)	230V	FCP-S4/600 230V-9h	PA025325
		400V	FCP-S4/600 400V-6h	PA025326
		500V	FCP-S4/600 500V-7h	PA025327
		690V	FCP-S4/600 690V-5h	PA025328
		1000V	FCP-S4/600 1000V-1h	PA025329
	5 (3L+N+PE)	230V	FCP-S5/600 230V-9h	PA025335
		400V	FCP-S5/600 400V-6h	PA025336
		500V	FCP-S5/600 500V-7h	PA025337
		690V	FCP-S5/600 690V-5h	PA025338
		1000V	FCP-S5/600 1000V-1h	PA025339

MCPA

Panel Mounted Inlet Angled

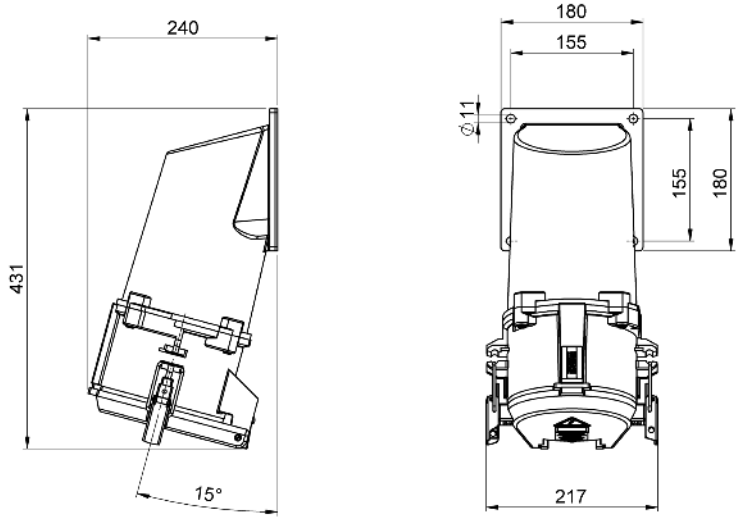




Current	No. of Poles	Voltage	Type designation	Article No.
500 A	4 (3L+PEN)	230V	MCPA-S4/500 230V-9h	PA025260
		400V	MCPA-S4/500 400V-6h	PA025261
		500V	MCPA-S4/500 500V-7h	PA025262
		690V	MCPA-S4/500 690V-5h	PA025263
		1000V	MCPA-S4/500 1000V-1h	PA025264
	5 (3L+N+PE)	230V	MCPA-S5/500 230V-9h	PA025270
		400V	MCPA-S5/500 400V-6h	PA025271
		500V	MCPA-S5/500 500V-7h	PA025272
		690V	MCPA-S5/500 690V-5h	PA025273
		1000V	MCPA-S5/500 1000V-1h	PA025274
600 A	4 (3L+PEN)	230V	MCPA-S4/600 230V-9h	PA025340
		400V	MCPA-S4/600 400V-6h	PA025341
		500V	MCPA-S4/600 500V-7h	PA025342
		690V	MCPA-S4/600 690V-5h	PA025343
		1000V	MCPA-S4/600 1000V-1h	PA025344
	5 (3L+N+PE)	230V	MCPA-S5/600 230V-9h	PA025350
		400V	MCPA-S5/600 400V-6h	PA025351
		500V	MCPA-S5/600 500V-7h	PA025352
		690V	MCPA-S5/600 690V-5h	PA025353
		1000V	MCPA-S5/600 1000V-1h	PA025354

FCPA

Panel Mounted Receptacle Angled



Current	No. of Poles	Voltage	Type designation	Article No.
500 A	4 (3L+PEN)	230V	FCPA-S4/500 230V-9h	PA025265
		400V	FCPA-S4/500 400V-6h	PA025266
		500V	FCPA-S4/500 500V-7h	PA025267
		690V	FCPA-S4/500 690V-5h	PA025268
		1000V	FCPA-S4/500 1000V-1h	PA025269
	5 (3L+N+PE)	230V	FCPA-S5/500 230V-9h	PA025275
		400V	FCPA-S5/500 400V-6h	PA025276
		500V	FCPA-S5/500 500V-7h	PA025277
		690V	FCPA-S5/500 690V-5h	PA025278
		1000V	FCPA-S5/500 1000V-1h	PA025279
600 A	4 (3L+PEN)	230V	FCPA-S4/600 230V-9h	PA025345
		400V	FCPA-S4/600 400V-6h	PA025346
		500V	FCPA-S4/600 500V-7h	PA025347
		690V	FCPA-S4/600 690V-5h	PA025348
		1000V	FCPA-S4/600 1000V-1h	PA025349
	5 (3L+N+PE)	230V	FCPA-S5/600 230V-9h	PA025355
		400V	FCPA-S5/600 400V-6h	PA025356
		500V	FCPA-S5/600 500V-7h	PA025357
		690V	FCPA-S5/600 690V-5h	PA025358
		1000V	FCPA-S5/600 1000V-1h	PA025359

Options

Enchancements for every application

Seawater resistant connector

For port applications, an option often requested by the customer. The seawater-resistant design prevents oxidation on the housing.

Seawater resistant connectors upon request.

Vibration resistant connectors

On request there are vibration resistant connectors available. This option is frequently asked for railway applications.

Accessories:

- Cover cap (article No.: 12123)
- Padlock (article Nor: 14349)

General information

Special features for A-Line connectors

Some product features listed in the catalog apply only to the A-Line connectors.

This includes:

- Exchangeable contacts
- Resistant housing up to 2 tons load

Weight and packaging-information

Article		Weight (kg)	Packaging Bulk outside (mm)
Plug MC	4-pole	8	462 x 240 x 242
	5-pole	9	462 x 240 x 242
Panel Mounted Inlet MCP	4-pole	9	275 x 230 x 350
	5-pole	9	275 x 230 x 350
Panel Mounted Inlet Angled MCPA	4-pole	10	462 x 240 x 242
	5-pole	11	462 x 240 x 242
Wall Mounted Inlet MCW	4-pole	10	462 x 240 x 242
	5-pole	11	462 x 240 x 242
Coupling FC	4-pole	10	462 x 240 x 242
	5-pole	10	462 x 240 x 242
Panel Mounted Receptacle FCP	4-pole	7	275 x 230 x 350
	5-pole	8	275 x 230 x 350
Panel Mounted Receptacle Angled FCPA	4-pole	11	462 x 240 x 242
	5-pole	11	462 x 240 x 242
Wall Mounted Receptacle FCW	4-pole	12	462 x 240 x 242
	5-pole	12	462 x 240 x 242

Connector Unit

CUMI

Technical Data	Unit	D-Line	C-Line		B - Line			A-Line	
Nominal current	A	160	200	250	250	315	400	500	600
Rated current	A	160	250	285	315	380	450	500	600
Rated voltage	V	1'000							
Rated frequency	Hz	50 / 60							
Withstand voltage (1 Min / 50 Hz)	V	4'000							
Protection grade		IP 55							
Shock resistance		IK 07							
Ambient temperature	°C	-40 / +70							
Insulation resistance (phase to phase and phase to earth)	MOhm	> 500							
Comparative tracking index of the insert	CTI	> 600							
Weight 4-pol. (3L+PEN)	kg	25.1					45.6		
Weight 5-pol. (3L+N+PE)	kg	25.3					47.1		
Connector bolts for cable shoes		M8					M10		
Max. cross section pilot cable, conductor (EN 60228 Class 1)	mm2	4					4		
Diameter of cable - normal other diameters on request	mm	20 - 70							

Technical modifications reserved

Structure

Locking system

Male connector will be connected to connector unit. Switch is manually set to the „ON“ position. Connector is now under load and is mechanically locked via a linkage integrated in the connecter unit.

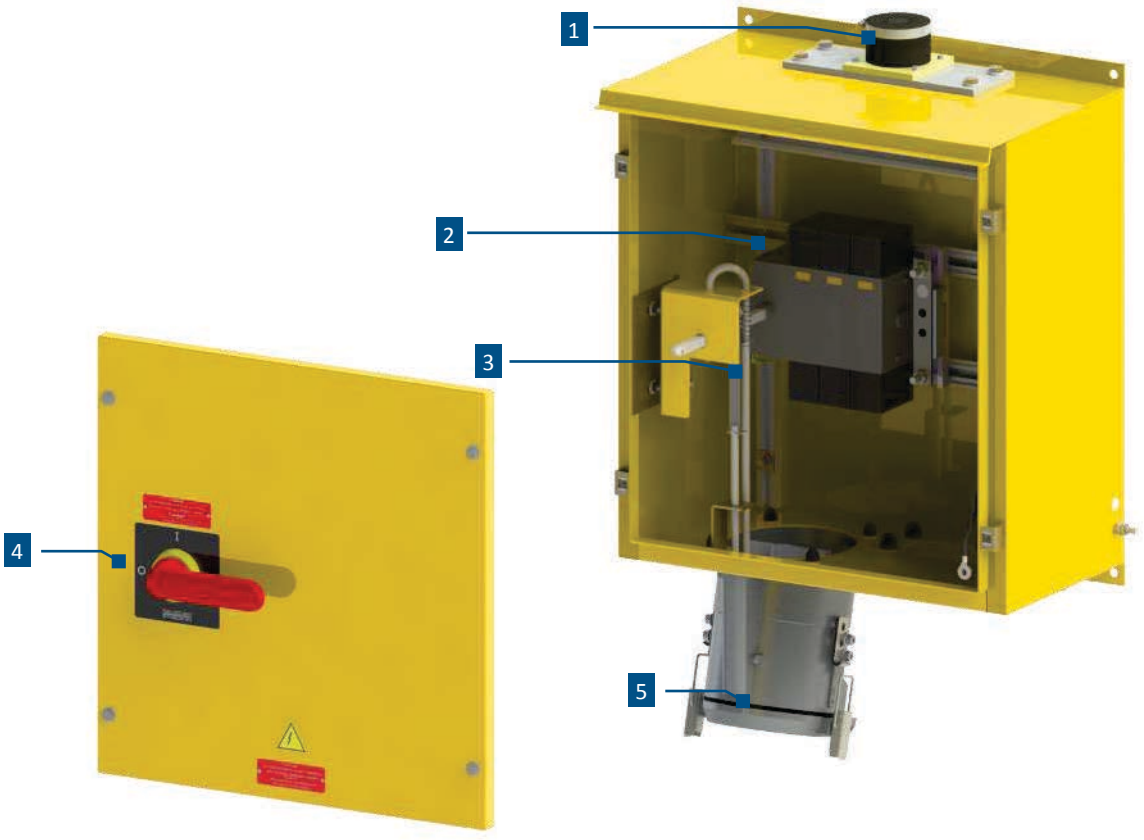
Only by moving the switch to the „OFF“ position the connector can be disconnected from the connector unit.

Important!

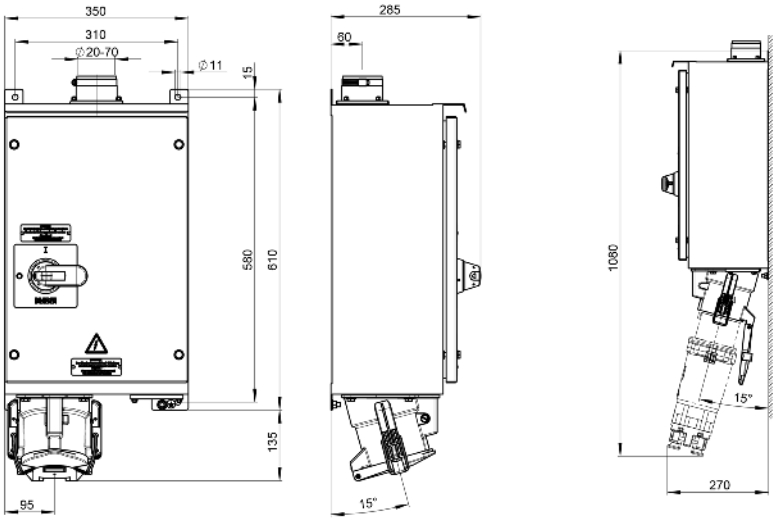
Plugging is not possible under load!

Construction of a CUMI connector unit

1. Cable gland
2. Load break switch
3. Linkage
4. Switch
5. Panel Mounted Receptacle

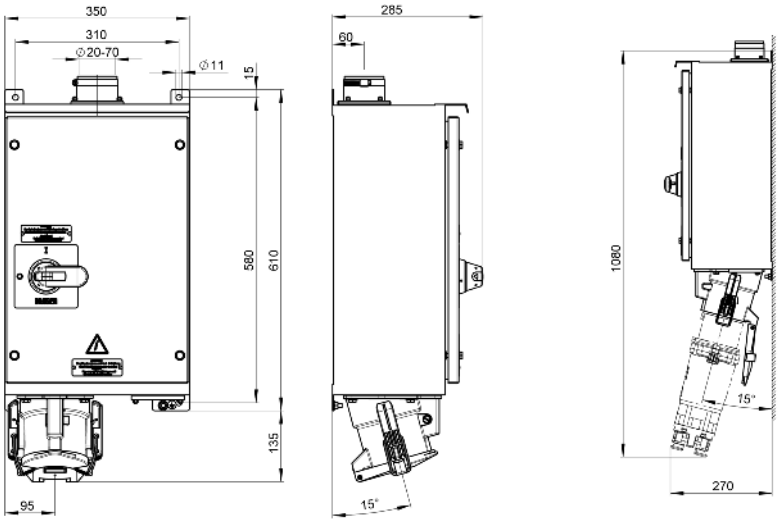


CUMI D - Line



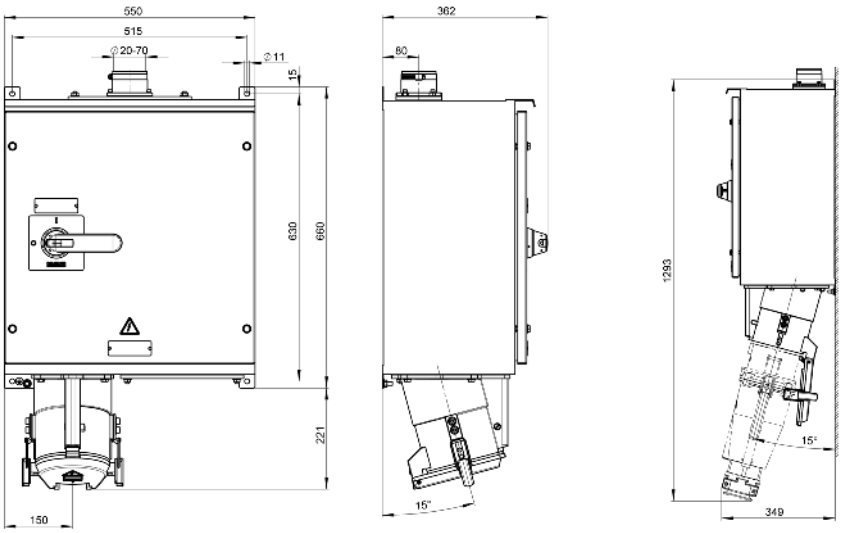
Current	No. of Poles	Voltage	Type designation	Article No.
160 A	4 (3L+PEN)	230V	CUMI-S4/160 230V-9h	PD025360
		400V	CUMI-S4/160 400V-6h	PD025361
		500V	CUMI-S4/160 500V-7h	PD025362
		690V	CUMI-S4/160 690V-5h	PD025363
		1000V	CUMI-S4/160 1000V-1h	PD025364
	5 (3L+N+PE)	230V	CUMI-S5/160 230V-9h	PD025375
		400V	CUMI-S5/160 400V-6h	PD025376
		500V	CUMI-S5/160 500V-7h	PD025377
		690V	CUMI-S5/160 690V-5h	PD025378
		1000V	CUMI-S5/160 1000V-1h	PD025379

CUMI C - Line



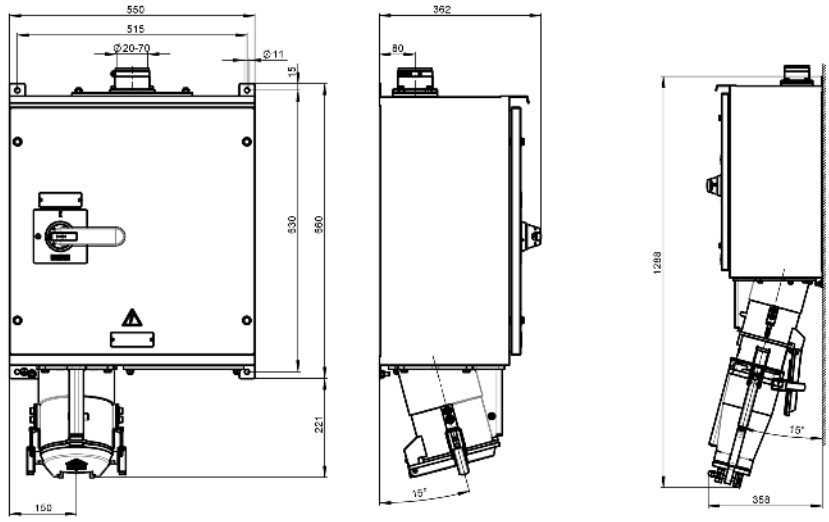
Current	No. of Poles	Voltage	Type designation	Article No.
200 A	4 (3L+PEN)	230V	CUMI-S4/200 230V-9h	PC011790
		400V	CUMI-S4/200 400V-6h	PC011791
		500V	CUMI-S4/200 500V-7h	PC011792
		690V	CUMI-S4/200 690V-5h	PC011793
		1000V	CUMI-S4/200 1000V-1h	PC011794
	5 (3L+N+PE)	230V	CUMI-S5/200 230V-9h	PC011795
		400V	CUMI-S5/200 400V-6h	PC011796
		500V	CUMI-S5/200 500V-7h	PC011797
		690V	CUMI-S5/200 690V-5h	PC011798
		1000V	CUMI-S5/200 1000V-1h	PC011799
250 A	4 (3L+PEN)	230V	CUMI-S4/250 230V-9h	PC022160
		400V	CUMI-S4/250 400V-6h	PC022161
		500V	CUMI-S4/250 500V-7h	PC022162
		690V	CUMI-S4/250 690V-5h	PC022163
		1000V	CUMI-S4/250 1000V-1h	PC022164
	5 (3L+N+PE)	230V	CUMI-S5/250 230V-9h	PC022165
		400V	CUMI-S5/250 400V-6h	PC022166
		500V	CUMI-S5/250 500V-7h	PC022167
		690V	CUMI-S5/250 690V-5h	2PC02168
		1000V	CUMI-S5/250 1000V-1h	PC022169

CUMI B - Line



Current	No. of Poles	Voltage	Type designation	Article No.
250A	4 (3L+PEN)	230V	CUMI-S4/250 230V-9h	PB011800
		400V	CUMI-S4/250 400V-6h	PB011801
		500V	CUMI-S4/250 500V-7h	PB011802
		690V	CUMI-S4/250 690V-5h	PB011803
		1000V	CUMI-S4/250 1000V-1h	PB011804
	5 (3L+N+PE)	230V	CUMI-S5/250 230V-9h	PB011805
		400V	CUMI-S5/250 400V-6h	PB011806
		500V	CUMI-S5/250 500V-7h	1PB01807
		690V	CUMI-S5/250 690V-5h	PB011808
		1000V	CUMI-S5/250 1000V-1h	PB011809
315 A	4 (3L+PEN)	230V	CUMI-S4/315 230V-9h	PB022960
		400V	CUMI-S4/315 400V-6h	PB022961
		500V	CUMI-S4/315 500V-7h	PB022962
		690V	CUMI-S4/315 690V-5h	PB022963
		1000V	CUMI-S4/315 1000V-1h	PB022964
	5 (3L+N+PE)	230V	CUMI-S5/315 230V-9h	PB022965
		400V	CUMI-S5/315 400V-6h	PB022966
		500V	CUMI-S5/315 500V-7h	PB022967
		690V	CUMI-S5/315 690V-5h	PB022968
		1000V	CUMI-S5/315 1000V-1h	PB022969
400 A	4 (3L+PEN)	230V	CUMI-S4/400 230V-9h	PB011810
		400V	CUMI-S4/400 400V-6h	PB011811
		500V	CUMI-S4/400 500V-7h	PB011812
		690V	CUMI-S4/400 690V-5h	PB011813
		1000V	CUMI-S4/400 1000V-1h	PB011814
	5 (3L+N+PE)	230V	CUMI-S5/400 230V-9h	PB011815
		400V	CUMI-S5/400 400V-6h	PB011816
		500V	CUMI-S5/400 500V-7h	PB011817
		690V	CUMI-S5/400 690V-5h	PB011818
		1000V	CUMI-S5/400 1000V-1h	PB011819

CUMI A - Line



Current	No. of Poles	Voltage	Type designation	Article No.
500 A	4 (3L+PEN)	230V	CUMI-S4/500 230V-9h	PA025365
		400V	CUMI-S4/500 400V-6h	PA025366
		500V	CUMI-S4/500 500V-7h	PA025367
		690V	CUMI-S4/500 690V-5h	PA025368
		1000V	CUMI-S4/500 1000V-1h	PA025369
	5 (3L+N+PE)	230V	CUMI-S5/500 230V-9h	PA025380
		400V	CUMI-S5/500 400V-6h	PA025381
		500V	CUMI-S5/500 500V-7h	PA025382
		690V	CUMI-S5/500 690V-5h	PA025383
		1000V	CUMI-S5/500 1000V-1h	PA025384
600 A	4 (3L+PEN)	230V	CUMI-S4/600 230V-9h	PA025370
		400V	CUMI-S4/600 400V-6h	PA025371
		500V	CUMI-S4/600 500V-7h	PA025372
		690V	CUMI-S4/600 690V-5h	PA025373
		1000V	CUMI-S4/600 1000V-1h	PA025374
	5 (3L+N+PE)	230V	CUMI-S5/600 230V-9h	PA025385
		400V	CUMI-S5/600 400V-6h	PA025386
		500V	CUMI-S5/600 500V-7h	PA025387
		690V	CUMI-S5/600 690V-5h	PA025388
		1000V	CUMI-S5/600 1000V-1h	PA025389

Connector Unit

CUBC

Technical Data	Unit	D-Line	C-Line		B - Line			A-Line	
Nominal current	A	160	200	250	250	315	400	500	600
Rated current	A	160	250	285	315	380	450	500	600
Rated voltage	V	1'000							
Rated frequency	Hz	50 / 60							
Withstand voltage (1 Min / 50 Hz)	V	4'000							
Protection grade		IP 55							
Shock resistance		IK 07							
Ambient temperature	°C	-40 / +70							
Insulation resistance (phase to phase and phase to earth)	MOhm	> 500							
Comparative tracking index of the insert	CTI	> 600							
Weight 4-pol. (3L+PEN)	kg	25.1					45.6		
Weight 5-pol. (3L+N+PE)	kg	25.3					47.1		
Connection bolts for cable shoes		M8					M10		
Max. cross section pilot cable, conductor (EN 60228 Class 1)	mm2	4							
Diameter of cable - normal other diameters on request	mm	20 - 70							

Technical modifications reserved

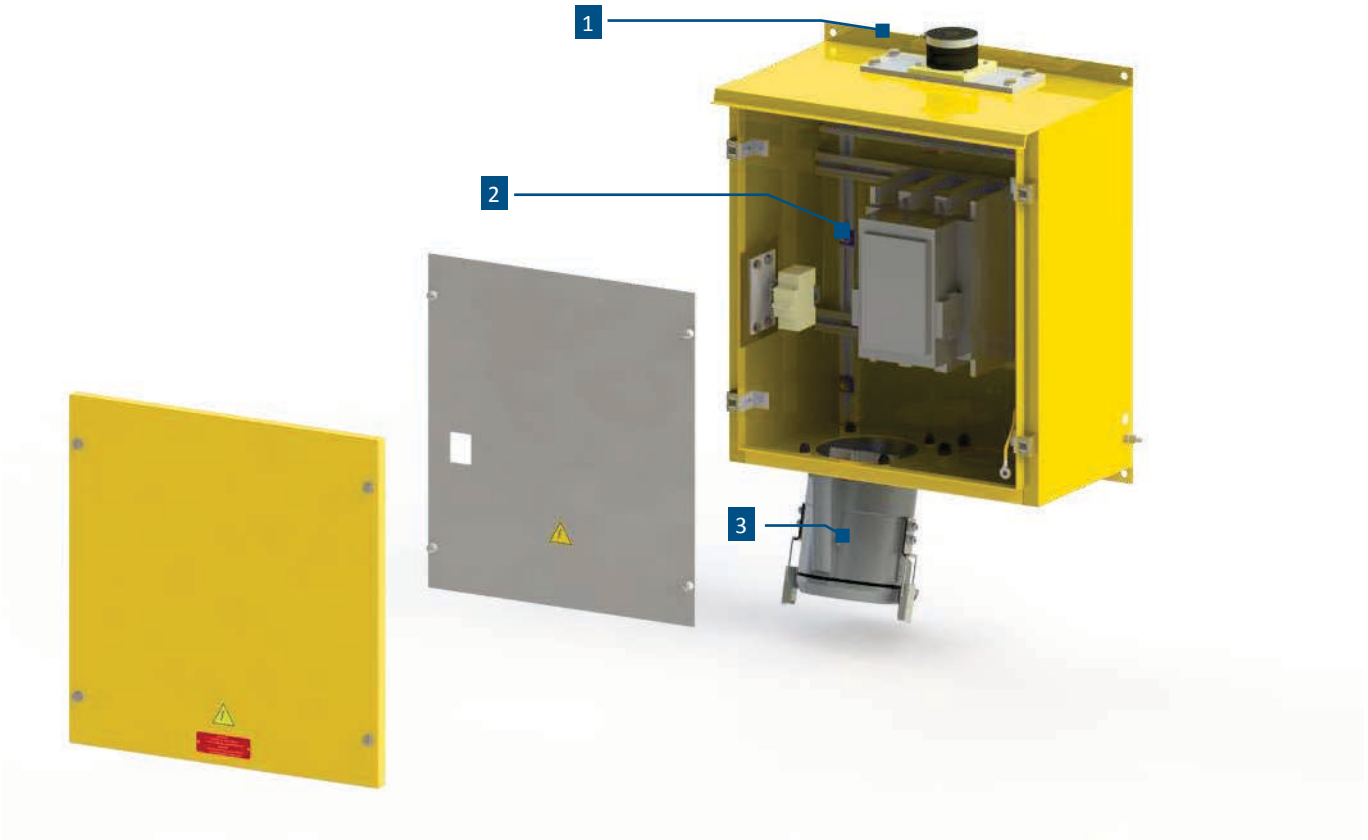
Structure

Locking system

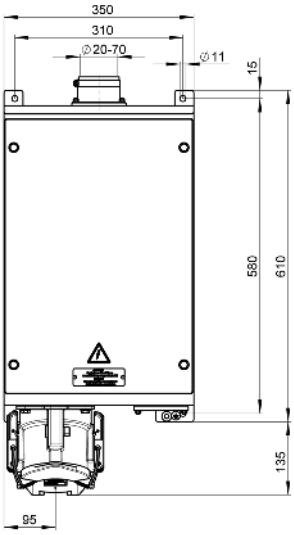
A contactor is installed in the CUBC connector unit. During every plug-in operation, the standardly installed pilot contacts in the connector transmit a signal to the contactors.
The main contacts in the connector unit are subsequently closed. Thus the connection is under load. Furthermore, the electrical connection will be disconnected immediately by the pilot contacts, if an unintentional manual disconnection is conducted.

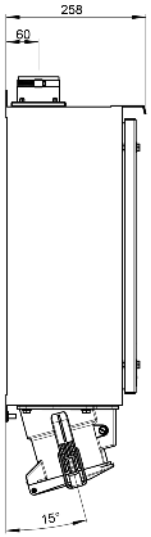
Construction of a CUBC connection box

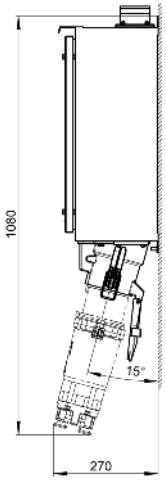
1. Cable gland
2. Contactor
3. Panel Mounted Receptacle



CUBC D - Line

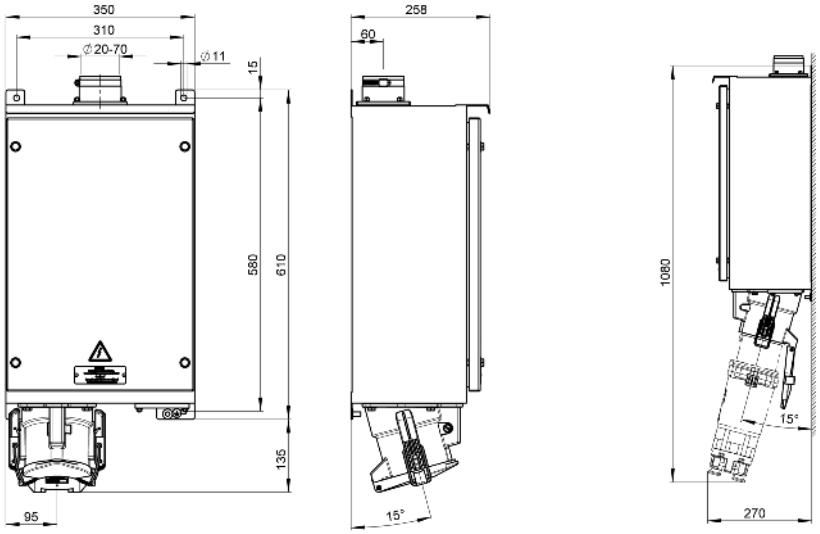






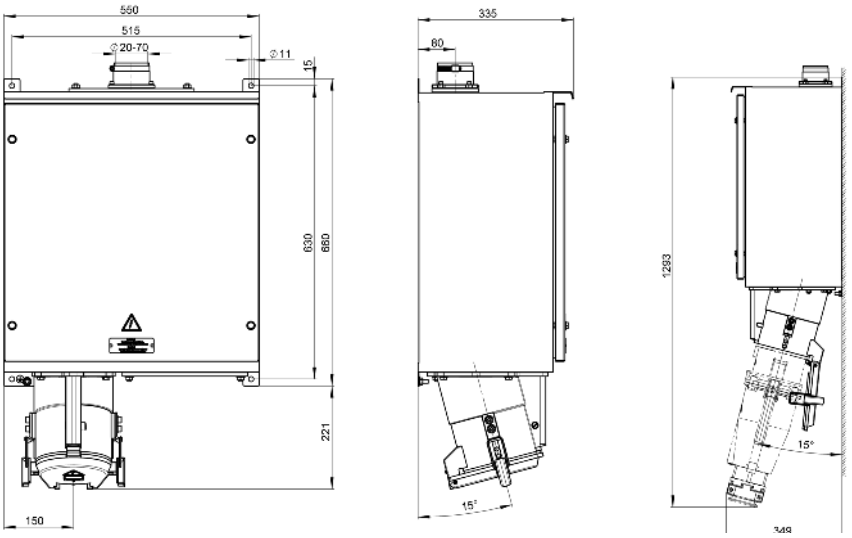
Current	No. of Poles	Voltage	Type designation	Article No.
160 A	4 (3L+PEN)	230V	CUBC-S4/160 230V-9h	PD025390
		400V	CUBC-S4/160 400V-6h	PD025391
		500V	CUBC-S4/160 500V-7h	PD025392
		690V	CUBC-S4/160 690V-5h	PD025393
		1000V	CUBC-S4/160 1000V-1h	PD025394
	5 (3L+N+PE)	230V	CUBC-S5/160 230V-9h	PD025405
		400V	CUBC-S5/160 400V-6h	PD025406
		500V	CUBC-S5/160 500V-7h	PD025407
		690V	CUBC-S5/160 690V-5h	PD025408
		1000V	CUBC-S5/160 1000V-1h	PD025409

CUBC C - Line



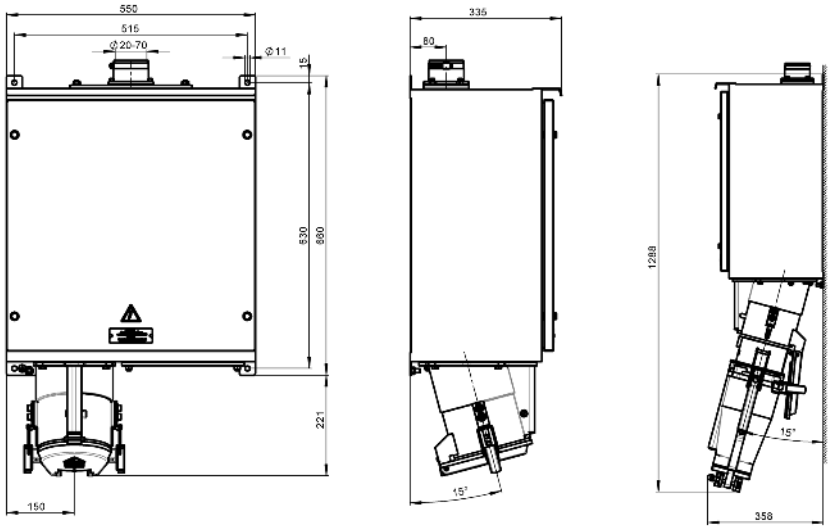
Current	No. of Poles	Voltage	Type designation	Article No.
200 A	4 (3L+PEN)	230V	CUBC-S4/200 230V-9h	PC011820
		400V	CUBC-S4/200 400V-6h	PC011821
		500V	CUBC-S4/200 500V-7h	PC011822
		690V	CUBC-S4/200 690V-5h	PC011823
		1000V	CUBC-S4/200 1000V-1h	PC011824
	5 (3L+N+PE)	230V	CUBC-S5/200 230V-9h	PC011825
		400V	CUBC-S5/200 400V-6h	PC011826
		500V	CUBC-S5/200 500V-7h	PC011827
		690V	CUBC-S5/200 690V-5h	PC011828
		1000V	CUBC-S5/200 1000V-1h	PC011829
250 A	4 (3L+PEN)	230V	CUBC-S4/250 230V-9h	PC022170
		400V	CUBC-S4/250 400V-6h	PC022171
		500V	CUBC-S4/250 500V-7h	PC022172
		690V	CUBC-S4/250 690V-5h	PC022173
		1000V	CUBC-S4/250 1000V-1h	PC022174
	5 (3L+N+PE)	230V	CUBC-S5/250 230V-9h	PC022175
		400V	CUBC-S5/250 400V-6h	PC022176
		500V	CUBC-S5/250 500V-7h	PC022177
		690V	CUBC-S5/250 690V-5h	PC022178
		1000V	CUBC-S5/250 1000V-1h	PC022179

CUBC B - Line



Current	No. of Poles	Voltage	Type designation	Article No.
250A	4 (3L+PEN)	230V	CUBC-S4/250 230V-9h	PB011830
		400V	CUBC-S4/250 400V-6h	PB011831
		500V	CUBC-S4/250 500V-7h	PB011832
		690V	CUBC-S4/250 690V-5h	PB011833
		1000V	CUBC-S4/250 1000V-1h	PB011834
	5 (3L+N+PE)	230V	CUBC-S5/250 230V-9h	PB011835
		400V	CUBC-S5/250 400V-6h	PB011836
		500V	CUBC-S5/250 500V-7h	PB011837
		690V	CUBC-S5/250 690V-5h	PB011838
		1000V	CUBC-S5/250 1000V-1h	PB011839
315 A	4 (3L+PEN)	230V	CUBC-S4/315 230V-9h	PB022970
		400V	CUBC-S4/315 400V-6h	PB022971
		500V	CUBC-S4/315 500V-7h	PB022972
		690V	CUBC-S4/315 690V-5h	PB022973
		1000V	CUBC-S4/315 1000V-1h	PB022974
	5 (3L+N+PE)	230V	CUBC-S5/315 230V-9h	PB022975
		400V	CUBC-S5/315 400V-6h	PB022976
		500V	CUBC-S5/315 500V-7h	PB022977
		690V	CUBC-S5/315 690V-5h	PB022978
		1000V	CUBC-S5/315 1000V-1h	PB022979
400 A	4 (3L+PEN)	230V	CUBC-S4/400 230V-9h	PB011840
		400V	CUBC-S4/400 400V-6h	PB011841
		500V	CUBC-S4/400 500V-7h	PB011842
		690V	CUBC-S4/400 690V-5h	PB011843
		1000V	CUBC-S4/400 1000V-1h	PB011844
	5 (3L+N+PE)	230V	CUBC-S5/400 230V-9h	PB011845
		400V	CUBC-S5/400 400V-6h	PB011846
		500V	CUBC-S5/400 500V-7h	PB011847
		690V	CUBC-S5/400 690V-5h	PB011848
		1000V	CUBC-S5/400 1000V-1h	PB011849

CUBC A - Line



Current	No. of Poles	Voltage	Type designation	Article No.
500 A	4 (3L+PEN)	230V	CUBC-S4/500 230V-9h	PA025395
		400V	CUBC-S4/500 400V-6h	PA025396
		500V	CUBC-S4/500 500V-7h	PA025397
		690V	CUBC-S4/500 690V-5h	PA025398
		1000V	CUBC-S4/500 1000V-1h	PA025399
	5 (3L+N+PE)	230V	CUBC-S5/500 230V-9h	PA025410
		400V	CUBC-S5/500 400V-6h	PA025411
		500V	CUBC-S5/500 500V-7h	PA025412
		690V	CUBC-S5/500 690V-5h	PA025413
		1000V	CUBC-S5/500 1000V-1h	PA025414
600 A	4 (3L+PEN)	230V	CUBC-S4/600 230V-9h	PA025400
		400V	CUBC-S4/600 400V-6h	PA025401
		500V	CUBC-S4/600 500V-7h	PA025402
		690V	CUBC-S4/600 690V-5h	PA025403
		1000V	CUBC-S4/600 1000V-1h	PA025404
	5 (3L+N+PE)	230V	CUBC-S5/600 230V-9h	PA025415
		400V	CUBC-S5/600 400V-6h	PA025416
		500V	CUBC-S5/600 500V-7h	PA025417
		690V	CUBC-S5/600 690V-5h	PA025418
		1000V	CUBC-S5/600 1000V-1h	PA025419

Connector Unit

CUCB

Technical Data	Unit	D-Line	C-Line		B - Line			A-Line	
Nominal current	A	160	200	250	250	315	400	500	600
Rated current	A	160	250	285	315	380	450	500	600
Rated voltage	V	690							
Rated ultimate short-circuit breaking capacity Icu (400V)	kA	36							
Thermo magnetic current setting range	A	160	200	250	250	315	400	500	600
Rated frequency	Hz	50 / 60							
Withstand voltage (1 Min / 50 Hz)	V	3'000							
Protection grade		IP 54							
Shock resistance		IK 07							
Ambient temperature	°C	-40 / +70							
Insulation resistance (phase to phase and phase to earth)	MOhm	> 500							
Comparative tracking index of the insert	CTI	> 600							
Weight 4-pol. (3L+PEN)	kg	25.1					45.6		
Weight 5-pol. (3L+N+PE)	kg	25.3					47.1		
Connection bolts for cable shoes		M10							
Max. cross section pilot cable, conductor (EN 60228 Class 1)	mm2	4							
Diameter of cable - normal other diameters on request	mm	20 - 70							

Technical modifications reserved

Structure

Locking system

A circuit breaker is installed in the CUCB connector unit. During every plug-in operation, the standardly installed pilot contacts in the connector transmit a signal to the circuit breaker.

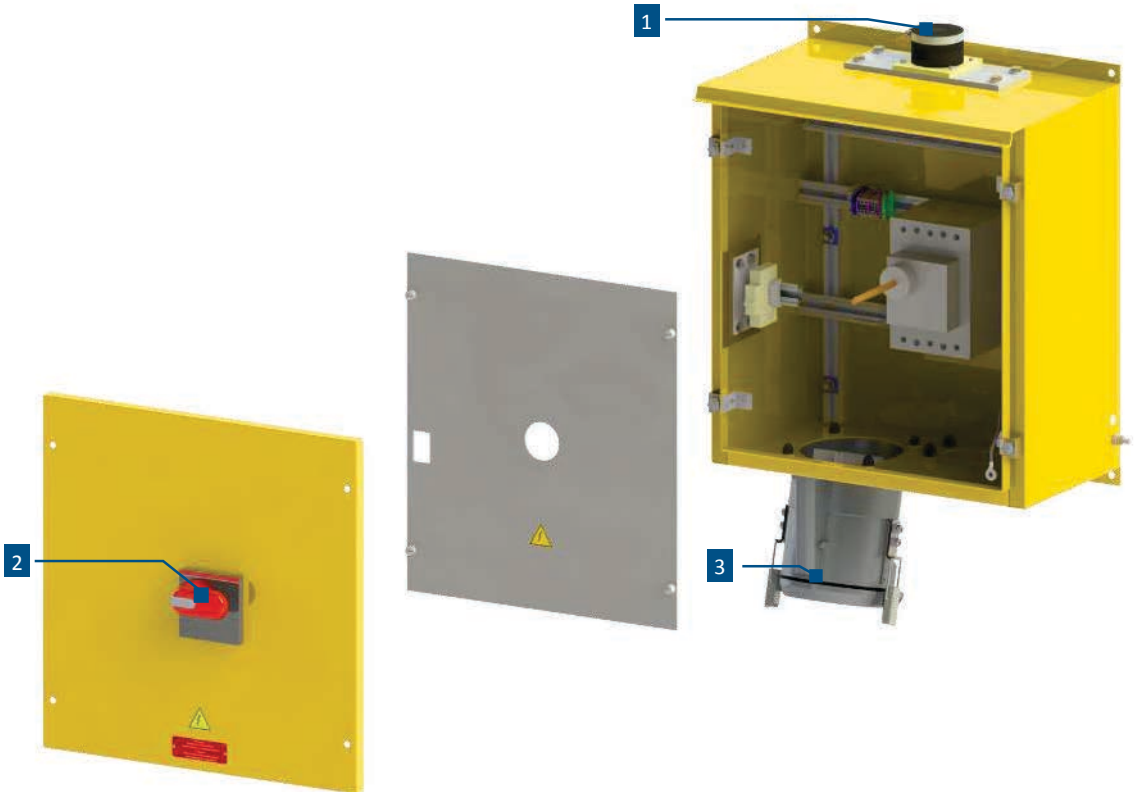
The main contacts in the connector unit can be manually closed via the switch afterwards. Thus the connection is under load.

In addition, the CUCB has an overload protection device, which safely disconnects the connection even in the event of damage to other connected devices.

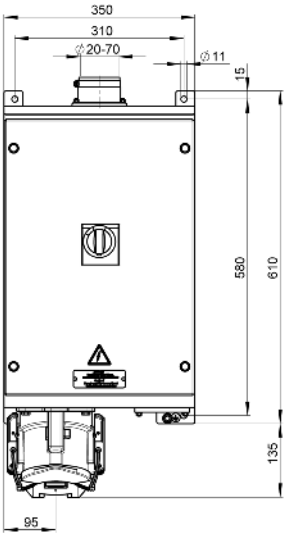
On request, a residual current circuit breaker „RCD“ is also available.

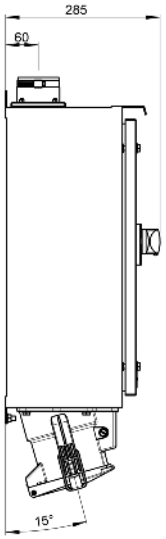
Construction of a CUCB connection box

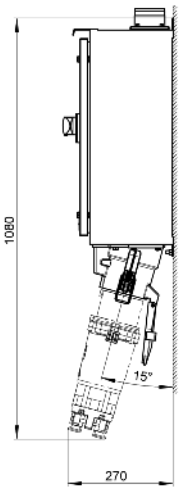
1. Cable gland
2. Switch
3. Panel Mounted Receptacle



CUCB D - Line

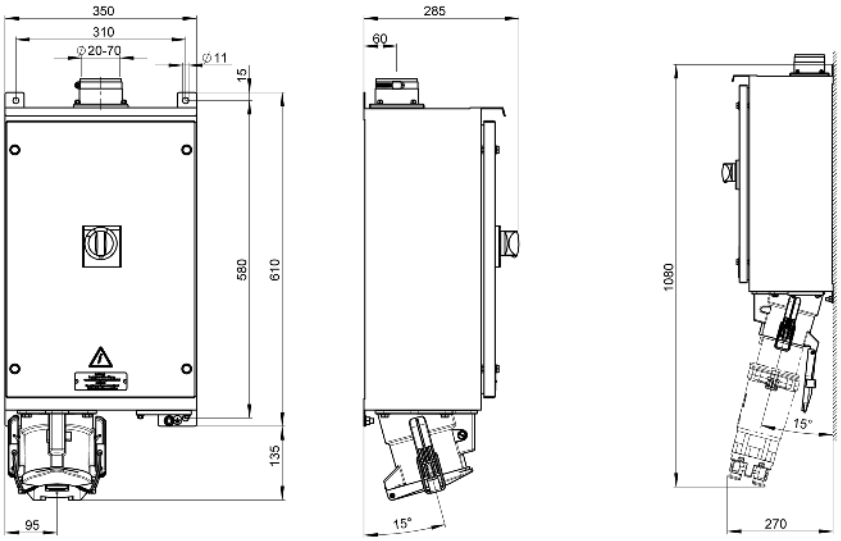






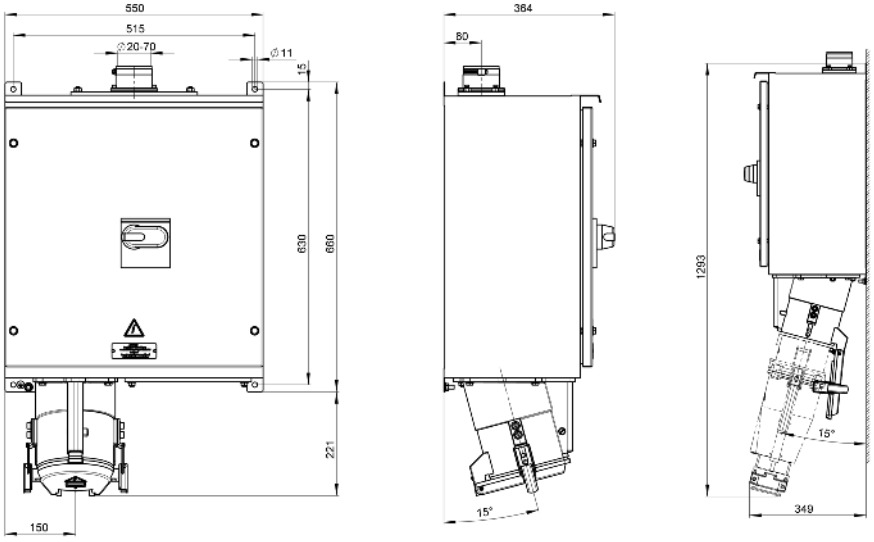
Current	No. of Poles	Voltage	Type designation	Article No.
160 A	4 (3L+PEN)	230V	CUCB-S4/160 230V-9h	PD025420
		400V	CUCB-S4/160 400V-6h	PD025421
		500V	CUCB-S4/160 500V-7h	PD025422
		690V	CUCB-S4/160 690V-5h	PD025423
	5 (3L+N+PE)	230V	CUCB-S5/160 230V-9h	PD025435
		400V	CUCB-S5/160 400V-6h	PD025436
		500V	CUCB-S5/160 500V-7h	PD025437
		690V	CUCB-S5/160 690V-5h	PD025438

CUCB C - Line



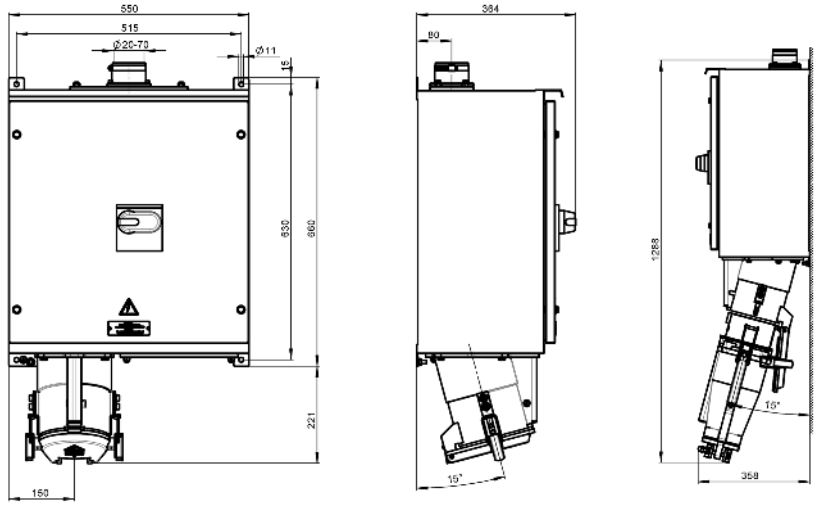
Current	No. of Poles	Voltage	Type designation	Article No.
200 A	4 (3L+PEN)	230V	CUCB-S4/200 230V-9h	PC017360
		400V	CUCB-S4/200 400V-6h	PC017361
		500V	CUCB-S4/200 500V-7h	PC017362
		690V	CUCB-S4/200 690V-5h	PC017363
	5 (3L+N+PE)	230V	CUCB-S5/200 400V-6h	PC017365
		400V	CUCB-S5/200 500V-7h	PC017366
		500V	CUCB-S5/200 690V-5h	PC017367
		690V	CUCB-S4/250 230V-9h	PC017368
250 A	4 (3L+PEN)	230V	CUCB-S4/250 500V-7h	PC022180
		400V	CUCB-S4/250 690V-5h	PC022181
		500V	CUCB-S5/250 230V-9h	PC022182
		690V	CUCB-S5/250 400V-6h	PC022183
	5 (3L+N+PE)	230V	CUCB-S5/250 690V-5h	PC022185
		400V	CUBC-S5/250 400V-6h	PC022186
		500V	CUBC-S5/250 500V-7h	PC022187
		690V	CUBC-S5/250 690V-5h	PC022188

CUCB B - Line



Current	No. of Poles	Voltage	Type designation	Article No.
250A	4 (3L+PEN)	230V	CUCB-S4/250 230V-9h	1PB07370
		400V	CUCB-S4/250 400V-6h	PB017371
		500V	CUCB-S4/250 500V-7h	PB017372
		690V	CUCB-S4/250 690V-5h	PB017373
	5 (3L+N+PE)	230V	CUCB-S5/250 400V-6h	PB017375
		400V	CUCB-S5/250 500V-7h	PB017376
		500V	CUCB-S5/250 690V-5h	PB017377
		690V	CUCB-S4/315 230V-9h	PB017378
315 A	4 (3L+PEN)	230V	CUCB-S4/315 500V-7h	PB022980
		400V	CUCB-S4/315 690V-5h	PB022981
		500V	CUCB-S5/315 230V-9h	PB022982
		690V	CUCB-S5/315 400V-6h	PB022983
	5 (3L+N+PE)	230V	CUCB-S5/315 690V-5h	PB022984
		400V	CUCB-S4/400 230V-9h	PB022985
		500V	CUCB-S4/400 400V-6h	PB022986
		690V	CUCB-S4/400 500V-7h	PB022987
400 A	4 (3L+PEN)	230V	CUCB-S5/400 230V-9h	PB017380
		400V	CUCB-S5/400 400V-6h	PB017381
		500V	CUCB-S5/400 500V-7h	PB017382
		690V	CUCB-S5/400 690V-5h	PB017383
	5 (3L+N+PE)	230V	CUBC-S5/400 230V-9h	PB017385
		400V	CUBC-S5/400 400V-6h	PB017386
		500V	CUBC-S5/400 500V-7h	PB017387
		690V	CUBC-S5/400 690V-5h	PB017388

CUCB A - Line



Current	No. of Poles	Voltage	Type designation	Article No.
500 A	4 (3L+PEN)	230V	CUCB-S4/500 230V-9h	PA025425
		400V	CUCB-S4/500 400V-6h	PA025426
		500V	CUCB-S4/500 500V-7h	PA025427
		690V	CUCB-S4/500 690V-5h	PA025428
	5 (3L+N+PE)	230V	CUCB-S5/500 230V-9h	PA025440
		400V	CUCB-S5/500 400V-6h	PA025441
		500V	CUCB-S5/500 500V-7h	PA025442
		690V	CUCB-S5/500 690V-5h	PA025443
600 A	4 (3L+PEN)	230V	CUCB-S4/600 230V-9h	PA025430
		400V	CUCB-S4/600 400V-6h	PA025431
		500V	CUCB-S4/600 500V-7h	PA025432
		690V	CUCB-S4/600 690V-5h	PA025433
	5 (3L+N+PE)	230V	CUCB-S5/600 230V-9h	PA025445
		400V	CUCB-S5/600 400V-6h	PA025446
		500V	CUCB-S5/600 500V-7h	PA025447
		690V	CUCB-S5/600 690V-5h	PA025448

Customized Solutions

Special designs upon request

CUBC for special applications

The project - specific connector unit CUBC was designed for a tunnel construction application on customer request.
Several machines could be connected at the same time and the workload was reduced to a minimum.

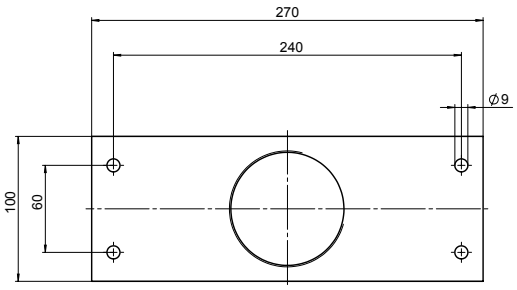
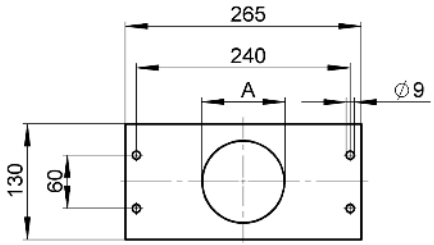
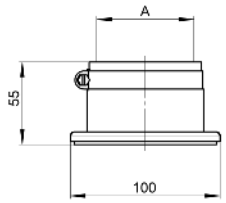
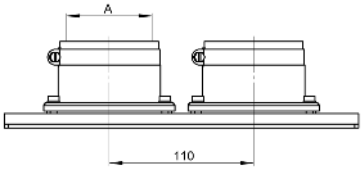
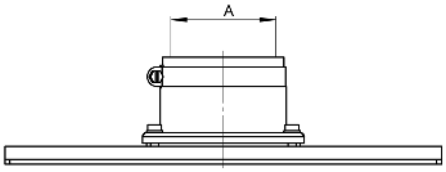
CUMI with CEE connectors

In cooperation with renowned manufacturers of CEE connectors, Rauscher & Stoecklin AG develops solutions that go beyond the normal portfolio.

Connector unit 2 in 1

In order to make optimum use of limited space conditions, a connection box has been designed on request which takes over the function of two connector units.

Options

Description	Image	A	Weight	Article No.
Seawater resistant connector unit				On request
Cover plate for B- and A-Line		1xM64x2	0.50 kg	On request
		1xM80x2	0.46 kg	On request
		1xM94x2	0.60 kg	On request
Cover plate with 1 introduction clip for C- and D-Line		1x Ø70	0.31 kg	On request
Cover plate including two cable entry sleeves for B- and A-Line		2x Ø70	1.18 kg	On request
Cover plate with 1 introduction clip for B- and A-Line		1x Ø70	0.85 kg	On request

Technical modifications reserved

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