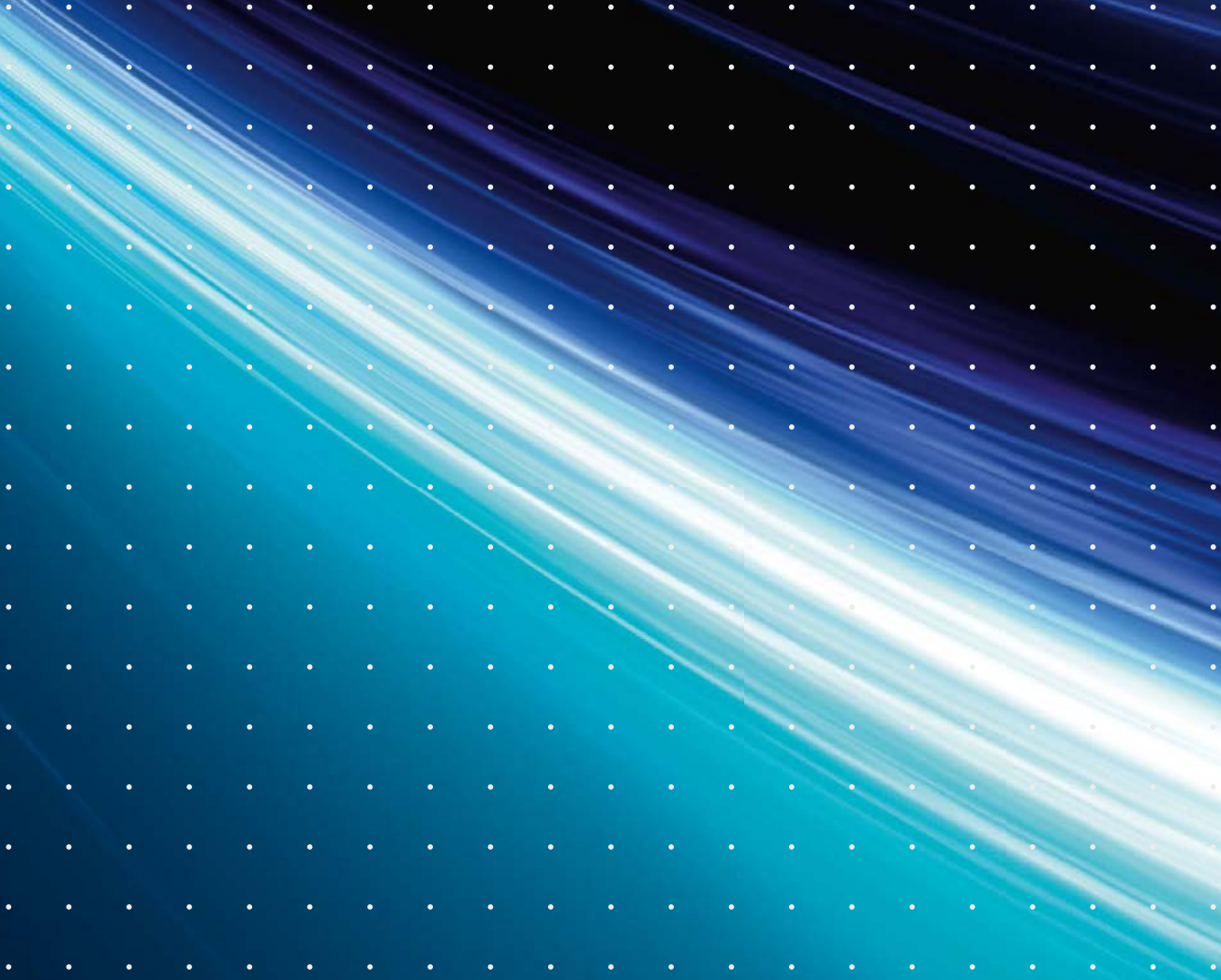


wöhner

# MANUAL

# 2019







# INNOVATION IS OUR POWER.

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**Wöhner develops system solutions  
for the electro-technical market.**

For over 90 years, the Wöhner name has been synonymous with impressive technical achievements and innovations. Today, the Wöhner Group is established worldwide as a specialist for international fuse and busbar systems in the field of power distribution, control technology and renewable energies. Innovations, short response times and the best possible customer service are the factors which enable us to compete in the international market. To help us meet these challenges, we are investing worldwide and continuously searching for skilled employees.



Wöhner offers in excess of 2400 different products.  
 The naming structure consists of a combination of basic system  
 and product family names. The individual products  
 can be used for one or more systems.

## BASIC SYSTEMS



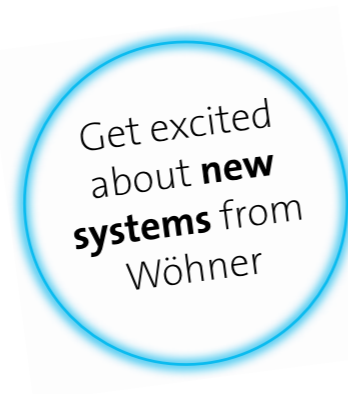
**CrossBoard®**



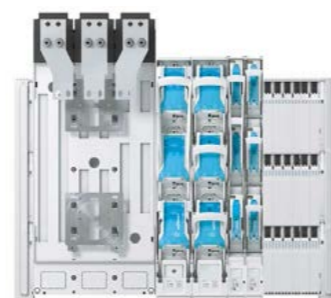
**Panel**



**30Compact**



**60Classic**



**185Power**

## PRODUCT FAMILY



**AMBUS®**

Busbar mounted fuse-holder



**BROOME10®**

Power supply unit



**CAPUS®**

Switch-disconnector



**CRITO®**

Connection terminal plate



**CUSTO®**

Busbar mounted fuse-base



**EQUES®**

Busbar adapter



**MOTUS®**

Hybrid motor starter



**OMUS®**

Hybrid switch



**QUADRON®**

NH busbar mounted fuse-switch-disconnector



**SECUR®**

D0 switch-disconnector with fuses

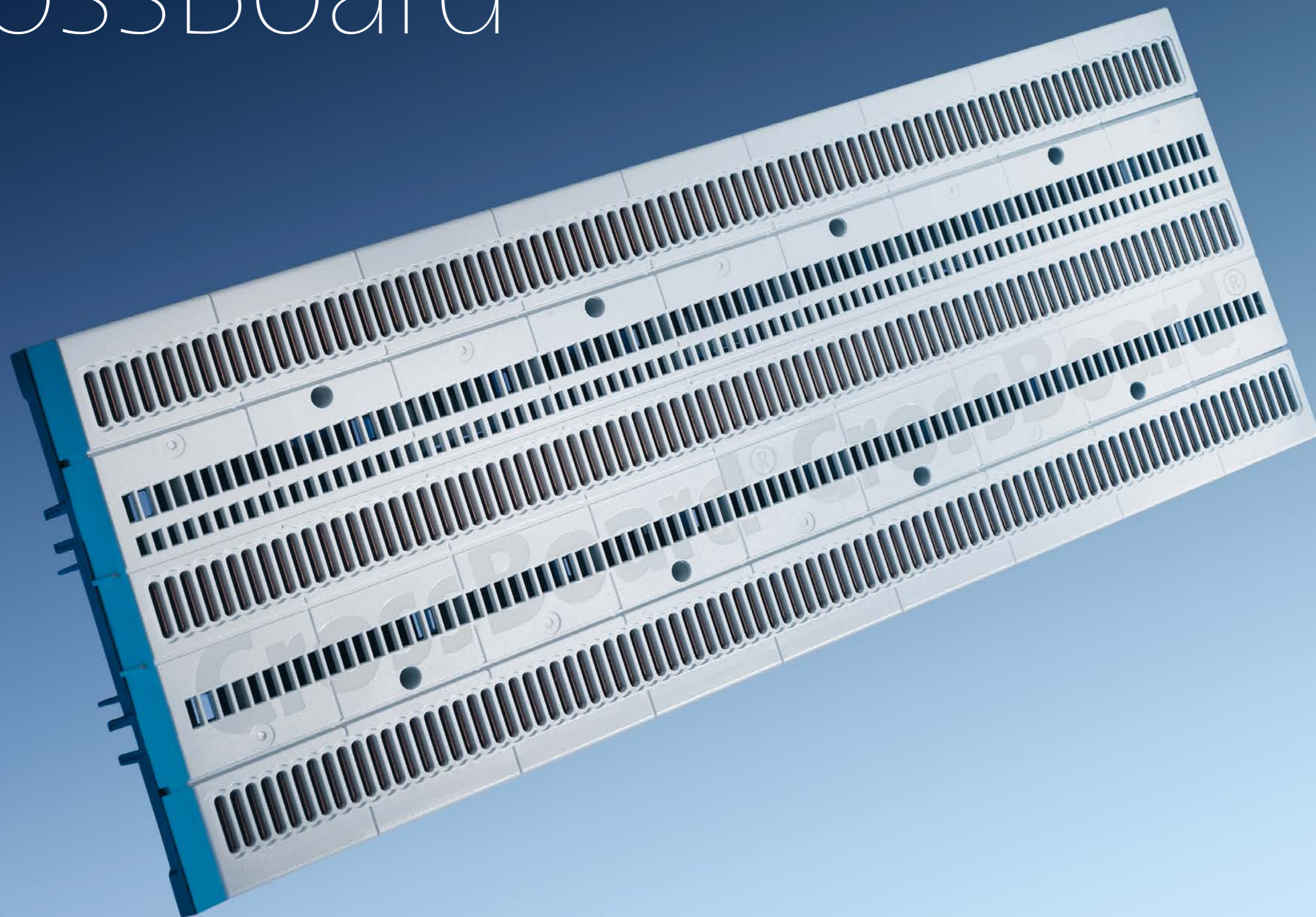


**TRITON®**

Panel mounted fuse-base

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# CrossBoard®



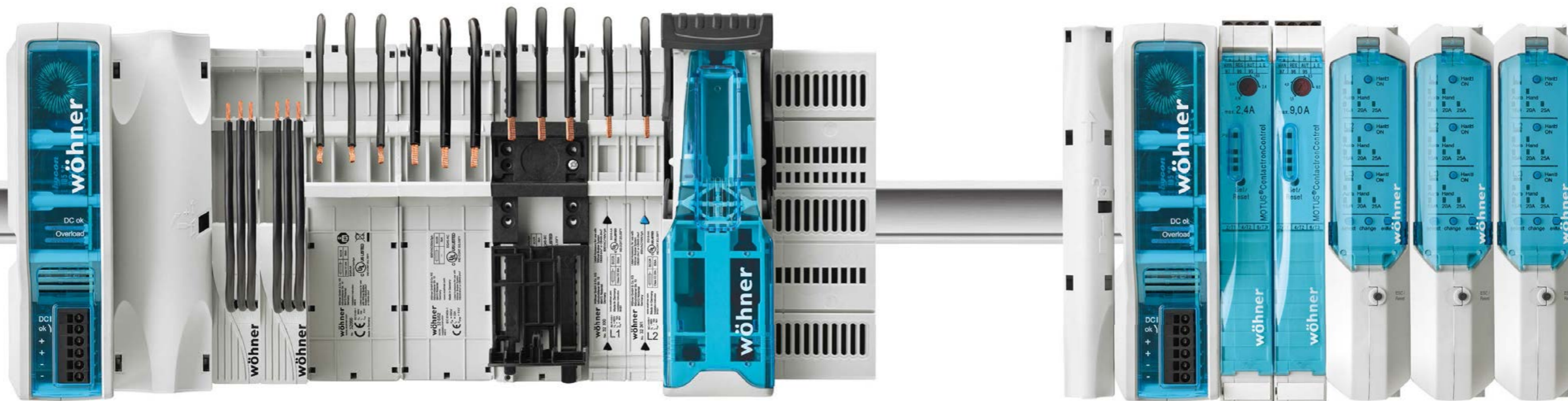
POWER DISTRIBUTION SYSTEM

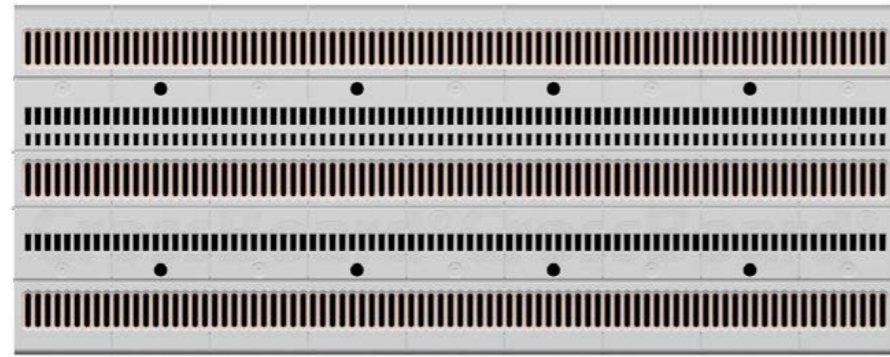
# CrossBoard®

## CrossBoard® – the global basic system

Tool-free mounting combined with outstanding safety thanks to integrated touch-safe protection make CrossBoard® by Wöhner the ideal system solution for power distribution equipment up to 125 A. The user can quickly and easily snap components onto the global basic system. The feeding of the system can be achieved via connection modules or the NH fuse-switch-disconnector size 000. CrossBoard® is suitable mainly for applications in machine tool and plant engineering.

The modular structure ensures that the systems are clearly structured and, when necessary, easy to change or expand. Motors of up to 4 kW can be supplied directly from the CrossBoard® using the MOTUS® hybrid motor starter. The OMUS® hybrid switch is available for resistive loads with its low power dissipation and high life expectancy thanks to hybrid switch technology. The power supply for supplying the devices with control voltage can be integrated directly on the CrossBoard®.





### CrossBoard®

- Connection and mounting platform for all components.
- rated current 125 A
  - equipment width: 225 or 405 mm
  - height 160 mm
  - short-circuit capacity I<sub>pk</sub>=25 kA
  - rated voltage: 690 V AC / 600 V DC (IEC) 600 V AC / 600 V DC (UL)
  - UL listed



### CRITO® CrossBoard

- Connection modules for CrossBoard®. Particularly simple, safe and convenient mounting.
- rated current: 80 A or 125 A
  - equipment width: 22.5 or 45 mm
  - connection cables: 1.5 - 16 mm<sup>2</sup> or 6 - 50 mm<sup>2</sup>
  - equipment width 22.5 mm with SnapLock technology for tool-free mounting of cables with CRITO® 22.5 mm
  - UL listed



### EQUES® CrossBoard

- The EQUES® universal adapter can be used to mount measuring and monitoring relays.
- rated current 16 A
  - equipment width 22.5 mm
  - connection cross-section 2.5 mm<sup>2</sup>
  - for 1- to 3- pole devices
  - fuse compartment for 10x38 Class CC fuses up to max. 16 A
  - UL listed



### EQUES® CrossBoard

- Adapter of 18 mm width, suitable for mounting miniature circuit breakers from various manufacturers.
- rated current: 16 A or 63 A
  - equipment width 18 mm
  - 1 fixed mounting rail
  - connection cables: 2.5 mm<sup>2</sup> or 10 mm<sup>2</sup>
  - can be combined into 1- to 4-pole adapters via accessories
  - UL listed



### EQUES® CrossBoard

- Adapter for mounting motor protection devices with a fixed DIN rail.
- rated current up to 32 A
  - equipment width 45 mm
  - connection cables: 2.5 mm<sup>2</sup> or 6 mm<sup>2</sup>
  - UL listed



### EQUES® CrossBoard

- The EQUES®CrossBoard adapters are available for simple mounting of motor starter combinations from various manufacturers.
- rated current up to 45 A
  - equipment width 45 mm
  - adjustable mounting rail
  - connection cables: 2.5 mm<sup>2</sup>, 4 mm<sup>2</sup>, 6 mm<sup>2</sup> or 10 mm<sup>2</sup>
  - accessories for mounting of contactors
  - UL listed



### EQUES® CrossBoard

- Adapter, 90 mm wide, to accept circuit breakers of different manufacturers.
- rated current 160 A
  - equipment width 90 mm
  - fixing adjustable to the circuit breaker
  - tool-free mounting of the adapter
  - UL listed



### OMUS® CrossBoard

- Hybrid switch for switching resistive loads. The hybrid switch technology minimises power dissipation.
- continuous current up to 25 A
  - equipment width 36 mm
  - 4 integrated functions: energy supply, fuse protection, monitoring and switching
  - 3-pole or 1-pole switching
  - UL listed



### MOTUS® CrossBoard

- Hybrid motor starter with integrated functions: direct and reversing starter, overload protection and emergency stop function. Significantly reduced space requirements and wiring costs.
- 3 design versions: up to 0.6 A, up to 2.4 A and up to 9 A
  - equipment width 22.5 mm
  - hybrid switch technology
  - up to 30 mil. switching cycles
  - UL listed



### BROOME10® CrossBoard

- Power supply for direct connection on the CrossBoard®.
- output voltage 24 Vdc
  - output current 10 A
  - equipment width 45 mm
  - no back-up fuse required
  - series and parallel connection to expand the current and voltage range
  - UL listed



### QUADRON® CrossBoard

- NH fuse-switch-disconnector size 000 with only 49.5 mm equipment width. For feeding the CrossBoard® or a fused tap.
- rated current 125 A
  - for NH fuse-links size 000
  - equipment width 49.5 mm
  - box terminals 6 - 50 mm<sup>2</sup>
  - connection at top and bottom
  - utilisation category AC 22B, AC 21B

## CrossBoard® - Basic systems

3-pole up to 125 A



### CrossBoard® power distribution system, touch-safe protected with CrossLink® interface

Type	Rated current	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
CrossBoard®225	125 A	225	160	1	79.8	06	11225
CrossBoard®405		405		1	137.2	06	11405



### CRITO®CrossBoard connection module, 3-pole, with SnapLock connection technology, cover cap and CrossLink® interface

Type	For use up to max.	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
with integrated spring terminals 1.5 - 16 mm <sup>2</sup> , AWG 14 - 6	80 A	22.5	160	1	21.5	07	01592
with box terminals 6 - 50 mm <sup>2</sup> / AWG 10 - AWG 1	125 A	45	160	1	25.0	07	01593



### QUADRON®CrossBoard fuse-switch-disconnector, size 000, with CrossLink® interface

Type	Rated current	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
box terminal	125 A	49.5	173	1	41.5	09	33800



### BROOME10®CrossBoard power supply, with CrossLink® interface

Type	Nominal output current	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
24 V DC, with push-in terminals	10 A	45	160	1	71.8	21	36200

parallel connection for increased current and series connection for increased voltage possible



## MOTUS®CrossBoard - OMUS®CrossBoard

Hybrid switch for switching of inductive and resistive loads



### MOTUS®CrossBoard hybrid motor starter, 3-pole, with reversing function and CrossLink® interface

Type	Rated current	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
electronic unit 0.075 - 0.6 A direct and reversing starter	0.6 A	22.5	160	1	50.9	21	36109
electronic unit 0.18 - 2.4 A direct and reversing starter	2.4 A			1	50.7	21	36110
electronic unit 1.5 - 9 A direct and reversing starter	9 A			1	51.4	21	36111

### Replacement fuse, for MOTUS®CrossBoard

Type	Pack size	Weight kg/100 u.	PG	Part No.
fuse 16 A for version 0.6 A and 2.4 A	3	2.8	21	31567
fuse 20 A for version 9 A	3	2.8	21	31568
fuse 30 A for version 9 A for motors with heavy-duty starting	3	2.8	21	31569



### OMUS®CrossBoard hybrid switch, 3- or 1-pole switchable, for resistive loads, with CrossLink® interface

Type	Rated current	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
electronic unit, 25 A (IEC)	25 A	36	160	1	55.2	21	36154
electronic unit, 20 A (UL)	20 A			1	55.2	21	36159

supplied with both load and control plug

### Replacement component, for OMUS®CrossBoard

Type	Pack size	Weight kg/100 u.	PG	Part No.
3-pole load plug with spring terminals	1	1.5	21	36916
3-pole load plug with screw terminals	1	1.4	21	36918
12-pole control plug with spring terminals	1	0.6	21	36917

### Replacement fuse, for OMUS®CrossBoard

Type	Pack size	Weight kg/100 u.	PG	Part No.
cylindr. fuse link 32 A	10	0.6	22	31189
cylindr. fuse link 30 A, time delay	10	0.8	22	31252



## EQUES®CrossBoard - Adapters 16 A - 63 A

1-pole, 3-pole



### EQUES®CrossBoard adapter and component support, 1-pole, for MCBs, with CrossLink® interface

Type	Rated current	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
phase L1, 1 fixed mounting rail, with leads AWG 14 (2.5 mm <sup>2</sup> )	16 A	18	160	6	6.0	05	<b>32300</b>
phase L2, 1 fixed mounting rail, with leads AWG 14 (2.5 mm <sup>2</sup> )	16 A	18	160	6	6.0	05	<b>32301</b>
phase L3, 1 fixed mounting rail, with leads AWG 14 (2.5 mm <sup>2</sup> )	16 A	18	160	6	6.0	05	<b>32302</b>
phase L1, 1 fixed mounting rail, with leads AWG 8 (10 mm <sup>2</sup> )	63 A	18	160	6	6.6	05	<b>32307</b>
phase L2, 1 fixed mounting rail, with leads AWG 8 (10 mm <sup>2</sup> )	63 A	18	160	6	6.6	05	<b>32308</b>
phase L3, 1 fixed mounting rail, with leads AWG 8 (10 mm <sup>2</sup> )	63 A	18	160	6	6.6	05	<b>32309</b>
without electrical connection, 1 fixed mounting rail		18	160	6	3.3	05	<b>32311</b>



### EQUES®CrossBoard adapter with fuse-carrier 16 A, with leads AWG 14 (2,5 mm<sup>2</sup>), with CrossLink® Interface

Type	Rated current	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
1 fixed mounting rail, with fuse-carrier 10x38 / Class CC	16 A	22.5	160	1	12.9	05	<b>36009</b>



## EQUES®CrossBoard - Adapters 16 A - 160 A

1-pole, 3-pole



### EQUES®CrossBoard adapter, basic version, with CrossLink® interface

Type	Rated current	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
1 fixed mounting rail, with leads AWG 14 (2.5 mm <sup>2</sup> )	16 A	45	160	1	12.4	05	<b>32666</b>
1 fixed mounting rail, with leads AWG 10 (6 mm <sup>2</sup> )	32 A			1	14.0	05	<b>32682</b>



### EQUES®CrossBoard adapter and component support, comfort version, with CrossLink® interface

Type	Rated current	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
1 adjustable mounting rail, with leads AWG 14 (2.5 mm <sup>2</sup> )	16 A	45	160	1	14.0	05	<b>32668</b>
1 adjustable mounting rail, with leads 160 mm long AWG 14 (2.5 mm <sup>2</sup> ), for devices with spring terminal technology	16 A			1	10.6	05	<b>32669</b>
1 adjustable mounting rail, with leads AWG 14 (2.5 mm <sup>2</sup> )	25 A			1	14.5	05	<b>32676</b>
1 adjustable mounting rail, with leads AWG 10 (6 mm <sup>2</sup> )	32 A			1	15.6	05	<b>32684</b>
1 adjustable mounting rail, with leads 160 mm long AWG 10 (6 mm <sup>2</sup> ), for devices with spring terminal technology	32 A			1	12.4	05	<b>32686</b>
1 adjustable mounting rail, with leads AWG 8 (10 mm <sup>2</sup> )	45 A			1	18.0	05	<b>32692</b>
without electrical connection, 1 adjustable mounting rail				9	9.0	05	<b>32665</b>

### Extension component, for adapter comfort version

Article	Type	Width	Pack size	Weight kg/100 u.	PG	Part No.
extension module for direct starters	40 mm extension	45	8	2.2	05	<b>32933</b>
extension set for reversing starters		90	4	7.3	05	<b>32934</b>

### Accessories, for adapter comfort version

mounting rail 45 mm	10	1.4	05	<b>32947</b>
positioning piece for Siemens S00 and S0	10	1.7	05	<b>32952</b>
positioning piece for Eaton PKZ	10	1.2	05	<b>32979</b>



### EQUES®CrossBoard Adapter, 160 A, with CrossLink® Interface

Article	Width	Pack size	Weight kg/100 u.	PG	Part No.
universal version up to 160 A, mounting distance 25 mm	90	1	50.0	05	<b>32690</b>
universal version up to 160 A, mounting distance 30 mm	90	1	50.0	05	<b>32691</b>



# 30Compact



30 MM / 60 MM BUSBAR SYSTEM

# 30 Compact

Compact busbar system for control technology and power distribution equipment up to 360 A

The 30Compact busbar system is the ideal solution for distribution boards with a rated current up to 360 A. The installation height of just 160 mm allows a particularly compact system to be realised. The 30Compact busbar system offers a clear space advantage compared to the

60Classic busbar system. Especially with smaller systems and their lower power requirements, valuable space can be saved within the cabinet. For such applications the 30Compact is the ideal system.



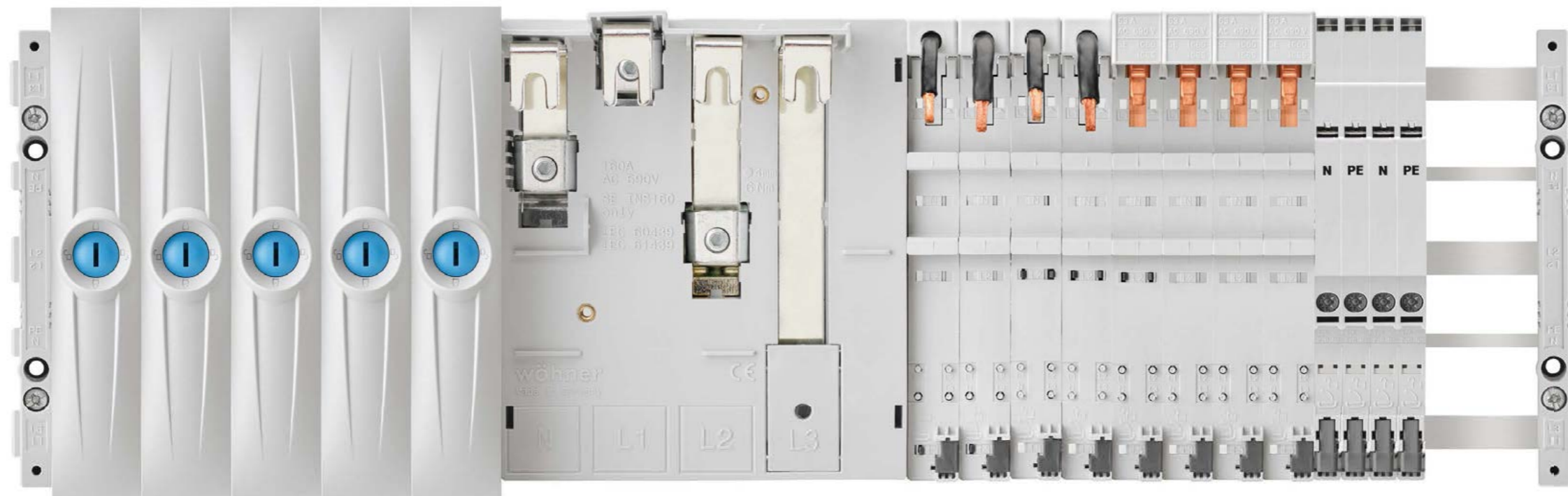
30 MM / 60 MM BUSBAR SYSTEM

# 30Compact

## 30Compact 5-pole – space-saving solution for distribution systems with miniature circuit breakers

In addition to the 3 phases, N and PE conductors can be arranged between the phase bars maintaining an installation height of just 160 mm. For distribution systems up to 200 A, 5-pole systems can be built in a space-saving manner with convenient connection.

For connection, 1-pole modules for conductors up to 120 mm<sup>2</sup> or adapters for switch-disconnectors are available. The adapters for mounting miniature circuit breakers up to 63 A can be variably adjusted to the tapping of the different phases and combined as required to form multipole adapters.



## Busbars 30Compact

- 12 x 5 mm for 3- and 5-pole applications
- 12 x 10 mm for 3-pole applications
- tin-plated versions
- proven load current capacity
- proven short-circuit capacity
- UL listed

## Busbar support 30Compact

- Busbar support for easy and safe installation. 3-pole with 60 mm distance between busbar centres, also for UL-compliant applications.
- 3- to 5- pole busbar support
- for 12 x 5 and 12 x 10 mm (3-pole only) busbars
- with end cover
- UL listed, in connection with 3-pole installation

## CRITO® 30Compact

- Connection module with spring terminals for 30Compact allows especially simple, safe and convenient mounting.
- rated current max. 80 A
- equipment width 20 mm
- connection area 1.5 - 16 mm<sup>2</sup>
- spring-loaded technology for tool-free conductor connection
- UL listed

## CRITO® 30Compact

- Connection terminal plates. Convenient terminals for drill-less connection technology. Integrated touch-safe protection, complies with air and creepage distances as per UL.
- rated current up to 480 A
- equipment width: 54 or 90 mm
- connection area: 6 - 50 mm<sup>2</sup> or 35 - 150 mm<sup>2</sup>
- lam. CU bars
- UL listed

## EQUES® 30Compact

- Adapter of 18 mm width, suitable for mounting miniature circuit breakers from various manufacturers.
- rated current: 32 A or 63 A
- equipment width 18 mm
- 1 fixed mounting rail
- connection cables: 6 or 10 mm<sup>2</sup>
- can be combined into 1- to 4-pole adapters via accessories
- side, PE and N extension modules are available

## EQUES® 30Compact

- The EQUES®30Compact busbar adapters are available for easy mounting of motor starter combinations from various manufacturers.
- rated current: up to 32 A or up to 63 A
- equipment width: 45 or 54 mm
- adjustable mounting rail
- connection cables: 6 or 10 mm<sup>2</sup>
- side-mounted module, 9 mm wide
- UL listed

## MOTUS® 30Compact

- Hybrid motor starter with integrated functions: direct and reversing starter, overload protection and emergency stop function. Significantly reduced space requirements and wiring costs.
- 3 design versions: up to 0.6 A, up to 2.4 A and up to 9 A
- equipment width 22.5 mm
- hybrid switch technology
- up to 30 mil. switching cycles
- UL listed

## OMUS® 30Compact

- Hybrid switch for switching resistive loads. The hybrid switch technology minimises power dissipation.
- continuous current up to 25 A
- equipment width 36 mm
- 4 integrated functions: energy supply, fuse protection, monitoring and switching
- 3-pole or 1-pole switching
- UL listed

## BROOME10® 30Compact

- Power supply for direct connection, including adapter with CrossLink®Technology.
- output voltage 24 Vdc
- output current 10 A
- equipment width 45 mm
- no back-up fuse required
- series and parallel connection to expand the current and voltage range
- UL listed

## CUSTO® 30Compact

- Busbar mounted fuse-base for D02 fuses.
- rated current 63 A
- equipment width 36 mm
- connection area 1.5 - 35 mm<sup>2</sup>

## QUADRON® 30Compact

- Extra-slim NH fuse-switch-disconnector for size NH 000 fuses with CrossLink®Technology. Tool-free mounting, spring-loaded contact and offering a particularly safe connection, changing the direction of outgoing connection is easy and safe.
- rated current 125 A
- for NH fuse-links size 000
- equipment width 49.5 mm
- box terminal 6 - 50 mm<sup>2</sup>
- utilisation category AC 22B, AC 21B
- connection at top and bottom

## 30Compact - Busbar systems

3-pole systems, system height 160 mm



### Busbar support, with end cover

For busbar	Pack size	Weight kg/100 u.	PG	Part No.
for busbar 3-pole 12 x 5 and 12 x 10	10	6.8	06	01272

### UL spacer

Type	Pack size	Weight kg/100 u.	PG	Part No.
suitable for 01272	10	5.2	06	01374



### BROOME10®30Compact power supply, with CrossLink®Technology

Type	Nominal output current	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
24 V DC, with push-in terminals	10 A	45	160	1	71.8	21	36201

parallel connection for increased current and series connection for increased voltage possible



### Copper busbar, flat busbar, tin-plated

Type	Length	Cross-section mm <sup>2</sup>	Pack size	Weight kg/100 u.	PG	Part No.
12 x 5	2400	60	1	128.4	06	01618
12 x 10	2400	120	1	257.0	06	01623

for current carrying capacity of the busbars visit [www.woehner.com](http://www.woehner.com); partial lengths on request

### Cover section, for 3-pole busbar systems

0.70 m long	2	42.0	06	01314
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### Mount for cover section, for 3-pole busbar systems

for 01314	10	1.8	06	01317
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### Busbar cover, 1 m long

for 12 x 5 busbar, 1 m long	10	3.2	06	78463
for 12 - 30 x 5 busbar, 1 m long	10	8.7	06	01244
for 12 - 30 x 10 busbar, 1 m long	10	10.1	06	01245



## CRITO®30Compact - Connection technology

1-pole and 3-pole, system height 160 mm



### Universal connection terminal, 1.5 to 120 mm<sup>2</sup>

For busbar	Connection min. - max.	Terminal space W x H	For use up to max.	Pack size	Weight kg/100 u.	PG	Part No.
flat busbars 5 mm	1.5 - 16 mm <sup>2</sup> , AWG 14 - 6	7 x 7	180 A	100	2.1	07	01284
	4 - 35 mm <sup>2</sup> , AWG 10 - 2	10 x 11	270 A	50	4.6	07	01285
	16 - 70 mm <sup>2</sup> , AWG 14 - 2/0	14 x 14	400 A	25	7.1	07	01287
flat busbars 10 mm	16 - 120 mm <sup>2</sup> , AWG 4 - MCM 250	17 x 15	440 A	25	10.6	07	01068
	1.5 - 16 mm <sup>2</sup> , AWG 14 - 6	7 x 7	180 A	100	2.3	07	01289
flat busbars 10 mm and section busbars	4 - 35 mm <sup>2</sup> , AWG 10 - 2	10 x 11	270 A	50	4.7	07	01290
	16 - 70 mm <sup>2</sup> , AWG 14 - 2/0	14 x 14	400 A	25	7.5	07	01292
	16 - 120 mm <sup>2</sup> , AWG 4 - MCM 250	17 x 15	440 A	25	10.9	07	01203

### Cover cap, for universal connection terminals

terminal cover, for 01284 and 01289	20	0.5	07	01093
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### Brace terminal, up to 150 mm<sup>2</sup>, for round conductors

For busbar	Connection min. - max.	Terminal space W x H	For use up to max.	Pack size	Weight kg/100 u.	PG	Part No.
12, 15, 20 x 5, 10	* 35 - 150 mm <sup>2</sup> , AWG 2 - MCM 300, lam. Cu. 15 - 20 x 5 - 10	20 x 22	480 A	6	10.2	07	01135

\* when using aluminium conductors, observe the maintenance instructions (see 8.2)

### Connection module, 3-pole, with spring terminals, with cover cap

For busbar	Connection	Width	For use up to max.	Pack size	Weight kg/100 u.	PG	Part No.
12 x 5, 10	with integrated spring terminals 1.5 - 16 mm <sup>2</sup> , AWG 14 - 6	20	80 A	6	16.0	07	01562

### Connection terminal plate, 3-pole, with cover cap

12 x 5, 10	6 - 50 mm <sup>2</sup> , AWG 10 - 2/0, lam. Cu. 7 - 9 x 4 - 10	54	300 A	1	20.6	07	01401
12 x 5, 10	35 - 150 mm <sup>2</sup> , AWG 2 - MCM 300, lam. Cu. 15 - 20 x 5 - 10	90	480 A	1	57.5	07	01165

### Busbar connecting terminal, for identical busbars

For busbar	System spacing	Width	For use up to max.	Pack size	Weight kg/100 u.	PG	Part No.
12, 15, 20 x 5, 10	5 - 10	55	520 A	12	19.2	07	01166
12, 15, 20 x 5, 10	100 - 110	150	520 A	3	52.4	07	01193

3 pieces required for a 3-pole connection, use 01317 and 01314 as cover



## EQUES®30Compact - MOTUS®30Compact - OMUS®30Compact

busbar adapter and hybrid switch for switching of inductive and resistive loads



### Busbar adapter with fuse carrier, 16 A, with removable top section, with leads AWG 14 (2.5 mm<sup>2</sup>)

Type	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
1 fixed mounting rail, with fuse-carrier 10x38 / Class CC	22.5	160	1	18.0	05	36001

### Busbar adapter, 32 A, with leads AWG 10 (6 mm<sup>2</sup>)

1 adjustable mounting rail	45	160	4	19.8	05	32590
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### Busbar adapter, 63 A, with leads AWG 8 (10 mm<sup>2</sup>)

1 adjustable mounting rail	54	160	4	21.8	05	32591
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### Busbar adapter, 160 A, connection to system at the top

for Siemens 3VA10, 11 and 3VT160	76	160	1	78.0	05	32661
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### Side-mounted module, for busbar adapters 32 A to 63 A

for 32590 and 32591	9	160	10	2.0	05	32912
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### Hybrid motor starter, MOTUS®30Compact, 3-pole, with reversing function and CrossLink®Technology

0.075 - 0.6 A direct and reversing starter	22.5	160	1	55.3	21	36101
0.18 - 2.4 A direct and reversing starter	22.5	160	1	55.8	21	36104
1.5 - 9 A direct and reversing starter	22.5	160	1	55.9	21	36107

### Replacement component, for MOTUS®30Compact

electronic unit 0.075 - 0.6 A direct and reversing starter	1	50.9	21	36109
electronic unit 0.18 - 2.4 A direct and reversing starter	1	50.7	21	36110
electronic unit 1.5 - 9 A direct and reversing starter	1	51.4	21	36111
busbar adapter base with CrossLink® interface	1	9.3	05	36113
fuse 16 A for version 0.6 A and 2.4 A	3	2.8	21	31567
fuse 20 A for version 9 A	3	2.8	21	31568
fuse 30 A for version 9 A for motors with heavy-duty starting	3	2.8	21	31569

### Hybrid switch, OMUS®30Compact, 3- or 1-pole switchable, for resistive loads, with CrossLink®Technology

Type	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
25 A (IEC)	36	160	1	62.8	21	36152
20 A (UL)	36	160	1	45.2	21	36157

### Replacement component, for OMUS®30Compact

electronic unit, 25 A (IEC)	1	55.2	21	36154
electronic unit, 20 A (UL)	1	55.2	21	36159
busbar adapter base with CrossLink® interface	1	10.6	05	36155
3-pole load plug with spring terminals	1	1.5	21	36916
3-pole load plug with screw terminals	1	1.4	21	36918
12-pole control plug with spring terminals	1	0.6	21	36917

### Replacement fuse-link, for OMUS®30Compact

cylindr. fuse link 32 A	10	0.6	22	31189
cylindr. fuse link 30 A, time delay	10	0.8	22	31252



UL certificate

## CUSTO®30Compact - QUADRON®30Compact

3-pole fuse-base and fuse-switch-disconnector, system height 160 mm



### D0 busbar mounted fuse-base, with touch-safe protection

Type	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
E 18 / 63 A	36	160	6	13.0	01	31554



### NH busbar mounted fuse-switch-disconnector, size 000, 3-pole, connection at top / bottom

Type	Rated current	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
box terminal	125 A	49.5	173	1	52.5	09	33801
box terminal	125 A	90	160	1	90.0	09	33416



### Pilot switch, for monitoring the disconnector lid position

Type	Pack size	Weight kg/100 u.	PG	Part No.
changeover 250 V AC / 5 A, 30V DC / 4 A	1	1.1	09	33156

suitable for disconnector 33416 only

### Accessories, busbar adapter base with CrossLink® interface

Type	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.	
busbar adapter base with CrossLink® interface	*	49.5	210	2	75.5	05	32619

\* spare part for 33801

### Side-mounted module, for NH busbar mounted fuse-switch-disconnector, size 000

Type	Width	Pack size	Weight kg/100 u.	PG	Part No.
attachable to both sides	3.5	10	2.2	09	33805

to extend the disconnector NH000 33801 to 53 mm wide



UL certificate

## 30Compact - Busbar systems 5-pole (N/PE)

5-pole systems, system height 160 mm



### Intermediate busbar brace, 2 mm wide

Type	Pack size	Weight	PG	Part No.
to increase the mechanical strength	10	1.5	06	<b>01376</b>

### Busbar support, with end cover

for busbars 5-pole 12 x 5 and 12 x 10, N + PE 12 x 5	10	6.8	06	<b>01272</b>
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### Copper busbar, flat busbars, tin-plated

busbar 12 x 5	1	128.4	06	<b>01618</b>
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for current carrying capacity of the busbars visit [www.woehner.com](http://www.woehner.com); partial lengths on request

### Cover section, for 3- to 5-pole busbar systems

700 x 160	2	42.0	06	<b>01314</b>
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### Mount for cover section, for 3- to 5-pole busbar systems

for 01314	10	1.8	06	<b>01317</b>
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### Base plate

700 x 160	2	26.7	06	<b>01371</b>
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### Connection set, 10 to 120 mm<sup>2</sup>, with cover cap

Type	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
connection set, 3-pole L1-L2-L3	90	160	1	60.0	07	<b>01370</b>
connection module N	30	160	1	21.5	07	<b>01364</b>
connection module PE	30	160	1	21.5	07	<b>01367</b>
connection set, 3-pole L1-L2-L3	60	160	1	51.5	07	<b>01426</b>
connection module PE + N	30	160	1	30.0	07	<b>01427</b>

### Busbar adapter, 160 A, 4-pole

for Schneider Electric INS 100/125/160, top connection to the system	141	160	1	64.0	05	<b>32640</b>
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## EQUES® 30Compact - Busbar adapters 32 A - 63 A

1-pole, for miniature circuit breakers, system height 160 mm



### Busbar adapter, 32 A, 1-pole, connection to system at the top

Type	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
1 fixed mounting rail	18	160	12	6.0	05	<b>32629</b>

connection adjustable to L<sub>1</sub>, L<sub>2</sub>, L<sub>3</sub> or N

### Busbar adapter, 63 A, 1-pole, connection to system at the top

1 fixed mounting rail	18	160	12	6.6	05	<b>32630</b>
1 fixed mounting rail, for Schneider Electric iC60, iC65 and C60	18	160	12	7.0	05	<b>32628</b>

connection adjustable to L<sub>1</sub>, L<sub>2</sub>, L<sub>3</sub> or N

### Busbar component support, without electrical connection

1 fixed mounting rail	18	160	6	3.3	05	<b>32631</b>
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### PE/N adapter module, with terminal 16 mm<sup>2</sup>

module PE	9	160	12	4.4	05	<b>32634</b>	
module N	*	9	160	12	4.4	05	<b>32632</b>

\* without own locking on the busbar system; must be plugged onto busbar adapter

### Side-mounted module, for adapters

for single pole busbar adapters	9	160	12	1.2	05	<b>32633</b>
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### Accessories

Type	Pack size	Weight kg/100 u.	PG	Part No.	
connector to create multipole adapters (100 pieces)	*	1	2.0	05	<b>31390</b>

\* for 50 device connections



UL certificate

# 60Classic





60 MM BUSBAR SYSTEM

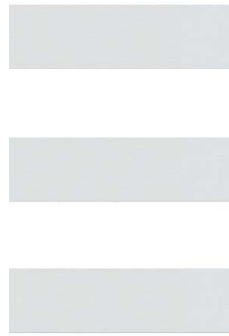
# 60Classic

## Busbar system for international use

Thanks to "UL listed" approval, numerous components meet the requirements for use in the USA and Canada. The system is complemented by a number of special components

for UL-compliant fuse systems. In addition, extensive documentation as well as planning and selection tools support the user during the specification phase.





## Busbars 60Classic

- 12, 15, 20, 30 x 5, 10 mm
- tin-plated versions
- proven load current capacity
- proven short-circuit capacity
- UL listed



## Double-T, triple-T, TCC section busbars 60Classic

- double-T section busbars in 500 mm<sup>2</sup> and 720 mm<sup>2</sup>
- triple-T section busbars with 1140 mm<sup>2</sup>
- TCC section busbars 1600 mm<sup>2</sup>
- UL listed double-T and triple-T bars



## Busbar support 60Classic

- Busbar support for easy and safe construction of systems with 60 mm distance between busbar centres.
- 1-, 2-, 3- and 4-pole versions
  - adjustable for busbars 12 x 5 - 30 x 10 mm
  - versions for double-T and triple-T bars
  - versions in connection with spacer or base plate
  - UL listed



## Busbar support 60Classic

- Busbar support for section busbars in the 60Classic system.
- 1- and 3-pole versions
  - versions for double-T, triple-T and TCC section busbars
  - UL listed double-T and triple-T bars



## CRITO®60Classic

- Connection module for 60Classic. Particularly simple, safe and convenient mounting.
- rated current 80 A
  - equipment width 20 mm
  - connection area 1.5 - 16 mm<sup>2</sup>
  - spring terminal technology for tool-free conductor connection
  - UL listed



## CRITO®60Classic

- Connection technology for many different conductor types up to 300 mm<sup>2</sup> cross-section and up to 32 mm wide lam. CU bars.
- rated current up to 800 A
  - equipment width: 54, 81, 135, 153, 204 mm
  - connection area 6 - 300 mm<sup>2</sup> with different conductor connection terminals
  - lam. CU bars
  - UL listed



## EQUES®60Classic

- The EQUES® busbar adapters are available for simple mounting of motor starter combinations from various manufacturers.
- rated current up to 80 A
  - equipment width from 45 to 90 mm
  - moveable DIN rails
  - connection cables: 2.5 - 10 mm<sup>2</sup> terminals up to 16 mm<sup>2</sup>
  - versions with CrossLink® Technology
  - UL listed



## EQUES®60Classic

- Busbar adapters for circuit breakers up to 630 A.
- 3- and 4-pole versions
  - versions for all commercially available switching devices
  - size aligned to the circuit breaker
  - easy and convenient mounting
  - integrated connection for the respective switching device
  - UL listed



## MOTUS® 60Classic

- Hybrid motor starter with integrated functions: direct and reversing starter, overload protection and emergency stop function. Significantly reduced space requirements and wiring costs.
- 3 design versions: up to 0.6 A, up to 2.4 A and up to 9 A
  - equipment width 22.5 mm
  - hybrid switch technology
  - up to 30 mil. switching cycles
  - UL listed



## OMUS® 60Classic

- Hybrid switch for switching resistive loads. The hybrid switch technology minimises power dissipation.
- continuous current up to 25 A
  - equipment width 36 mm
  - 4 integrated functions: energy supply, fuse protection, monitoring and switching
  - 3-pole or 1-pole switching
  - UL listed



## BROOME10® 60Classic

- Power supply for direct connection, including adapter with CrossLink® Technology.
- output voltage 24 Vdc
  - output current 10 A
  - equipment width 45 mm
  - no back-up fuse required
  - series and parallel connection to expand the current and voltage range
  - UL listed



## CUSTO® 60Classic

- 3-pole busbar mounted fuse-base for D and D0 fuses.
- covers also available for double widths
  - versions with integrated touch-safe protection
  - rated current up to 63 A
  - equipment width 27 - 57 mm
  - connection area: 1.5 - 25 mm<sup>2</sup> / 35 mm<sup>2</sup>
  - optional D-base gauge rings and screw-in gauge rings



### SECUR®60Classic PowerLiner

D0 busbar mounted switch-disconnector with proven drawer-type method for higher loads. All phase conductors are conveniently guided downwards.

- captive fuse carrier for commercial gauge rings
- optional side-mounted module, LED display and auxiliary switch
- 3-pole version



### SECUR®60Classic EasyLiner

Busbar mounted switch-disconnector for D0 fuses with SnapLock Technology. Flat design, especially suitable for use in distribution boards.

- captive fuse carrier for commercial gauge rings
- optional side-mounted module, LED display and auxiliary switch
- 3-pole version
- lockable



### AMBUS® 60Classic

Busbar mounted fuse-holder for Class CC or 10x38 fuses up to 32 A. Snap-on mounting on busbars, convenient connection with spring-type terminals on outgoing side.

- equipment width 27 mm
- 2-, 3- and 4-pole versions
- versions with LED display
- 1-pole version for photovoltaic applications
- UL listed



### CRITO®

Brace terminals for round or flat conductor. Simple and convenient connection due to overlap of the busbar and conductor.

- conductor connection possible from top and bottom
- looping possible
- for round conductors 35 - 300 mm<sup>2</sup>
- for flat conductors 50 - 100 mm wide
- UL listed



### QUADRON® 60Classic

NH fuse-switch-disconnector size 000 with only 49.5 mm equipment width with CrossLink®Technology.

- rated current 125 A
- for NH fuses size 000
- equipment width 49.5 mm
- box terminals 6 - 50 mm<sup>2</sup>
- utilisation category AC 22B, AC 21B
- connection at top and bottom



### QUADRON® 60Classic

NH busbar mounted fuse-switch-disconnectors up to 630 A with CrossLink®Technology. Spring-loaded for secure connection, tool-free installation, easily change outgoing direction.

- for size NH 000 up to 3 fuses
- versions with fuse monitoring
- various accessories for connection and shrouding



### QUADRON® 60Classic

Class J busbar mounted fuse-base with CrossLink®Technology. Spring-loaded for secure connection, tool-free installation, easily change outgoing direction.

- for Class J to 30 A, 60 A and 100 A as well as 200 A and 400 A fuses
- integrated fuse adaptor for ease of use
- UL listed



### QUADRON® 60Classic Speed

The switch-disconnector with NH fuses with CrossLink®Technology is the highlight. Its snap-action switch mechanism enables safe, operator-independent switching.

- tool-free mounting
- double break
- lockable in OFF position
- rotary drive versions or fuse monitoring

## 60Classic - Busbar systems

1-, 2-, 3-, 4-pole systems, system height 200 mm



### Universal busbar support, without end cover

Type	Busbar	Pack size	Weight kg/100 u.	PG	Part No.
2-pole with internal screw holes	12, 20, 30 x 5, 10	1	8.3	06	<b>01602</b>
3-pole with internal screw holes	12, 15, 20, 25, 30 x 5, 10	10	12.7	06	<b>01495</b>
3-pole with additional external screw holes		10	13.7	06	<b>01500</b>
4-pole with internal screw holes		10	26.6	06	<b>01485</b>

### UL busbar support, without end cover

3-pole, with internal screw holes	12, 20, 30 x 5, 10	10	14.0	06	<b>01508</b>
4-pole, with internal screw holes		10	19.7	06	<b>01357</b>

### UL spacer, for UL busbar supports

suitable for 01508	10	9.1	06	<b>01358</b>
suitable for 01357	10	13.1	06	<b>01359</b>

### Base plate, for UL busbar supports 01508, 01231, 01232

240 x 1100	2	73.7	06	<b>01518</b>
240 x 700	2	46.9	06	<b>01515</b>

### PE/N busbar support, incl. PE and N labels

Type	Busbar	Pack size	Weight kg/100 u.	PG	Part No.
2-pole, indiv. mountable	* 12, 15, 20, 25, 30 x 5, 10	10	9.5	06	<b>01356</b>
1-pole, indiv. mountable	12, 20, 30 x 5, 10	1	5.9	06	<b>01601</b>

\* stepped busbars



### BROOME10®60Classic power supply, with CrossLink®Technology

Type	Nominal output current	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
24 V DC, with push-in terminals	10 A	45	200	1	71.8	21	<b>36202</b>

parallel connection for increased current and series connection for increased voltage possible



## 60Classic - Busbar systems with section busbars

1-, 3-, 4-pole systems



### Busbar support, for double-T section, without end cover

Type	Pack size	Weight kg/100 u.	PG	Part No.
1-pole, to be attached to 01231 and individually mountable	4	13.0	06	<b>01116</b>
3-pole, with internal screw holes	3	59.1	06	<b>01231</b>

### Busbar support, for triple-T section, without end cover

1-pole, to be attached to 01232 and individually mountable	4	15.0	06	<b>01132</b>
3-pole, with internal screw holes	2	69.7	06	<b>01232</b>

### Busbar support, for TCC section, without end cover

3-pole, with internal screw holes	2	69.7	06	<b>01422</b>
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### End cover, for busbar support for section busbars

for busbar supports 01116 and 01132	4	1.8	06	<b>01373</b>
for busbar supports 01231 and 01232	4	4.8	06	<b>01234</b>
for busbar support 01422	4	5.3	06	<b>01425</b>



### Connection busbar support, without end cover

Type	Busbar	Pack size	Weight kg/100 u.	PG	Part No.
3-pole, with integrated terminals 1.5 - 16 mm <sup>2</sup>	12, 15, 20, 25, 30 x 5, 10	10	25.6	06	<b>01484</b>

### End cover, for universal busbar supports, to cover the busbar ends

Type	Pack size	Weight kg/100 u.	PG	Part No.
for busbar support 01356 and 01601	10	0.7	06	<b>01325</b>
for busbar support 01602	1	1.5	06	<b>01363</b>
for busbar supports 01484, 01495, 01500, 01508 and 01603	10	2.0	06	<b>01573</b>
for busbar supports 01357 and 01485, consists of 5 left and 5 right covers	5	5.6	06	<b>01131</b>



## 60Classic - Busbar systems

standard copper busbars and section busbars



### Copper busbar, flat, tin-plated

Type	Length	Cross-section mm <sup>2</sup>	Pack size	Weight kg/100 u.	PG	Part No.
busbar 12 x 5	2400	60	1	128.4	06	01618
busbar 15 x 5	2400	75	1	160.6	06	01619
busbar 20 x 5	2400	100	1	214.4	06	01620
busbar 25 x 5	2400	125	1	267.8	06	01621
busbar 30 x 5	2400	150	1	321.4	06	01622
busbar 12 x 10	2400	120	1	257.0	06	01623
busbar 20 x 10	3600	200	1	650.0	06	01140
busbar 20 x 10	2400	200	1	428.6	06	01624
busbar 30 x 10	3600	300	1	970.0	06	01204
busbar 30 x 10	2400	300	1	643.2	06	01625

for current carrying capacity of the busbars visit [www.woehner.com](http://www.woehner.com); partial lengths on request



### Section copper busbar, tin-plated

Type	Length	Cross-section mm <sup>2</sup>	Pack size	Weight kg/100 u.	PG	Part No.
double-T section busbar 500 mm <sup>2</sup>	3600	500	1	1596.0	06	01224
double-T section busbar 500 mm <sup>2</sup>	2400	500	1	1062.0	06	01609
double-T section busbar 720 mm <sup>2</sup>	3600	720	1	2334.0	06	01190
double-T section busbar 720 mm <sup>2</sup>	2400	720	1	1554.0	06	01608
triple-T section busbar 1140 mm <sup>2</sup>	3600	1140	1	3693.6	06	01227
triple-T section busbar 1140 mm <sup>2</sup>	2400	1140	1	2462.4	06	01187
TCC section busbar 1600 mm <sup>2</sup>	2400	1600	1	3416.0	06	01610

for current carrying capacity of the busbars visit [www.woehner.com](http://www.woehner.com); partial lengths on request

### Section copper busbar, plain

double-T section busbar 500 mm <sup>2</sup>	3600	500	1	1596.0	06	01223
double-T section busbar 500 mm <sup>2</sup>	2400	500	1	1060.0	06	01250
double-T section busbar 720 mm <sup>2</sup>	3600	720	1	2332.0	06	01229
double-T section busbar 720 mm <sup>2</sup>	2400	720	1	1556.0	06	01249

for current carrying capacity of the busbars visit [www.woehner.com](http://www.woehner.com); partial lengths on request



UL certificate

wöhner

## 60Classic - Covering systems

1-, 3- and 4-pole versions



### Busbar cover, for 1-pole busbars

Type	Pack size	Weight kg/100 u.	PG	Part no.
for 12 - 30 x 5 busbar, 1 m long	10	8.7	06	01244
for 12 - 30 x 10 busbar, 1 m long	10	10.1	06	01245
for double-T and triple-T section, 1m long	5	38.0	06	01252
for 12 x 5 busbar, 1 m long	10	3.2	06	78463

independent from system, for individual busbars

### Cover section, for 3-pole busbar systems

700 x 195	2	75.0	06	01025
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### Mount, for cover section for 3-pole busbar systems

depth 32 mm, for 01025	10	3.9	06	01026
depth 107 mm, for 01025, 01236, 01237, 01238	8	12.0	06	01320

snaps directly onto busbars 12, 15, 20, 25, 30 x 5, 10, double-T and triple-T section

### Holder set, for cover sections for 3-pole busbar systems

set consisting of left and right holder, for covers 01554, 01555 and 01417	1	18.0	07	01136
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### Cover section, for holder set for 3-pole busbar systems

front mounted, 1.10 m long, for holder 01136	1	45.1	07	01554
top / bottom, 1.10 m long, for holders 01136 or 01137	2	27.1	07	01555
top / bottom, slotted, 1.10 m long, for holders 01136 or 01137	2	23.0	07	01417

snaps directly onto busbars 12, 15, 20, 25, 30 x 5, 10, double-T and triple-T section

### Holder set, for cover sections for 4-pole busbar systems

set consisting of left and right holder, for covers 01599, 01555 and 01417	1	21.0	07	01137
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### Cover section, for holder set for 4-pole busbar systems

front mounted, 1.10 m long, for holder 01137	1	58.0	07	01599
top / bottom, 1.10 m long, for holders 01136 or 01137	2	27.1	07	01555
top / bottom, slotted, 1.10 m long, for holders 01136 or 01137	2	23.0	07	01417

### Compartment section, for adjusting the installation depth for double-T and triple-T section busbar systems

48 mm deep, 2.40 m long	1	70.0	06	01236
76 mm deep, 2.40 m long	1	105.0	06	01237
106 mm deep, 2.40 m long	1	140.0	06	01238



UL certificate

wöhner

## CRITO® 60Classic - Connection technology

3- and 4-pole versions



### Connection busbar support, 3-pole, for 12, 15, 20, 25, 30 x 5, 10 busbars, with cover cap

Type	For use up to max.	Width	Pack size	Weight kg/100 u.	PG	Part No.
3-pole, with integrated terminals 1.5 - 16 mm <sup>2</sup>	80 A	20	10	25.6	06	<b>01484</b>

### Connection module, 3-pole, for 12, 15, 20, 25, 30 x 5, 10 busbars and section busbars, with spring terminals, with cover cap

Type	For use up to max.	Width	Pack size	Weight kg/100 u.	PG	Part No.
with integrated spring terminals 1.5 - 16 mm <sup>2</sup> , AWG 14 - 6	80 A	20	8	18.1	07	<b>01563</b>

### Connection terminal plate, 3-pole, for 12 x 5 - 30 x 10 busbars and section busbars, with cover cap

Type	For use up to max.	Width	Pack size	Weight kg/100 u.	PG	Part No.
6 - 50 mm <sup>2</sup> , AWG 10 - 2/0, lam. Cu. 7 - 9 x 4 - 10	300 A	54	1	45.1	07	<b>01240</b>
35 - 120 mm <sup>2</sup> , AWG 2 - MCM 250, lam. Cu. 9 - 15.5 x 2,4 - 10	440 A	81	1	53.5	07	<b>01243</b>

### Accessory, single cover for terminals

Type	Pack size	Weight kg/100 u.	PG	Part No.
for terminal plate 01240	3	0.4	07	<b>01300</b>
for terminal plate 01243	3	0.5	07	<b>01301</b>



### Connection terminal plate, 3-pole, for 20 x 5 - 30 x 10 and section busbars, with cover cap

Type	For use up to max.	Width	Pack size	Weight kg/100 u.	PG	Part No.
95 - 185 mm <sup>2</sup>	* 460 A	135	1	132.2	07	<b>01199</b>
95 - 300 mm <sup>2</sup>	* 560 A	135	1	165.7	07	<b>01754</b>
lam. Cu. 20 - 32 x 3 - 15	800 A	135	1	144.7	07	<b>01753</b>

\* when using aluminium conductors, observe the maintenance instructions (see 8.2)

### Connection set, 3-pole, for 20 x 5 - 30 x 10 and section busbars, without cover cap

Type	For use up to max.	Width	Pack size	Weight kg/100 u.	PG	Part No.
95 - 300 mm <sup>2</sup> , AWG 3/0 - MCM 600	* 560 A	153	1	155.5	07	<b>01537</b>
lam. Cu. 20 - 32 x 3 - 15	800 A	153	1	132.5	07	<b>01538</b>

\* when using aluminium conductors, observe the maintenance instructions (see 8.2)

### Connection set, 4-pole, for 20 x 5 - 30 x 10 and section busbars, without cover cap

Type	For use up to max.	Width	Pack size	Weight kg/100 u.	PG	Part No.
95 - 300 mm <sup>2</sup> , AWG 3/0 - MCM 600	* 560 A	204	1	210.0	07	<b>01147</b>
lam. Cu. 20 - 32 x 3 - 15	800 A	204	1	180.0	07	<b>01162</b>

\* when using aluminium conductors, observe the maintenance instructions (see 8.2)



## CRITO® - Conductor connection terminals

1-pole and covers



### Universal connection terminal, 1.5 mm<sup>2</sup> to 120 mm<sup>2</sup>

For busbar	Connection min. - max.	Terminal space W x H	For use up to max.	Pack size	Weight kg/100 u.	PG	Part No.
flat busbars 5 mm	1.5 - 16 mm <sup>2</sup> , AWG 14 - 6	7 x 7	180 A	100	2.1	07	<b>01284</b>
	4 - 35 mm <sup>2</sup> , AWG 10 - 2	10 x 11	270 A	50	4.6	07	<b>01285</b>
	16 - 70 mm <sup>2</sup> , AWG 14 - 2/0	14 x 14	400 A	25	7.1	07	<b>01287</b>
	16 - 120 mm <sup>2</sup> , AWG 4 - MCM 250	17 x 15	440 A	25	10.6	07	<b>01068</b>
flat busbars 10 mm	1.5 - 16 mm <sup>2</sup> , AWG 14 - 6	7 x 7	180 A	100	2.3	07	<b>01289</b>
	4 - 35 mm <sup>2</sup> , AWG 10 - 2	10 x 11	270 A	50	4.7	07	<b>01290</b>
flat busbars 10 mm and section busbars	16 - 70 mm <sup>2</sup> , AWG 14 - 2/0	14 x 14	400 A	25	7.5	07	<b>01292</b>
	16 - 120 mm <sup>2</sup> , AWG 4 - MCM 250	17 x 15	440 A	25	10.9	07	<b>01203</b>

### Cover cap, for universal connection terminals

Type	Pack size	Weight kg/100 u.	PG	Part No.
terminal cover, for 01284 and 01289	20	0.5	07	<b>01093</b>

### Brace terminal, up to 300 mm<sup>2</sup>, for round conductors

For busbar	Connection	For use up to max.	Pack size	Weight kg/100 u.	PG	Part No.
12, 15, 20 x 5, 10	* 35 - 150 mm <sup>2</sup> , AWG 2 - MCM 300, lam. Cu. 15 - 20 x 5 - 10	480 A	6	10.2	07	<b>01135</b>
20, 25, 30 x 5, 10 and section busbars	* Cu / Al 95 - 185 mm <sup>2</sup>	500 A	6	31.2	07	<b>01318</b>
20, 25, 30 x 5, 10 and section busbars	* Cu / Al 95 - 300 mm <sup>2</sup>	600 A	3	42.5	07	<b>01760</b>

\* when using aluminium conductors, observe the maintenance instructions (see 8.2)

### Brace terminal, 30 to 105 wide, for flat conductors

For busbar	Terminal space	End feed	Centre feed	Pack size	Weight kg/100 u.	PG	Part No.
20, 25, 30 x 5, 10 and section busbars	30 x 20	630 A	750 A	6	30.3	07	<b>01319</b>
	32 x 20	630 A	800 A	3	34.7	07	<b>01759</b>
30 x 10 and section busbars	55 x 10 - 28	1600 A	2000 A	3	50.0	07	<b>01069</b>
	68 x 10 - 28	1600 A	2000 A	3	63.0	07	<b>01070</b>
	105 x 10 - 28	1600 A	2800 A	3	84.0	07	<b>01071</b>

### Cover cap, 3-pole, can also be used as a reserve section cover

For busbar	W x H x D	Pack size	Weight kg/100 u.	PG	Part No.
12, 15, 20, 25, 30 x 5, 10 and section busbars	54 x 200 x 55	1	14.7	07	<b>01590</b>
12, 15, 20, 25, 30 x 5, 10 and section busbars	84 x 200 x 55	10	14.9	07	<b>01413</b>
20, 25, 30 x 5, 10 and section busbars	135 x 200 x 90	1	29.5	07	<b>01756</b>
12, 15, 20, 25, 30 x 5, 10 and section busbars	180 x 200 x 90	1	33.0	07	<b>01539</b>
12, 15, 20, 25, 30 x 5, 10 and section busbars	228 x 200 x 90	1	37.3	07	<b>01596</b>
12, 15, 20, 25, 30 x 5, 10 and section busbars	250 x 200 x 90	1	39.3	07	<b>01540</b>
20, 25, 30 x 5, 10 and section busbars	270 x 200 x 90	1	64.7	07	<b>01757</b>

### Cover cap, 4-pole, can also be used as a reserve section cover

For busbar	W x H x D	Pack size	Weight kg/100 u.	PG	Part No.
12, 15, 20, 25, 30 x 5, 10 and section busbars	228 x 260 x 90	1	45.0	07	<b>01597</b>



## CRITO® - Conductor connection terminals

1-pole



**Screw-type terminal**, attachable, for DIN 46234 cable lugs

Type	Terminal space	For use up to max.	Pack size	Weight kg/100 u.	PG	Part No.
flat busbars 5 mm	M5 x 8	360 A	25	4.8	07	<b>01747</b>
	M8 x 8	490 A	20	16.0	07	<b>01748</b>
	M10 x 10	630 A	6	35.8	07	<b>01749</b>
flat busbars 10 mm	M5 x 8	360 A	25	5.0	07	<b>01512</b>
12, 15, 20, 25, 30 x 10 and section busbars	M8 x 8	490 A	20	16.5	07	<b>01514</b>
	M10 x 10	630 A	6	36.2	07	<b>01047</b>

**Busbar connector**, for connection of flat busbars and laminated copper bar

Type	Terminal space	Pack size	Weight kg/100 u.	PG	Part No.
connection of busbar 25 wide with lam. Cu 20 wide	20	10	14.9	07	<b>01996</b>
connection of busbar 30 wide with lam. Cu 20 wide	20	10	16.2	07	<b>01997</b>
connection of busbar 30 wide with lam. Cu 30 wide	20	10	19.8	07	<b>01586</b>
connection of busbar 35 wide with lam. Cu 30 wide	20	10	21.5	07	<b>01587</b>
connection of busbar 40 wide with lam. Cu 20 wide	20	10	17.8	07	<b>01206</b>
connection of busbar 40 wide with lam. Cu 32 wide	20	6	27.6	07	<b>01616</b>

**Busbar connection terminals**, in longitudinal direction with wedge clamp terminal

Busbar	Round conductor min - max	flat conductor W x H	Pack size	Weight kg/100 u.	PG	Part No.
20 x 5, 10	120 - 240 mm <sup>2</sup>	21 x 4 - 20	3	11.0	07	<b>01201</b>
25 x 5	150 - 300 mm <sup>2</sup>	25 x 5 - 20	3	13.4	07	<b>01202</b>

**Busbar connecting terminal**, in longitudinal direction with brace terminal, for laminated copper bar

the terminal is able to connect flexible copper 32 x 10 in longitudinal direction	32 x 1 - 15	3	50.0	07	<b>01069</b>
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## CRITO® - Conductor connection terminals

1-pole profile terminals for flat conductors



**Profile terminal**, for double-T section busbars

Connection cross-section	End feed	Centre feed	terminal space W x H	Pack size	Weight kg/100 u.	PG	Part No.
320 - 800 mm <sup>2</sup>	1600 A	1600 A	41 x 20 - 42	3	67.0	07	<b>01185</b>
500 - 750 mm <sup>2</sup>	1600 A	1600 A	51 x 5 - 28	3	70.5	07	<b>01906</b>
600 - 900 mm <sup>2</sup>	1600 A	1600 A	64 x 5 - 28	3	84.0	07	<b>01907</b>
500 - 1000 mm <sup>2</sup>	1600 A	2000 A	51 x 20 - 42	3	73.5	07	<b>01936</b>
600 - 1200 mm <sup>2</sup>	1600 A	2000 A	64 x 20 - 42	3	85.9	07	<b>01911</b>
800 - 1600 mm <sup>2</sup>	1600 A	2500 A	81 x 20 - 42	3	101.1	07	<b>01934</b>
1000 - 2000 mm <sup>2</sup>	1600 A	2800 A	101 x 20 - 42	3	113.7	07	<b>01935</b>

for the connection of flat busbars and flexible copper busbars

**Profile terminal**, for triple-T section busbars

320 - 800 mm <sup>2</sup>	1600 A	1600 A	41 x 23 - 45	3	105.0	07	<b>01513</b>
500 - 1260 mm <sup>2</sup>	2000 A	2500 A	64 x 23 - 45	3	124.0	07	<b>01008</b>
1200 - 3600 mm <sup>2</sup>	2500 A	3200 A	101 x 23 - 45	3	172.7	07	<b>01186</b>

for the connection of flat busbars and flexible copper busbars

**Brace terminal**, for busbars 30 x 10 and section busbars

500 - 1000 mm <sup>2</sup>	1600 A	2000 A	55 x 10 - 28	3	50.0	07	<b>01069</b>
600 - 1200 mm <sup>2</sup>	1600 A	2000 A	68 x 10 - 28	3	63.0	07	<b>01070</b>
1000 - 2000 mm <sup>2</sup>	1600 A	2800 A	105 x 10 - 28	3	84.0	07	<b>01071</b>

for the connection of flat busbars and flexible copper busbars

**Connection terminal**

Busbar	For use up to max.	Connection	Pack size	Weight kg/100 u.	PG	Part No.
30 x 10 and section busbars	630 A	95 - 300 mm <sup>2</sup>	3	85.7	07	<b>01094</b>
30 x 10 and section busbars	1250 A	40 x 25	3	81.7	07	<b>01092</b>

**Flexible copper busbar, plain, insulated, length 2 m**

Dimensions (number of laminates x width x thickness)	current at 30K	current at 50K	Cross-section mm <sup>2</sup>	Pack size	Weight kg/100 u.	PG	Part No.
10 x 40 x 1	774 A	1053 A	400	1	746.0	06	<b>01615</b>
10 x 50 x 1	914 A	1244 A	500	1	932.0	06	<b>01509</b>
10 x 63 x 1	1088 A	1481 A	630	1	1180.0	06	<b>01510</b>
10 x 80 x 1	1305 A	1777 A	800	1	1490.0	06	<b>01061</b>
10 x 100 x 1	1550 A	2110 A	1000	1	1870.0	06	<b>01273</b>

you will find more flexible copper busbars in the accessories section



## CRITO® - Longitudinal busbar connectors

for flat conductors and section busbars



### Busbar connecting terminal, for same-size busbars

For busbar	Length	System spacing	For use up to max.	Pack size	Weight kg/100 u.	PG	Part No.
12, 15, 20 x 5, 10	55	5 - 10 mm	520 A	12	19.2	07	<b>01166</b>
	150	100 - 110 mm	520 A	3	52.4	07	<b>01193</b>
20, 25, 30 x 5, 10	40	9 - 20 mm	630 A	6	23.3	07	<b>01990</b>
	40	13 - 20 mm	630 A	6	25.2	07	<b>01823</b>
	95	50 - 60 mm	630 A	3	54.4	07	<b>01141</b>
	150	100 - 110 mm	630 A	3	86.6	07	<b>01886</b>
double-T section	50	9 - 20 mm	1600 A	6	49.4	07	<b>01827</b>
	95	50 - 60 mm	1600 A	3	94.3	07	<b>01145</b>
	150	100 - 110 mm	1600 A	3	146.1	07	<b>01829</b>
triple-T section	95	50 - 60 mm	2500 A	3	120.6	07	<b>01274</b>
	150	100 - 110 mm	2500 A	3	178.0	07	<b>01275</b>

3 pieces are required for a 3-pole connection, use 01026 or 01320 as well as 01025 as covers (see 3.4)  
for a UL-compliant design of the longitudinal busbar connector, one of the UL separation blocks described below must be used

### UL separator set, 3-pole, for longitudinal busbar connector

Type	Width	Pack size	Weight kg/100 u.	PG	Part No.
for longitudinal connecting terminals 01990, 01823, 01827	* 105	1	17.2	06	<b>01360</b>
for longitudinal connecting terminals 01141, 01145, 01274	* 145	1	19.6	06	<b>01361</b>
for longitudinal connecting terminals 01886, 01829, 01275	200	1	21.8	06	<b>01362</b>

\* the depth gauge must be tailored to fit

### Connection set, 3-pole, for section busbars

For busbar	Type	For use up to max.	Pack size	Weight kg/100 u.	PG	Part No.
double-T section	* 150 mm, flexible longitudinal connection	1600 A	1	536.0	07	<b>30322</b>
double-T section	* 130 mm, flexible corner connection		1	638.0	07	<b>30473</b>
triple-T section	* 200 mm, flexible longitudinal connection	2500 A	1	940.0	07	<b>01295</b>

\* supplied as a 3-pole connection set



## EQUES® 60Classic CrossLink® Technology - Busbar adapters 16 A - 45 A

removable top section with CrossLink® interface, the touch-protected base remains on the busbar system



### Busbar adapter with fuse-carrier, 16 A, with removable top section, with leads AWG 14 (2.5 mm<sup>2</sup>)

Type	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
1 fixed mounting rail, with fuse-carrier 10x38 / Class CC	22.5	200	1	20.0	05	<b>36003</b>

### Busbar adapter, 16 A, with removable top section, with leads AWG 14 (2.5 mm<sup>2</sup>)

Type	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
for direct starter Allen-Bradley 140M-RC2E, Eaton PKZM0, Siemens S00, Schneider Electric GV2 with spring terminals	45	200	4	42.7	05	<b>32401</b>

### Busbar adapter, 25 A, with removable top section, with leads AWG 12 (4 mm<sup>2</sup>)

Type	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
2 adjustable mounting rails	45	200	4	42.7	05	<b>32400</b>
2 adjustable mounting rails		260	4	45.0	05	<b>32402</b>

### Busbar adapter, 32 A, with removable top section, with leads AWG 10 (6 mm<sup>2</sup>)

Type	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
2 adjustable mounting rails	54	200	4	49.2	05	<b>32404</b>
2 adjustable mounting rails		260	4	54.4	05	<b>32408</b>

### Busbar adapter, 45 A, with removable top section, with leads AWG 8 (10 mm<sup>2</sup>)

Type	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
2 adjustable mounting rails	54	200	4	52.9	05	<b>32412</b>
2 adjustable mounting rails		260	4	56.7	05	<b>32416</b>

### Busbar adapter, with removable top section, without electrical connection

Type	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
2 adjustable mounting rails	45	200	4	34.9	05	<b>32420</b>
2 adjustable mounting rails			4	38.8	05	<b>32421</b>
2 adjustable mounting rails	54	260	4	36.2	05	<b>32425</b>
2 adjustable mounting rails			4	42.1	05	<b>32426</b>

### Side-mounted module, for busbar adapters with removable top section

Type	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
attachable to both sides	9	200	10	4.3	05	<b>32964</b>

### Accessories, for CrossLink® busbar adapters

Type	Pack size	Weight kg/100 u.	PG	Part No.
mounting rail 45 mm	10	1.4	05	<b>32947</b>
mounting rail 54 mm	10	1.5	05	<b>32948</b>
mounting rail 63 mm	10	1.8	05	<b>32949</b>
mounting rail 72 mm	10	2.0	05	<b>32950</b>
mounting rail 81 mm	10	2.1	05	<b>32951</b>
mounting rail end stop	50	0.1	05	<b>32969</b>
connecting element, universal	50	0.1	05	<b>32954</b>
8-pole connector, with support, 250 V	10	3.4	05	<b>32511</b>
10-pole connector, with support, 250 V	10	4.0	05	<b>32513</b>
micro switch for CrossLink adapter	10	0.9	05	<b>32956</b>

all devices can be mounted directly on busbars 12, 15, 20, 25, 30 x 5, 10 and section busbars



## EQUES® 60Classic - Busbar adapters 25 A - 80 A

universal version



### Busbar adapter, 25 A, with leads AWG 12 (4 mm<sup>2</sup>)

Type	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
1 adjustable mounting rail	45	200	4	32.5	05	32430
2 adjustable mounting rails			4	32.6	05	32431
2 adjustable mounting rails	90	260	2	57.1	05	32432
2 adjustable mounting rails	45		4	35.7	05	32433

### Busbar adapter, 25 A, without leads, with screw terminals 6 mm<sup>2</sup> from rear

Type	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
2 adjustable mounting rails	45	200	4	32.2	05	32436
		260	4	35.2	05	32439

### UL terminal cap

Type	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
for busbar adapters 32436 and 32439	45	15	4	0.7	05	32973

### Busbar adapter, 32 A, with leads AWG 10 (6 mm<sup>2</sup>)

Type	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
1 adjustable mounting rail	45	200	4	33.3	05	32655
1 adjustable mounting rail	54		4	36.6	05	32441
2 adjustable mounting rails			4	38.0	05	32442
1 adjustable mounting rail	63		4	44.5	05	32443
1 adjustable mounting rail	72		4	44.3	05	32444
2 adjustable mounting rails	81		4	49.5	05	32446
2 adjustable mounting rails	54	260	4	43.3	05	32449

### Busbar adapter, 63 A, with leads AWG 8 (10 mm<sup>2</sup>)

Type	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
1 adjustable mounting rail	54	200	4	39.2	05	32454
2 adjustable mounting rails			4	41.0	05	32455
1 adjustable mounting rail	63		4	44.9	05	32456
1 adjustable mounting rail	72		4	47.6	05	32457
2 adjustable mounting rails	81		4	51.3	05	32459
2 adjustable mounting rails	54		260	4	43.0	05

### Busbar adapter, 80 A, without leads, with screw terminals 16 mm<sup>2</sup> from rear

Type	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
1 adjustable mounting rail	54	200	4	37.3	05	32466
2 adjustable mounting rails			4	38.9	05	32467
1 adjustable mounting rail	72	260	4	45.0	05	32469
2 adjustable mounting rails	54		4	43.8	05	32472

### UL terminal cap

Type	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
for busbar adapters 32466, 32467, 32469 and 32472	54	15	4	0.8	05	32974

all devices can be mounted directly on busbars 12, 15, 20, 25, 30 x 5, 10 and section busbars



## EQUES® 60Classic - Busbar adapters 32 A - 80 A

universal version



### Busbar adapter, 32 A, without leads, with spring terminal 1.5 - 6 mm<sup>2</sup> from front

Type	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
1 adjustable mounting rail	45	200	4	32.5	05	32486
2 adjustable mounting rails		260	4	35.5	05	32487

### Busbar adapter, 80 A, without leads, with screw terminals 1.5 - 16 mm<sup>2</sup> from front

Type	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
1 adjustable mounting rail	54	200	4	37.3	05	32464
2 adjustable mounting rails		260	4	41.2	05	32465

### Busbar component support, without electrical connection

Type	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
2 adjustable mounting rails	45	200	4	24.8	05	32477
1 adjustable mounting rail and 1 positioner for Siemens S00	45		4	24.8	05	32635
2 adjustable mounting rails	54	260	4	27.7	05	32478
2 adjustable mounting rails	45		4	27.9	05	32484
1 adjustable mounting rail and 1 positioner for Siemens S00 and S0	45		4	27.9	05	32636
2 adjustable mounting rails	54		4	38.5	05	32485

### Side-mounted module, for busbar adapter

Type	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
attachable to both sides	9	200	10	2.3	05	32963

### PE/N adapter module, with connection terminals 16 mm<sup>2</sup> top and bottom

Type	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
attachable to busbar adapter to both sides	18	242	4	14.1	05	32146

### Accessories, for adapter

Type	Pack size	Weight kg/100 u.	PG	Part No.
mounting rail 45 mm	10	1.4	05	32947
mounting rail 54 mm	10	1.5	05	32948
mounting rail 63 mm	10	1.8	05	32949
mounting rail 72 mm	10	2.0	05	32950
mounting rail 81 mm	10	2.1	05	32951
mounting rail end stop	50	0.1	05	32969
connecting element, universal	50	0.1	05	32954
8-pole connector, with support, 250 V	10	3.4	05	32511
10-pole connector, with support, 250 V	10	4.0	05	32513
lead AWG 14 (2.5 mm <sup>2</sup> ), 105 mm long	* 24	0.3	05	32921
lead AWG 10 (6 mm <sup>2</sup> ), 130 mm long	* 24	0.7	05	32907
lead AWG 4 (25 mm <sup>2</sup> ), 210 mm long	* 24	5.1	05	32914
double-lead 2x AWG 10 (2x 6 mm <sup>2</sup> ), 130 / 280 mm long	* 24	2.5	05	32915

\* ultrasonic-welded lead ends

all devices can be mounted directly on busbars 12, 15, 20, 25, 30 x 5, 10 and section busbars



## EQUES® 60Classic - Busbar adapters 16 A - 100 A

aligned to switchgear



### Busbar adapter, 16 A, with leads AWG 14 (2.5 mm²)

Type	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
for direct starter Allen-Bradley 140M-RC2E, Eaton PKZM0, Siemens S00, Schneider Electric GV2 with spring terminals	45	200	4	31.0	05	32429
for reversing starter Allen-Bradley 140M-RC2E, Eaton PKZM0, Siemens S00, Schneider Electric GV2 with spring terminals	90		2	57.0	05	32440

### Busbar adapter, 25 A, with leads AWG 12 (4 mm²)

Type	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
for direct starter Eaton PKZ0/BG1	45	200	4	33.0	05	32450
for reversing starter Eaton PKZ0/BG1	90		2	54.6	05	32452
for direct starter Siemens S00 with screw connection	45	260	4	33.0	05	32445
for direct starter Siemens S00 with spring terminal connection	45		4	30.7	05	32637
for reversing starter Siemens S00 with screw connection	90		2	54.1	05	32448
for direct starter Siemens S00 with spring terminal connection	45	200	4	33.0	05	32650

### Busbar adapter, 32 A, with leads AWG 10 (6 mm²)

Type	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
for direct starter ABB MS116/132	45	200	4	36.4	05	32498
for direct starter Eaton PKZ0/BG2	45		4	36.4	05	32451
for reversing starter Eaton PKZ0/BG2	90		2	61.2	05	32453
for direct starter Allen-Bradley 140MC/D	45		4	32.5	05	32533
for reversing starter Allen-Bradley 140M-C/D	54	260	4	38.0	05	32534
for direct starter Schneider Electric GV2-M/P	45		4	33.3	05	32434
for direct starter Schneider Electric GV2-M/P	45		4	36.2	05	32438
for direct starter Schneider Electric LUB12/32	45	200	4	32.2	05	32427
for reversing starter Schneider Electric LUB12/32	45		4	35.1	05	32428
for direct starter Siemens S0 with screw connection	45	260	4	33.3	05	32639
for direct starter Siemens S0 with spring terminal connection	45		4	32.1	05	32659
for direct starter Siemens S0 with spring terminal connection	45		4	32.1	05	32638
for direct starter Siemens 3RA6	45	200	4	44.0	05	32588

### Busbar adapter, 63 A, with leads AWG 8 (10 mm²)

Type	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
for direct starter ABB MS45x, Eaton PKZM4, Siemens S2	55	260	4	43.2	05	32460
for direct starter Allen-Bradley 140M-F	54	200	4	43.0	05	32535
for direct starter ABB MS45x and Eaton PKZ5	72	260	2	51.4	05	32463

### Busbar adapter, 80 A, with leads AWG 4 (25 mm²)

Type	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
for Siemens Sirius circuit breaker frame size S2, 200 mm long	54	200	1	52.1	05	32662
for Siemens Sirius direct starter frame size S2, 260 mm long	54		1	59.1	05	32663
for Siemens Sirius reversing starter frame size S2, 260 mm long	117	260	1	87.3	05	32664
for Siemens NGG, HGG, LGG (up to 80 A)	72		2	66.0	05	32029

### Busbar adapter, 100 A, with leads AWG 4 (25 mm²)

Type	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
for ABB circuit breaker MS49x and Siemens Sirius circuit breaker frame size S3, 200 mm long	72	200	1	66.0	05	32981

all devices can be mounted directly on busbars 12, 15, 20, 25, 30 x 5, 10 and section busbars



## EQUES® 60Classic - Busbar adapters 160 A - 250 A

aligned to switchgear



### Busbar adapter, 160 A, 3-pole, phase pitch 23 - 30 mm

Type	Rated current	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
for Siemens 3VA10, 11 and 3VT160, top connection to the system	160 A	76	200	1	81.0	05	32660
for Siemens 3VA51 and Siemens NGG, LGG, HGG, top connection to the system	160 A	90		1	81.0	05	32028
for Siemens 3VA10, 3VA11, 3VA51 and Siemens NGG, LGG, HGG, bottom connection to the system	125 A	90		1	81.0	05	32030
for Eaton NZM1, connection top / bottom	160 A	92		1	81.0	05	32570
for Allen-Bradley 140U-H, top connection to the system	160 A	90		1	81.0	05	32577
for ABB T-max T1, XT1, T2, XT2, GE FD160, Schneider El. NS80, NSX80, top connection to the system	160 A	90		1	81.0	05	32575
for ABB T-max T1, XT1, XT2, Allen-Bradley 140G-G and H, for circuit breakers with terminals for flexible copper, top connection to system	160 A	90		1	81.0	05	32018
for ABB T-max T1, XT1, XT2, Allen-Bradley 140G-G and H, for circuit breakers with connections for flexible copper, bottom connection to the system	160 A	90		1	81.0	05	32020

### Busbar adapter, 250 A, 3-pole, phase pitch 35 - 36 mm, connection to system at the top / bottom

Type	Rated current	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
for ABB T-max T4 and Siemens 3RV1063	* 290 A	105	240	1	122.0	05	32601
for ABB T-max XT4, Allen-Bradley 140G-J	250 A	105	190	1	122.0	05	32023
for Allen-Bradley 140U-J and 140M-J	250 A	105		1	90.0	05	32137
for Schneider Electric NSX100-NSX250, GV7	250 A	105		1	93.8	05	32156
for Eaton NZM2-XKR40 and NZM2-XKR4U	250 A	105	240	1	90.1	05	32140
for Siemens 3VL1 UL	160 A	105		1	95.3	05	32976
for Siemens 3VL2, 3VL3 UL	250 A	105		1	95.3	05	32977
for Siemens 3VT250, OEZ BD250	* 250 A	105		1	102.0	05	32651
for Siemens 3VA12, 20, 21, 22, 52, 61, 62	250 A	105	240	1	102.0	05	32017
for Terasaki S250-NJ	* 250 A	105		1	102.0	05	32592

\* connection to system only at the top

### Busbar adapter, 250 A, 4-pole, phase pitch 35 - 36 mm, connection to system at the top

Type	Rated current	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
for ABB Tmax T4, Allen-Bradley 140G-K	250 A	140	270	1	180.0	05	32584
for ABB XT3/XT4	250 A	140		1	180.0	05	32586
for Siemens 3VA12, 20, 21, 22, 61, 62	250 A	140		1	153.0	05	32067
for Schneider Electric NSX100-NSX250	* 230 A	140	251	1	118.6	05	32642
for Eaton NZM2-XKR40	250 A	140	270	1	180.0	05	32580
for Siemens 3VL2, 3VL3	250 A	140		1	180.0	05	32578

\* top / bottom connection to the system

all devices can be mounted directly on busbars 12, 15, 20, 25, 30 x 5, 10 and section busbars



## EQUES® 60Classic - Busbar adapters 630 A

tailored to the products of the switchgear manufacturers and universal busbar adapters



### Busbar adapter, 630 A, 3-pole, phase pitch 43 - 45 mm, connection to system at the top / bottom

Type	Rated current	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
for ABB T-max T5, Allen-Bradley 140G-K and Siemens 3RV1073	580 A	140	300	1	252.0	05	32593
for Allen-Bradley 140U-K, 140U-L, 140M-L	600 A		272	1	212.0	05	32138
for Schneider Electric NS400/630, NSX 400/630	570 A		1	1	222.6	05	32157
for Eaton NZM3-XKR130 and NZM3-XKR13U	630 A		300	1	250.0	05	32978
for Siemens 3VL4	400 A		295	1	222.4	05	32975
for Siemens 3VA13, 14, 23, 24, 53, 54, 63, 64	590 A		300	1	250.0	05	32031
for Siemens 3VT630, OEZ BH630	600 A		1	1	250.0	05	32641

### Busbar adapter, 630 A, 3-pole, phase pitch 63 mm, connection to system at the top

for Siemens 3VL5	580 A	184	325	1	276.0	05	32980
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### Busbar adapter, 650 A, 3-pole, phase pitch 70 mm, connection to system at the top

for ABB T-max T6, Allen-Bradley 140G-M and Siemens 3RV1073	650 A	238	300	1	285.6	05	32064
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### Busbar adapter, 630 A, 4-pole, phase pitch 43 - 45 mm, connection to system at the top

for ABB Tmax T5, Allen-Bradley 140G-K	500 A	185	300	1	360.0	05	32585
for Schneider Electric NSX400-NSX630*	520 A		284	1	283.1	05	32643
for Eaton NZM3-XKR130	500 A		300	1	350.0	05	32581
for Siemens 3VA13, 14, 23, 24, 53, 54, 63, 64	590 A		1	1	350.0	05	32033
for Siemens 3VL400	400 A		1	1	350.0	05	32579

\* connection to the system at the top / bottom

### Universal busbar adapter, 200 A - 250 A, 3-pole

terminals 70 mm <sup>2</sup> at top	200 A	108	222	1	84.2	05	32214
terminals 70 mm <sup>2</sup> at bottom	200 A	108		1	86.0	05	32215
terminals 35 - 120 mm <sup>2</sup> at top	250 A	110	320	1	160.4	05	32168
terminals 35 - 120 mm <sup>2</sup> at bottom	250 A	110		1	164.0	05	32216

for all commercially available switchgear with M4 fixing screws (see accessory for M5 screws)

### Accessories, slide nut M5, for universal busbar adapters 200 A - 250 A

Type	Pack size	Weight kg/100 u.	PG	Part No.
for 32168, 32214, 32215, 32216	4	0.4	05	32937

### Universal busbar adapter, 630 A, 3-pole

connection screws M12 (top / bottom)	630 A	184	320	1	278.0	05	32004
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### Mounting set, adjustable for various MCCBs

for adapter 32004	180	315	1	82.0	05	32982
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all devices can be mounted directly on busbars 12, 15, 20, 25, 30 x 5, 10 and section busbars



## MOTUS® 60Classic - OMUS® 60Classic

for switching of inductive and resistive loads



### Hybrid motor starter, MOTUS® 60Classic, 3-pole, with reversing function and CrossLink® Technology

Type	Width	Height	Depth	Pack size	Weight kg/100 u.	PG	Part No.
0.075 - 0.6 A direct and reversing starter	22.5	200	156	1	56.1	21	36102
0.18 - 2.4 A direct and reversing starter				1	56.5	21	36105
1.5 - 9 A direct and reversing starter				1	56.6	21	36108

### Replacement component, for MOTUS® 60Classic

Type	Pack size	Weight kg/100 u.	PG	Part No.
electronic unit 0.075 - 0.6 A direct and reversing starter	1	50.9	21	36109
electronic unit 0.18 - 2.4 A direct and reversing starter	1	50.7	21	36110
electronic unit 1.5 - 9 A direct and reversing starter	1	51.4	21	36111
busbar adapter base with CrossLink® interface	1	11.0	05	36114
fuse 16 A for version 0.6 A and 2.4 A	3	2.8	21	31567
fuse 20 A for version 9 A	3	2.8	21	31568
fuse 30 A for version 9 A for motors with heavy-duty starting	3	2.8	21	31569

### Hybrid switch, OMUS® 60Classic, 3- or 1-pole switchable, for resistive loads, with CrossLink® Technology

Type	Width	Height	Depth	Pack size	Weight kg/100 u.	PG	Part No.
25 A (IEC)	36	200	144	1	45.8	21	36153
20 A (UL)				1	45.8	21	36158

supplied with both load and control plug

### Replacement component, for OMUS® 60Classic

Type	Pack size	Weight kg/100 u.	PG	Part No.
electronic unit, 25 A (IEC)	1	55.2	21	36154
electronic unit, 20 A (UL)	1	55.2	21	36159
busbar adapter base with CrossLink® interface	1	10.8	05	36156
3-pole load plug with spring terminals	* 1	1.5	21	36916
3-pole load plug with screw terminals	1	1.4	21	36918
12-pole control plug with spring terminals	1	0.6	21	36917

\* maximum load current 20 A

### Replacement fuse, for OMUS® 60Classic

cylindr. fuse link 32 A	10	0.6	22	31189
cylindr. fuse link 30 A, time delay	10	0.8	22	31252

all devices can be mounted directly on busbars 12, 15, 20, 25, 30 x 5, 10 and section busbars



## CUSTO®60Classic - D busbar mounted fuse-bases

3-pole DII and DIII fuse-holders



### D busbar mounted fuse-base with touch-safe protection incl. strip cover, for gauge rings

Type	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
E 27 / 3P	42	200	8	29.7	01	<b>31946</b>
E 33 / 3P	57	200	6	39.8	01	<b>31947</b>

### D busbar mounted fuse-base with touch-safe protection incl. strip cover, for screw-in gauge rings

E 27 / 3P	42	200	8	28.7	01	<b>31950</b>
E 33 / 3P	57	200	6	38.7	01	<b>31951</b>

### D busbar mounted fuse-base without strip cover, for gauge rings

E 27 / 3P	42	200	10	23.3	01	<b>31918</b>
E 33 / 3P	57	200	10	32.0	01	<b>31919</b>

### D busbar mounted fuse-base without strip cover, for screw-in gauge rings

E 27 / 3P	42	200	10	22.3	01	<b>31441</b>
E 33 / 3P	57	200	10	30.9	01	<b>31442</b>

### D strip cover

Type	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
E 27	42	200	10	4.9	01	<b>31070</b>
E 33	57	200	10	6.2	01	<b>31071</b>
E 27	84	200	5	8.4	01	<b>31072</b>
E 33	114	200	5	10.8	01	<b>31073</b>

### Shock protection cover, for all strip covers

attachable on either side	10	1.3	01	<b>79663</b>
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all devices can be mounted directly on busbars 12, 15, 20, 25, 30 x 5, 10 and section busbars

## SECUR®60Classic - CUSTO®60Classic

3-pole switch-disconnector and D0 fuse-holder



### D0 busbar mounted switch-disconnector-fuse, PowerLiner, tall version, 3-pole, 3-pole / 1-pole switching

Type	Rated current	Rated voltage	Utilization category	Depth	Pack size	Weight kg/100 u.	PG	Part No.	
for fuse links D01 and D02	*	63 A	400 V	AC-23A (400 V)	104	1	75.9	01	<b>31158</b>
for D01 and D02 fuses, with LED		63 A	400 V	AC-23A (400 V)	104	1	76.5	01	<b>31525</b>

fuse links not included

\* for continuous loads above 35 A, use of the 9 mm side-mounted module is recommended, IEC / EN 61439-2

### Accessory for busbar mounted switch-disconnector, PowerLiner

Type	Pack size	Weight kg/100 u.	PG	Part No.
pilot switch	1	0.7	01	<b>31903</b>
side-mounted module	5	6.1	01	<b>31901</b>
reducer D02 for D01 fuses 2 - 16 A	20	0.1	01	<b>31902</b>

### D0 busbar mounted fuse-base, touch-safe protection, incl. strip cover

Type	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
E 18 / 63 A	*	27	8	14.4	01	<b>31935</b>
E 18 / 63 A	36		6	16.1	01	<b>31936</b>

\* the 36 mm wide version allows optimal cable routing and heat removal

### D0 busbar mounted fuse-base, without strip cover

E 18 / 3P	*	27	10	14.7	01	<b>01647</b>
E 18 / 3P	36		10	15.5	01	<b>01498</b>

\* the 36 mm wide version allows optimal cable routing and heat removal

### D0 strip cover

E 18	27	200	10	2.6	01	<b>01980</b>
	36		10	3.1	01	<b>01424</b>
	54		10	4.0	01	<b>01981</b>

### Shock protection cover, for all strip covers

Type	Pack size	Weight kg/100 u.	PG	Part No.
attachable on either side	10	1.3	01	<b>79663</b>

all devices can be mounted directly on busbars 12, 15, 20, 25, 30 x 5, 10 and section busbars

## SECUR®60Classic - QUADRON®60Classic

3-pole D0 and NH fuse-switch-disconnectors



**D0 busbar mounted switch-disconnector-fuse, EasyLiner**, flat version, 3-pole switching, for the 3-pole busbar system, with SnapLock connection technology

Type	Rated current	Rated voltage	Utilization category	Depth	Pack size	Weight kg/100 u.	PG	Part No.
for D01 and D02 fuses *	63 A	400 V	AC-22B (400V)	80	1	33.0	01	<b>31574</b>
for D01 and D02 fuses, with LED *	63 A	400 V	AC-22B (400V)	80	1	33.0	01	<b>31575</b>

fuse links not included  
\* for continuous loads above 35 A, use of the 9 mm side-mounted module is recommended, IEC / EN 61439-2

**D0 busbar mounted switch-disconnector-fuse, EasyLiner**, 3-pole, flat version, 3-pole switching, for the 5-pole busbar system, with SnapLock connection technology

Type	Rated current	Rated voltage	Utilization category	Depth	Pack size	Weight kg/100 u.	PG	Part No.
for D01 and D02 fuses *	63 A	400 V	AC-22B (400V)	80	1	33.0	01	<b>31578</b>
for D01 and D02 fuses, for busbar systems 250 A, 400 A and 630 A of company Hensel *	63 A	400 V	AC-22B (400V)	80	1	33.0	01	<b>31588</b>
for D01 and D02 fuses, with LED *	63 A	400 V	AC-22B (400V)	80	1	33.0	01	<b>31579</b>

fuse links not included  
\* for continuous loads above 35 A, use of the 9 mm side-mounted module is recommended, IEC / EN 61439-2

**Accessories** for D0 busbar mounted switch-disconnector EasyLiner

Type	Pack size	Weight kg/100 u.	PG	Part No.
pilot switch	1	0.7	01	<b>31976</b>
9 mm side module for 31574 and 31575	5	6.1	01	<b>31914</b>
9 mm side module for 31578 and 31579	5	6.1	01	<b>31915</b>
reducer D02 for D01 fuses 2 - 16 A	20	0.1	01	<b>31902</b>



**Busbar support**, 60 mm system, **5-pole**, for the VMS (GE) and AKi (Spelsberg) range of boxes

Type	Pack size	Weight kg/100 u.	PG	Part No.
for busbars 3x (12, 20, 30 x 10) and 2x (12, 20, 25 x 5, 10)	30	16.7	06	<b>01138</b>

**Reducer**, for 5 mm busbars

Type	Pack size	Weight kg/100 u.	PG	Part No.
reducer for busbar support 01138	100	0.1	06	<b>01170</b>

**NH busbar mounted fuse-switch-disconnector**, size 00, connection at top / bottom, 3-pole with short connection module for **5-pole** busbar systems, distribution boards/insulated distribution boards

Type	Size	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
box terminal	NH 00	106	200	1	100.0	09	<b>33075</b>
screw M8	NH 00	106	200	1	100.0	09	<b>33079</b>

all devices can be mounted directly on busbars 12, 15, 20, 25, 30 x 5, 10 and section busbars



## AMBUS®60Classic - Fuse-holders

for cylindrical fuses



**Busbar mounted fuse-holder, 1-pole**, 1-pole disconnecting

Type	For busbar	Rated current	Rated voltage	Width	Pack size	Weight kg/100 u.	PG	Part No.
for fuses 10x38 IEC 60269-6	30 x 5, 10	30 A	1000 V	22.5	12	6.1	01	<b>31570</b>
for fuses 10x38 IEC 60269-6, with LED 110 - 690 V AC / DC	30 x 5, 10			22.5	12	6.6	01	<b>31571</b>
for fuses 10x38 IEC 60269-6	20 x 5, 10			22.5	12	6.3	01	<b>31572</b>

**Busbar mounted fuse-holder, 2-pole**, 2-pole disconnecting, with spring terminals

Type	For busbar	Rated current	Rated voltage	Width	Pack size	Weight kg/100 u.	PG	Part No.
for fuses 10x38 IEC 60269-2	12, 15, 20, 25, 30 x 5, 10 and section busbars	32 A	690 V	27	6	12.2	01	<b>31961</b>

**Busbar mounted fuse-holder, 3-pole**, 3-pole disconnecting, with spring terminals

Type	For busbar	Rated current	Rated voltage	Width	Pack size	Weight kg/100 u.	PG	Part No.
for fuses 10x38 IEC 60269-2	12, 15, 20, 25, 30 x 5, 10 and section busbars	32 A	690 V	27	4	18.5	01	<b>31954</b>
for fuses 10x38 IEC 60269-2, with LED 110 - 690 V AC / DC				27	4	18.7	01	<b>31955</b>

**Busbar mounted fuse-holder, 3-pole +N**, all-pole disconnecting, with spring terminals

Type	For busbar	Rated current	Rated voltage	Width	Pack size	Weight kg/100 u.	PG	Part No.
for fuses 10x38 IEC 60269-2	12, 15, 20, 25, 30 x 5, 10 and section busbars	32 A	690 V	27	4	25.2	01	<b>31963</b>
for fuses 10x38 IEC 60269-2, with LED 110 - 690 V AC / DC				27	4	25.2	01	<b>31964</b>

**Busbar mounted switch-disconnector-fuse, PowerLiner**, tall version, 3-pole / 1-pole switching

Type	For busbar	Rated current	Rated voltage	Width	Pack size	Weight kg/100 u.	PG	Part No.
for fuses 10x38	12, 15, 20, 25, 30 x 5, 10 and section busbars	32 A	690 V	27	1	76.0	01	<b>31232</b>

all devices can be mounted directly on busbars 12, 15, 20, 25, 30 x 5, 10 and section busbars



## AMBUS®60Classic - QUADRON®60Classic - Fuse-holders

for QCB NH fuse-switch-disconnector, size 000 to 3



### Busbar mounted fuse-holder, 30 A Class CC, AMBUS®60Classic, 3-pole, 3-pole disconnecting, with spring terminals

Type	Rated current	Rated voltage	Width	Pack size	Weight kg/100 u.	PG	Part No.
for fuses Class CC UL 248-4	30 A	600 V	27	4	18.6	01	31958
for fuses Class CC UL 248-4, with LED 110 - 690 V AC / DC				4	18.8	01	31959

for busbars 12, 20, 30 x 5, 10 and section busbars

### Busbar mounted fuse-holder, 30 A - 200 A Class J, QUADRON®60Classic, 3-pole, 3-pole disconnecting, connection at top / bottom

Type	Rated current	Rated voltage	Width	Pack size	Weight kg/100 u.	PG	Part No.
for fuse links Class J 1 - 30 A (21x57)	30 A	600 V	106	1	138.0	16	33421
for fuse links Class J 35 - 60 A (27x60)	60 A			1	135.0	16	33422
for fuse links Class J 70 - 100 A (29 x 118)	* 100 A			1	129.0	16	33402
for fuse links Class J 110 - 200 A (41x146)	* 200 A		184	1	278.0	16	33403

for busbars 12, 20, 30 x 5, 10 and section busbars

\* do not use fuse links with sharp-edged blades

### Busbar mounted fuse-holder, 30 A / 60 A Class J, AMBUS®60Classic, complete solution on busbar adapter, 3-pole, 3-pole disconnecting

Type	Rated current	Rated voltage	Width	Pack size	Weight kg/100 u.	PG	Part No.
for fuse links Class J 1 - 30 A (21x57), with LED	30 A	600 V	108	1	110.0	16	31968
for fuse links Class J 35 - 60 A (27x60), with LED	60 A	600 V	126	1	131.0	16	31970

for busbars 12, 20, 30 x 5, 10 and section busbars

### Busbar mounted fuse-base, 400 A Class J, QUADRON®Classic, 3-pole, connection at top or bottom

Type	Rated current	Rated voltage	Width	Pack size	Weight kg/100 u.	PG	Part No.
for fuse links Class J 225 - 400 A (54x181)	400 A	600 V	256	1	690.0	16	33311

for busbars 12, 20, 30 x 5, 10 and section busbars



## QUADRON®60Classic - NH busbar mounted fuse-bases, size 00 - 2

QCC for NH fuses



### NH busbar mounted fuse-base, size 00 - 1, with touch-safe protection, 3-pole connection at top / bottom

Type	Rated current	Size	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
box terminal	160 A	NH 00	106	200	1	87.0	10	03199
screw M8					1	87.0	10	03299
box terminal	250 A	NH 1	184	210	1	210.5	10	03300
screw M10					1	198.5	10	03301

### NH busbar mounted fuse-base, size 00, with touch-safe protection, 3-pole connection at top

Type	Rated current	Size	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
terminal 70 mm <sup>2</sup>	160 A	NH 00	99	200	4	66.5	10	03654
screw M8				200	4	64.5	10	03656

### NH busbar mounted fuse-base, size 2, with touch-safe protection, 3-pole connection at bottom

Type	Rated current	Size	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
screw M10	400 A	NH 2	206	195	1	291.2	10	03693

### Accessories, for NH fuse-bases

Type	Size	Pack size	Weight kg/100 u.	PG	Part No.	
grip lug cover	*	00	30	1.2	10	79448
grip lug cover for CrossLink® NH fuse base		1	3	2.5	10	33916
grip lug cover	**	1 - 3	30	1.5	10	79449
connection for auxiliary line, for box terminal		00	3	0.6	09	33915
prism terminal, single, for Cu and Al cables	***	00	3	3.0	09	33224
tunnel terminal for screw connection M8		00	3	4.2	09	01182
cover for cable lugs, top / bottom attachable		00	1	2.8	09	79811

\* 1 piece required per fuse

\*\* 2 pieces required per fuse

\*\*\* when using aluminium conductors, observe the maintenance instructions (see 8.2)

all devices can be mounted directly on busbars 12, 15, 20, 25, 30 x 5, 10 and section busbars

## QUADRON®60Classic - NH fuse-switch-disconnectors, size 000 - 3

QCB for NH fuses



### NH busbar mounted fuse-switch-disconnector, size 000 - 3, connection at top / bottom, 3-pole

Type	Rated current	Size	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
box terminal	125 A	NH 000	49.5	200	1	53.5	09	<b>33802</b>
box terminal	125 A	NH 000	89		1	113.0	09	<b>33216</b>
box terminal	160 A	NH 00	106		1	100.0	09	<b>33198</b>
screw M8	160 A	NH 00			1	103.0	09	<b>33398</b>
box terminal	250 A	NH 1	184	243	1	266.0	09	<b>33600</b>
screw M10	250 A	NH 1	1		266.0	09	<b>33601</b>	
screw M10	* 400 A	NH 2	210	288	1	522.0	09	<b>33602</b>
screw M12	** 630 A	NH 3	256	300	1	756.0	09	<b>33603</b>

NH busbar mounted fuse-switch-disconnector size 00 with short connection module for 5-pole busbar systems, distribution boards / insulated distribution boards; see page 3.19

\* for size 2 the conversion kit 33148 is required for mounting on 5 mm busbars

\*\* size 3 is not suitable for 5 mm busbars

### Side-mounted module, for NH busbar mounted fuse-switch-disconnector, size 000

Type	Width	Pack size	Weight kg/100 u.	PG	Part No.
attachable to both sides	3.5	10	2.6	09	<b>33806</b>

to extend the NH000 device 33802 to a width of 53 mm, to enable the installation of two devices in the frame of one NH fuse-switch-disconnector NH00 (106 mm)

### NH busbar mounted fuse-switch-disconnector, size 00 - 3, connection at top / bottom, 3-pole, with electronic fuse monitoring

Type	Rated current	Size	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
box terminal	160 A	NH 00	106	200	1	117.0	09	<b>33324</b>
screw M8	160 A	NH 00			1	117.0	09	<b>33394</b>
screw M10	250 A	NH 1	184	243	1	223.0	09	<b>33325</b>
screw M10	* 400 A	NH 2	210	288	1	572.0	09	<b>33326</b>
screw M12	** 630 A	NH 3	256	300	1	796.0	09	<b>33327</b>

circuit diagram for fuse monitoring can be found online at [www.woehner.com](http://www.woehner.com)

\* for size 2 the conversion kit 33148 is required for mounting on 5 mm busbars

\*\* size 3 is not suitable for 5 mm busbars

### NH busbar mounted fuse-switch-disconnector, size 00 - 3, connection at top / bottom, 3-pole, with electromechanical fuse monitoring

Type	Rated current	Size	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
box terminal	160 A	NH 00	106	200	1	180.0	09	<b>33206</b>
screw M8	160 A	NH 00			1	180.0	09	<b>33420</b>
screw M10	250 A	NH 1	184	243	1	333.0	09	<b>33160</b>
screw M10	* 400 A	NH 2	210	288	1	574.0	09	<b>33161</b>
screw M12	** 630 A	NH 3	256	300	1	824.0	09	<b>33162</b>

circuit diagram for fuse monitoring can be found online at [www.woehner.com](http://www.woehner.com)

\* for size 2 the conversion kit 33148 is required for mounting on 5 mm busbars

\*\* size 3 is not suitable for 5 mm busbars

### Accessories, busbar adapter base with CrossLink® interface

Type	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
busbar adapter base with CrossLink® interface	49.5	200	2	75.5	05	<b>32620</b>
busbar adapter base with CrossLink® interface	106	200	2	36.5	05	<b>32594</b>
busbar adapter base with CrossLink® interface	184	210	2	75.5	05	<b>32595</b>



## QUADRON®60Classic - Accessories

for NH fuse-switch disconnectors QCB, size 000 - 3



### Pilot switch, for monitoring the disconnector lid position

Type	Size	Pack size	Weight kg/100 u.	PG	Part No.
changeover 250 V AC / 5 A, 30V DC / 4 A	000 - 3	1	1.1	09	<b>33156</b>
changeover 250 V AC / 5 A, 30 V DC / 4 A	1	1	1.3	09	<b>33917</b>

33156 not suitable for fuse-switch-disconnectors size 1 and part no. 33802

### Disconnecter lid interlock

Type	Size	Pack size	Weight kg/100 u.	PG	Part No.
for sealing wire	000	10	0.1	09	<b>33051</b>
	00	10	0.2	09	<b>03849</b>
for sealing wire or 3 padlocks with shackle of 4 - 7 mm	1 - 3	10	0.5	09	<b>33157</b>

### Barrier for handle

Type	Size	Pack size	Weight kg/100 u.	PG	Part No.
for closing of handle area from rear	1 - 3	10	2.2	09	<b>33155</b>

### Arc chamber

Type	Size	Pack size	Weight kg/100 u.	PG	Part No.
retrofit package for higher utilisation category	1	3	10.7	09	<b>33918</b>

### Conversion kit, for mounting on busbars 12, 15, 20, 25 and 30 x 5, only for size 2

Type	Size	Pack size	Weight kg/100 u.	PG	Part No.
for 5 mm busbars	2	1	6.5	09	<b>33148</b>



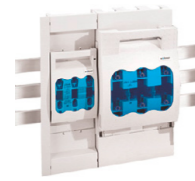
### Connection accessories

Type	Connection	Size	Pack size	Weight kg/100 u.	PG	Part No.
connection for auxiliary line, for box terminal	6.3 x 0.8	00	3	0.6	09	<b>33915</b>
box terminal for Cu cables	35 - 185 mm <sup>2</sup> / 24 x 3 - 21	1	3	10.0	09	<b>33909</b>
clamp connector for Cu cables	70 - 150 mm <sup>2</sup> / 18 x 2 - 14	1	1	6.3	09	<b>33163</b>
clamp connector for Cu cables	120 - 240 mm <sup>2</sup> / 21 x 1 - 14	2	1	10.6	09	<b>33164</b>
clamp connector for Cu cables	150 - 300 mm <sup>2</sup> / 25 x 1 - 13	3	1	12.5	09	<b>33165</b>
prism terminal, single, for Cu and Al cables	* 16 - 70 mm <sup>2</sup>	00	3	3.0	09	<b>33224</b>
prism terminal, single, for Cu and Al cables	* 35 - 150 mm <sup>2</sup>	1	1	11.6	09	<b>33166</b>
prism terminal, single, for Cu and Al cables	* 50 - 240 mm <sup>2</sup>	2	1	19.9	09	<b>33167</b>
prism terminal, single, for Cu and Al cables	* 150 - 300 mm <sup>2</sup>	3	1	24.7	09	<b>33168</b>
prism terminal, double, for Cu cables	2x 35 - 70 mm <sup>2</sup>	1	1	16.6	09	<b>33145</b>
prism terminal, double, for Cu cables	2x 70 - 120 mm <sup>2</sup>	2	1	27.8	09	<b>33146</b>
prism terminal, double, for Cu cables	2x 150 mm <sup>2</sup>	3	1	36.8	09	<b>33147</b>
prism terminal, double, for Cu cables	2x 185 mm <sup>2</sup>	3	1	36.8	09	<b>33385</b>
tunnel terminal for screw connection M8	1x 2.5 - 16 mm <sup>2</sup> + 2x 2.5 - 25 mm <sup>2</sup>	00	3	4.2	09	<b>01182</b>

\* when using aluminium conductors, observe the maintenance instructions (see 8.2)

## QUADRON®60Classic - Accessories

for NH fuse-switch disconnectors QCB, size 00 - 3



**Equalising trim**, to balance the installation depth

Type	Dimensions W x H x D	Size	Pack size	Weight kg/100 u.	PG	Part No.
trim cover, 2 parts	106 x 350 x 83	00	1	12.4	09	<b>33315</b>
trim strip, attachable at side	20 x 350 x 35	00	2	6.0	09	<b>33317</b>
cover for cable lugs, top / bottom attachable	183 x 65 x 68	1	2	10.7	09	<b>33142</b>
trim cover, 2 parts	210 x 350 x 83	2	1	21.1	09	<b>33316</b>

for trim cut-out 300 to 340 high, 83 in front of the busbar front edge



### Cover

Type	Size	Pack size	Weight kg/100 u.	PG	Part No.
cover for cable lugs, top / bottom attachable	00	1	2.8	09	<b>79811</b>
	1	2	10.7	09	<b>33142</b>
	2	2	10.9	09	<b>33143</b>
	3	2	15.6	09	<b>33144</b>
connection shroud	2	2	4.0	09	<b>33418</b>
	3	2	5.4	09	<b>33419</b>

## QUADRON®60Classic Speed - NH switch-disconnector-fuses 125 A / 160 A

QCS with snap-action switch mechanism, module width 106



**NH busbar mounted switch-disconnector-fuse, size 00**, 3-pole, with multifunction handle (snap-action switch mechanism)

Type	Rated current	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
box terminal, connection bottom	125 A	106	200	1	219.0	15	<b>33500</b>
box terminal, connection top				1	219.0	15	<b>33501</b>
box terminal, connection bottom, with electronic fuse monitoring				1	236.0	15	<b>33506</b>

fuse not included  
circuit diagram for fuse monitoring can be found online at [www.woehner.com](http://www.woehner.com)

**NH bus mounting switch-disconnector-fuse, size 00**, 3-pole, with door coupling rotary drive (snap-action switch mechanism)

Type	Rated current	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
box terminal, connection bottom, for door coupling rotary handle	125 A	106	200	1	208.0	15	<b>33503</b>
box terminal, connection top, for door coupling rotary handle				1	208.0	15	<b>33504</b>

fuse not included  
additional extension shaft and door coupling rotary handle required  
additional QCS for door coupling rotary handle with lateral actuation on request

**Busbar mounted switch-disconnector**, 3-pole, with multifunction handle (snap-action switch mechanism)

Type	Rated current	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
box terminal, connection bottom	* 160 A	106	200	1	216.0	14	<b>33540</b>
box terminal, connection top				1	216.0	14	<b>33541</b>

\* as main switch or emergency off switch only with the following maximum operating current: 125 A / 690 V AC

**Busbar mounted switch-disconnector**, 3-pole, with door coupling rotary drive (snap-action switch mechanism)

Type	Rated current	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
box terminal, connection bottom, for door coupling rotary handle	* 160 A	106	200	1	208.0	14	<b>33543</b>
box terminal, connection top, for door coupling rotary handle				1	208.0	14	<b>33544</b>

additional extension shaft and door coupling rotary handle required  
\* as main switch or emergency off switch only with the following maximum operating current: 125 A / 690 V AC

all devices can be mounted directly on busbars 12, 15, 20, 25, 30 x 5, 10 and section busbars

## QUADRON®60Classic Speed - NH switch-disconnector-fuses 250 A / 320 A

QCS with snap-action switch mechanism, module width 184



### NH busbar mounted switch-disconnector-fuse, size 1, 3-pole, with multifunction handle (snap-action switch mechanism)

Type	Rated current	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
screw M10, connection bottom	250 A	184	286	1	567.0	15	<b>33510</b>
screw M10, connection top	250 A	184	314	1	589.0	15	<b>33511</b>
screw M10, connection bottom, with electronic fuse monitoring	250 A	184	286	1	625.0	15	<b>33516</b>

fuse not included  
circuit diagram for fuse monitoring can be found online at [www.woehner.com](http://www.woehner.com)

### NH busbar mounted switch-disconnector-fuse, size 1, 3-pole, with door coupling rotary drive (snap-action switch mechanism)

screw M10, connection bottom, for door coupling rotary handle	250 A	184	286	1	555.0	15	<b>33513</b>
screw M10, connection top, for door coupling rotary handle	250 A	184	314	1	577.0	15	<b>33514</b>

fuse not included  
additional extension shaft and door coupling rotary handle required

### Busbar mounted switch-disconnector, 3-pole, with multifunction handle (snap-action switch mechanism)

screw M10, connection bottom	*	320 A	184	286	1	565.0	14	<b>33550</b>
screw M10, connection top	*	320 A	184	314	1	587.0	14	<b>33551</b>

\* as main switch or emergency off switch only with the following maximum operating current: 280 A / 400 V AC, 250 A / 690 V AC

### Busbar mounted switch-disconnector, 3-pole, with door coupling rotary drive (snap-action switch mechanism)

screw M10, connection bottom, for door coupling rotary handle	*	320 A	184	286	1	543.0	14	<b>33553</b>
screw M10, connection top, for door coupling rotary handle	*	320 A	184	314	1	565.0	14	<b>33554</b>

additional extension shaft and door coupling rotary handle required  
\* as main switch or emergency off switch only with the following maximum operating current: 280 A / 400 V AC, 250 A / 690 V AC

all devices can be mounted directly on busbars 12, 15, 20, 25, 30 x 5, 10 and section busbars

## QUADRON®60Classic - Accessories

for QCS module width 106 and 184



### Accessories

Type	Usable for version	Pack size	Weight kg/100 u.	PG	Part No.
connecting terminal 120 mm <sup>2</sup>	QCS-NH00, QCS 160 A	3	12.1	14	<b>33914</b>
connection for auxiliary line, for box terminal	QCB-NH00, QCS-NH00, QCS 160 A	3	0.6	09	<b>33915</b>
pilot switch for monitoring the switch position	QCS-NH00 / 1, QCS 160 A / 320 A	1	1.1	14	<b>33908</b>
cover for cable lugs, top / bottom attachable	QCB-NH1, QCS-NH1, QCS 320 A	2	10.7	09	<b>33142</b>
door coupling rotary handle, black, without shaft	* QCS-NH00 / 1, QCS 160 A / 320 A	1	57.0	14	<b>33910</b>
door coupling rotary handle, red-yellow, without shaft	*	1	57.0	14	<b>33911</b>
extension shaft, 290 mm long		1	13.0	14	<b>33912</b>
extension shaft, 490 mm long		1	22.0	14	<b>33913</b>

\* switch can also be installed 90° left / right, always with the same handle position



### Connection accessories

Type	Connection	Usable for version	Pack size	Weight kg/100 u.	PG	Part No.
box terminal for Cu cables	35 - 185 mm <sup>2</sup> / 24 x 3 - 21	QCB-NH1, QCS-NH1, QCS 320 A	3	10.0	09	<b>33909</b>
prism terminal, single, for Cu and Al cables	35 - 150 mm <sup>2</sup>		1	11.6	09	<b>33166</b>
prism terminal, double, for Cu cables	2x 35 - 70 mm <sup>2</sup>		1	16.6	09	<b>33145</b>
clamp connector for Cu cables	70 - 150 mm <sup>2</sup> / 18 x 2 - 14	QCB-NH1, QCS-NH1, LTS-F 250, LTS 400	1	6.3	09	<b>33163</b>

## QUADRON® 60Classic - NH in-line fuse-switch-disconnectors, size 00

for snapping onto the busbar system



**NH in-line fuse-switch-disconnector, size 00**, 3-pole switchable, connection at top / bottom

Type	Rated current	Size	Width	Height	Pack size	Weight kg/100 u.	PG	Part No.
screw M8 / clamp 70 mm <sup>2</sup>	160 A	NH 00	50	455	1	146.0	12	<b>33234</b>
screw M8 / clamp 70 mm <sup>2</sup> , with electronic fuse monitoring	160 A	NH 00	50	610	1	146.0	12	<b>33285</b>

with terminal compartment cover  
circuit diagram for fuse monitoring can be found online at [www.woehner.com](http://www.woehner.com)



**Pilot switch**, for monitoring of the disconnector lid position

Type	Size	Pack size	Weight kg/100 u.	PG	Part No.
changeover 250 V AC / 5 A, 30V DC / 4 A	000 - 3	1	1.1	09	<b>33156</b>

### Accessories

Type	Connection	Size	Pack size	Weight kg/100 u.	PG	Part No.
clamp connector	1.5 - 70 mm <sup>2</sup> / 12 x 1 - 10	00	3	1.5	09	<b>03727</b>
M8 screw connector	70	00	3	1.4	09	<b>30894</b>
prism terminal, single, for Cu and Al cables	* 16 - 70 mm <sup>2</sup>	00	3	3.0	09	<b>33224</b>
connection cover		00	2	9.0	12	<b>33280</b>

\* when using aluminium conductors, observe the maintenance instructions (see 8.2)

all devices can be mounted directly on busbars 12, 15, 20, 25, 30 x 5, 10 and section busbars

## Special solutions for busbar systems



**Busbar support**, 60 mm system, 3, 4, 5-pole, for VMS (GE) and AKi (Spelsberg) range of boxes

Type	Pack size	Weight kg/100 u.	PG	Part No.
for busbars 3x (12, 20, 30 x 10) and 2x (12, 20, 25 x 5, 10)	30	16.7	06	<b>01138</b>

**Reducer**, for 5 mm busbars

Type	Pack size	Weight kg/100 u.	PG	Part No.
reducer for busbar support 01138	100	0.1	06	<b>01170</b>

3 pieces are required for a busbar support

**Busbar support**, fits the Striebel & John system

Type	For busbar	Pack size	Weight kg/100 u.	PG	Part No.
3-pole with internal screw holes	12, 20, 30 x 5, 10	10	10.0	06	<b>01603</b>
1-pole, attachable to 01603 or individual mounting, with integrated end cover		1	4.1	06	<b>01355</b>

**End cover**

Type	Pack size	Weight kg/100 u.	PG	Part No.
for busbar supports 01484, 01495, 01500, 01508 and 01603	10	2.0	06	<b>01573</b>

**NH busbar mounted fuse-switch-disconnector**, outgoing terminal at top / bottom, 3-pole  
with short connection module for 5-pole busbar systems, distribution boards / insulated distribution boards

Type	Size	Rated current	Pack size	Weight kg/100 u.	PG	Part No.
box terminal	NH 00	160 A	1	100.0	09	<b>33075</b>
screw M8	NH 00	160 A	1	100.0	09	<b>33079</b>

**Cover frame**

Type	Pack size	Weight kg/100 u.	PG	Part No.
for boxes VMS	10	16.6	06	<b>01139</b>

**Reserve section cover**, for use only with cover frame 01139

Type	Pack size	Weight kg/100 u.	PG	Part No.
54 x 195, pitch 3 x 18 mm	10	4.5	06	<b>79738</b>
variable, 36 to 64 x 195, with 2 pieces	10	3.2	06	<b>79859</b>

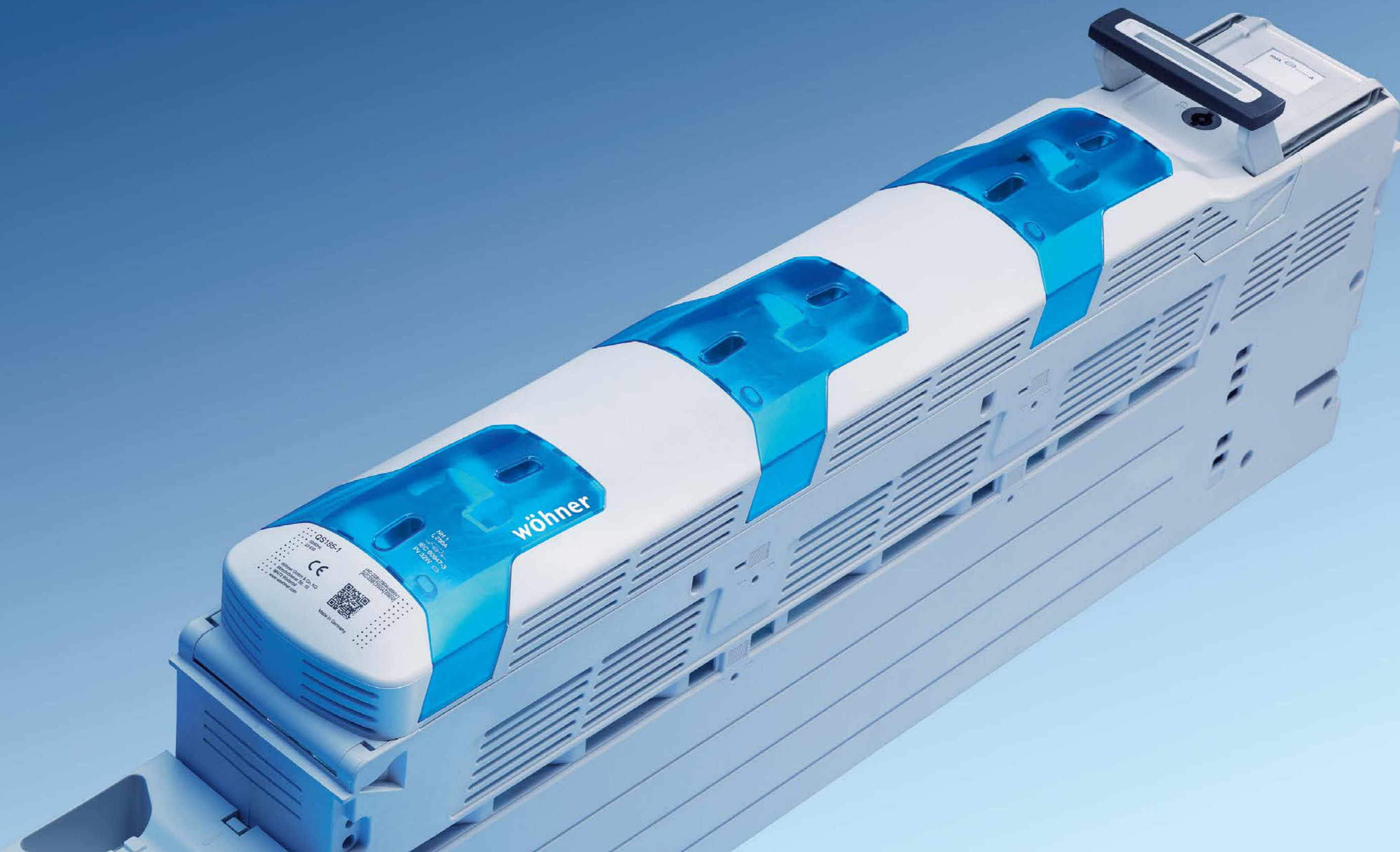
**Connection lug with brace terminal**, for device connections

Type	For use up to max.	Pack size	Weight kg/100 u.	PG	Part No.
for cables Cu and Al 120 - 300 mm <sup>2</sup>	* 600 A	3	36.6	07	<b>01890</b>

\* when using aluminium conductors, observe the maintenance instructions (see 8.2)

all devices can be mounted directly on busbars 12, 15, 20, 25, 30 x 5, 10 and section busbars

# 185Power



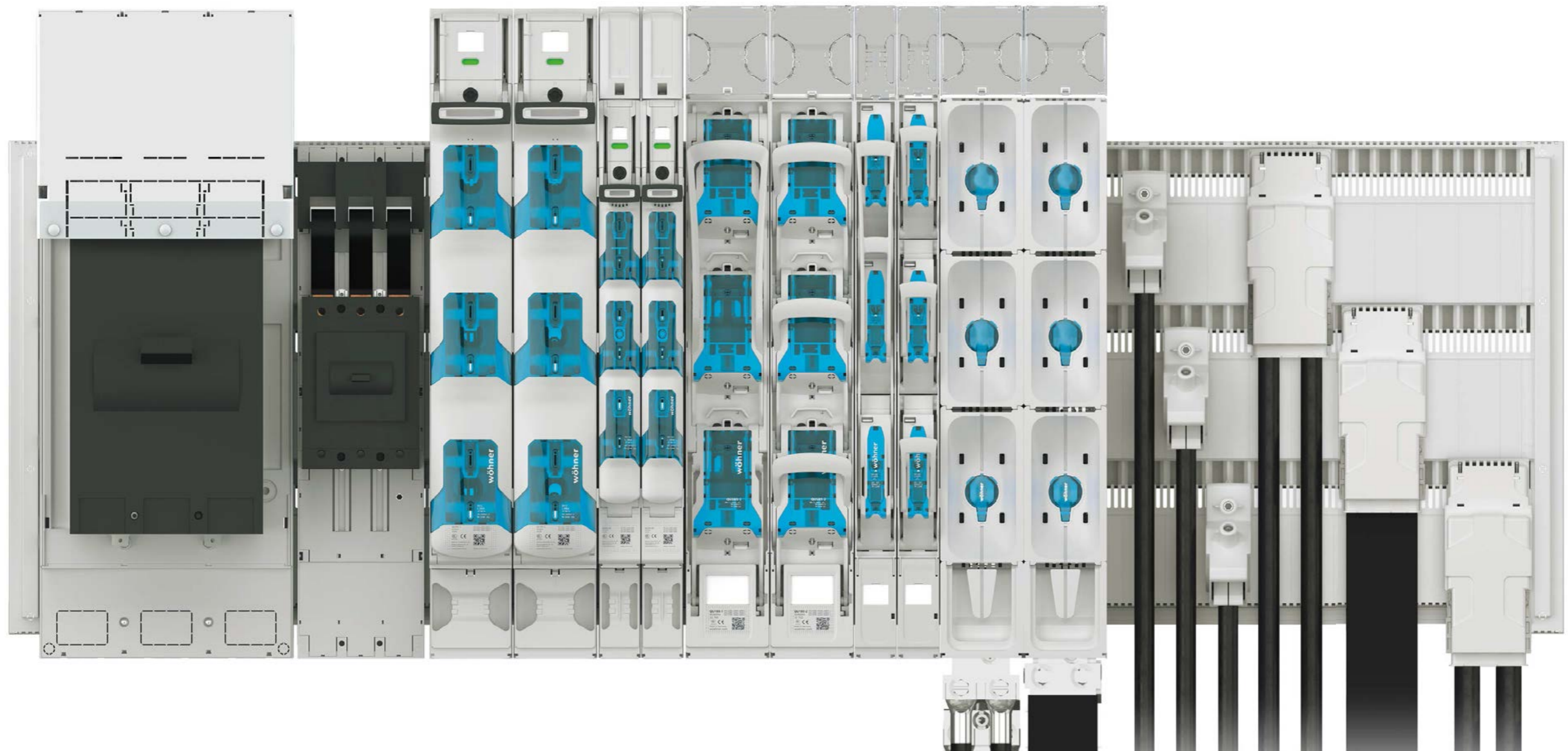
## 185 MM BUSBAR SYSTEM

# 185Power

## Powerful system solution with 185 mm busbar spacing

The 185Power busbar system by Wöhner is a modular system for low-voltage power distribution with 185 mm spacing of the busbars. All the components – busbar supports, CrossLink® covers, NH in-line fuse-switch-disconnectors and in-line NH switch-disconnector-fuse, connection rails and connection modules – fit together perfectly. The NH switch-disconnector-fuse is a particular highlight. This version, with the “Speed” suffix, allows reliable and operator-independent switching.

When integrating circuit breakers into the system, EQUES® adapters are available for all commercially available circuit breakers for currents from 400 A up to 1600 A. The 185Power allows the user to quickly realise cost-efficient low-voltage distribution systems. The modular structure and compatibility of the components contribute to efficient use of space within the cabinet. Systems based on the 185Power can easily be expanded or modified.





## Busbars 185Power

- 30, 40, 60, 80, 100, 120 x 10 mm
- tin-plated versions
- proven load current capacity
- proven short-circuit capacity



## Busbar support 185Power

- Busbar support for easy and safe construction of systems with 185 mm distance between busbar centres.
- can be aligned on busbars 30, 40, 60, 80, 100, 120 x 10
  - end and centre cover as accessories



## CrossLink® 185Power covering system

- In the 185Power system the CrossLink® 185Power covering modules, base plate profile and busbar support cover provide optimal all-around touch-safe protection for the busbar system.
- 50 mm and 100 mm width versions
  - reliable connection to each other and to the middle and end cover



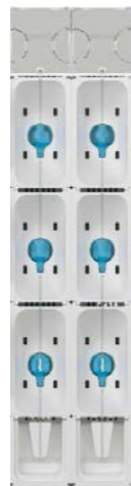
## CRITO®185Power connection module

- The compact connection module with complete touch-safe protection up to 500 A. The V-box terminal for connection of cross-sections of 7 - 240 mm<sup>2</sup> enables a space-saving arrangement one above the other. Mounting is possible on the CrossLink® touch-safe protection modules or directly on the busbar.



## CRITO®185Power connection modules

- These modules are available in three versions: fitted with a box terminal, for cable lugs, or flat copper up to 80 x 10. The position of the connection modules can be aligned to the incoming conductors. Mounting is possible on the CrossLink® touch-safe protection modules or directly on the busbar.



## CRITO®185Power connection rail

- The connection rails allow convenient connection of round and flat conductors as well as cable lugs up to 1400 A at just 100 mm wide. Mounting is achieved using terminal clamps on the CrossLink® touch-safe protection modules, or directly to the busbar by means of bolts.



## QUADRON® 185Power

- Available in sizes 00 to 3, the NH in-line switch-disconnectors allow quick, easy and safe mounting.
- mounting with terminal clamps on CrossLink® touch-safe protection modules or bolt mounting
  - integrated transformer
  - innovative ventilation duct



## QUADRON® 185Power Speed

- These NH in-line switch-disconnector-fuses in sizes 00 to 3 allow operator-independent switching.
- snap-action switch mechanism with double break
  - safer fuse technology
  - faster and safer mounting with terminal clamp and insulated screw extension
  - traditional screw mounting



## EQUES® 185Power Adapter

- Universal busbar adapters with a width of 150 mm for fast and compact mounting of commercially available circuit breakers. Safety has priority when used with the CrossLink® touch-safe protection module. Optionally also for mounting on busbars with screw type terminals.
- rated current: 400 A, 630 A



## EQUES® 185Power Adapter

- The busbar adapters with a width of 300 mm for fast and compact mounting of all commercially available circuit-breakers. Busbar mounting is done via screw type terminal or terminal clamp without drilling on the touch-safe protected system.
- rated current: 630 A, 1600 A

## 185Power - Busbar systems

3-pole systems



### Busbar support and CrossLink® busbar support cover

Article	Type	Pack size	Weight kg/100 u.	PG	Part No.
universal busbar support	for undrilled flat bars 30, 40, 60, 80, 100, 120 x 10	4	50.0	06	01430
end cover for busbar support 01430	set for one left and one right busbar support	1	39.0	06	01431
centre cover for busbar support 01430	when using the busbar support as a centre support	2	17.0	06	01432

additional busbar supports for drilled busbars and section busbars can be found at [www.woehner.com](http://www.woehner.com)

### Copper busbar and busbar cover

Article	Type	Cross-section mm²	Pack size	Weight kg/100 u.	PG	Part No.
busbar 30 x 10	length 2.40 m, tinned	300	1	643.2	06	01625
busbar 40 x 10	length 2.40 m, tinned	400	1	856.8	06	01626
busbar 60 x 10	length 2.40 m, tinned	600	1	1294.0	06	01628
busbar 80 x 10	length 2.40 m, tinned	800	1	1728.0	06	01765
busbar 100 x 10	length 2.40 m, tinned	1000	1	2174.0	06	01766
busbar 120 x 10	length 2.40 m, tinned	1200	1	2572.8	06	01767
busbar cover	for 12 - 30 x 10 busbar, 1 m long		10	10.1	06	01245
busbar cover	for 40 - 60 x 10 busbars, 1m long		5	17.6	06	01251

partial lengths on request

### CrossLink®185Power, system cover at front

Article	Type	Width	Pack size	Weight kg/100 u.	PG	Part No.
CrossLink® touch-safe protection cover module	50 mm wide	8	16.0	06	01433	
CrossLink® touch-safe protection cover module	100 mm wide	4	34.0	06	01434	
front cover IP40	for CrossLink® covers	3	3.0	06	01435	
completion section	499 mm long	2	5.6	06	01440	
completion section	649 mm long	2	7.6	06	01444	

the lengths of the completion sections are matched to the lengths of the rear system shrouding; completion section, length 499 mm, suitable for 01420; completion section, length 649 mm, suitable for 01436

### CrossLink®185Power, system cover at rear

Article	Type	Pack size	Weight kg/100 u.	PG	Part No.
system shrouding, rear	* set for busbar support distance 550 mm (centre to centre)	1	91.3	06	01420
system shrouding, rear	* set for busbar support distance 700 mm (centre to centre)	1	110.0	06	01436
spacer	** set, suitable for 01430	1	13.1	06	01421

\* eight spacers are included with the system partitioning

\*\* set consisting of 4 distance pieces, as an accessory when using a centre bar with system partitioning

### Busbar connecting terminal, for same-size busbars

Article	Type	Pack size	Weight kg/100 u.	PG	Part No.
longitudinal busbar connector	40 mm	3	48.0	07	01480
longitudinal busbar connector	60 mm	3	72.0	07	01481
touch-safe protection shroud for longitudinal connectors	3-pole, front and rear mounting, cover width 100 mm	1	29.5	06	01482
touch-safe protection shroud for longitudinal connectors	3-pole, front and rear mounting, cover width 150 mm	1	45.0	06	01416

one longitudinal busbar connecting terminal 01480 is required for the connection of 30 x 10 busbars; two longitudinal busbar connecting terminals 01480 are required for the connection of 80 x 10 busbars; one longitudinal busbar connecting terminal 01480 and 01481 each is required for the connection of 100 x 10 busbars; two longitudinal busbar connecting terminals 01481 are required for the connection of 120 x 10 busbars

system mounting instruction: [www.woehner.com/en/products/01430.html](http://www.woehner.com/en/products/01430.html)

UL certificate

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## CRITO®185Power - Connection technology

1-pole and 3-pole



### Connection rail, 3-pole, screw connection

Article	Type	Rated current	Width	Pack size	Weight kg/100 u.	PG	Part No.
screw M12	* 3-pole	800 A	100	1	484.0	07	01438
for 3 cable lugs 300mm² (offset arrangement), for 4 cable lugs 240 mm² or lam. Cu 80 x 10	** 3-pole	1400 A	100	1	1050.0	07	01439

terminal clamps required for drill-free mounting with and without CrossLink® touch-safe protection cover

\* current transformer can be integrated into connection rail, see 4.19

\*\* current carrying capacity 1400 A with screw connection, 1200 A with terminal clamp connection, see product description at [www.woehner.com](http://www.woehner.com)

### Terminal clamp, for drill-free mounting on the busbar system

Article	Type	Size	Pack size	Weight kg/100 u.	PG	Part No.
CrossLink® terminal clamp	for busbar systems with CrossLink® touch-safe protection	1 - 3	3	15.0	12	33738
terminal clamp	for busbar systems without system covers	1 - 3	3	10.0	12	33740



### Current transformer module, with terminal compartment cover, for connection rail 800 A

Article	Type	Size	Pack size	Weight kg/100 u.	PG	Part No.
universal current transformer module	for mounting in the connection compartment	1 - 3	1	170.0	18	33762

for matching transformer see page 4.19

### Connection module, 1-pole, CrossLink® clamp connection for drill-free mounting on the busbar system

Article	Type	Width	Pack size	Weight kg/100 u.	PG	Part No.
connection module with cover	for direct cable connection, Cu / Al up to 240 mm²	42	3	35.0	07	01423
connection module	for direct cable connection, with 2 box terminals 300 mm²	98	1	133.0	07	01441
connection module	for lam. Cu max. 2x 80 x 10	98	1	94.5	07	01442
connection module	for 4 cable lugs M12	98	1	165.0	07	01443

### Cover cap, for connection module 98 mm wide, 1-pole

Article	Type	Width	Pack size	Weight kg/100 u.	PG	Part No.
cover cap incl. rear touch protection cover		130	1	28.0	07	01437

all devices can be mounted directly on busbars 30, 40, 60, 80, 100, 120 x 10



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New product

Accessories → 4.19

UL certificate

## EQUES® 185Power CrossLink® Technology - Busbar adapters 630 A

universal version



**Busbar adapter, 630 A, clamp connection** for drill-free mounting on the busbar system, with and without **CrossLink®185Power** touch-safe protection module

Type	Rated current	Pack size	Weight kg/100 u.	PG	Part No.
connection at top, CrossLink® clamp connection	*	1	590.0	05	32741
connection at bottom, CrossLink® clamp connection	*	1	700.0	05	32745

\* for rated currents see product description at [www.woehner.com](http://www.woehner.com)

**Busbar adapter, 630 A, clamp connection** for drill-free mounting on the busbar system, flat installation situation

Type	Rated current	Pack size	Weight kg/100 u.	PG	Part No.
connection at top, flat clamp connection	*	1	640.0	05	32742
connection at bottom, flat clamp connection	*	1	700.0	05	32746

when installing the adapter incl. circuit breaker, the same installation depth (150 mm supporting edge) is possible as with NH in-line fuse-switch-disconnector  
\* for rated currents see product description at [www.woehner.com](http://www.woehner.com)



**Busbar adapter, 630 A, screw connection** for drilled busbars

Type	Rated current	Pack size	Weight kg/100 u.	PG	Part No.
connection at top / bottom, screw connection	*	1	620.0	05	32743

\* for rated currents see product description at [www.woehner.com](http://www.woehner.com)

**Accessories, current transformer, accuracy class 1**

Type	Rated apparent power	Pack size	Weight kg/100 u.	PG	Part No.
current transformer 300 A / 5 A	2.50 VA	1	20.9	23	32988
current transformer 400 A / 5 A	2.50 VA	1	21.0	23	32989
current transformer 600 A / 5 A	1.25 VA	1	19.0	23	32990

all devices can be mounted directly on busbars 30, 40, 60, 80, 100, 120 x 10  
for further information on current carrying capacity, see product specifications at [www.woehner.com](http://www.woehner.com)



UL certificate

## EQUES® 185Power CrossLink® Technology - Busbar adapters 1600 A

aligned to switchgear



**Busbar adapter 1600 A, connection to the system at the top**, clamp connection for drill-free mounting on the busbar system, with and without **CrossLink®185Power** touch-safe protection module

### ABB

Type	Rated current	Pack size	Weight kg/100 u.	PG	Part No.
for ABB Tmax T7/T6 800 A or T7/T6 630 A	800 A	1	2120.0	05	32767
for ABB Tmax T7 1000 A	1000 A	1	2100.0	05	32766
for ABB Tmax T7 1250 A	1250 A	1	3010.0	05	32765
for ABB Tmax T7, Emax2 1600 A	1320 A	1	3150.0	05	32807

for rated currents see product description at [www.woehner.com](http://www.woehner.com)

### Eaton

for Eaton NZM4 1000 A, 800 A, 630 A	1000 A	1	2300.0	05	32763
for Eaton NZM4 1250 A	1250 A	1	2900.0	05	32762
for Siemens 3VL8 1600 A, Eaton NZM4 1600 A	1440 A	1	3060.0	05	32761

for rated currents see product description at [www.woehner.com](http://www.woehner.com)

### Schneider Electric

for Schneider Electric NS1000, NS800 or NS630B	1000 A	1	2620.0	05	32758
for Schneider Electric NS1250	1250 A	1	3000.0	05	32757
for Schneider Electric NS1600	1450 A	1	3100.0	05	32756

for rated currents see product description at [www.woehner.com](http://www.woehner.com)

### Siemens

for Siemens 3VL5 630 A	630 A	1	2100.0	05	32769
for Siemens 3VL6 800 A or 630 A	720 A	1	1950.0	05	32754
for Siemens 3VL7 1000 A	1000 A	1	2200.0	05	32755
for Siemens 3VL7 1250 A	1150 A	1	2850.0	05	32753
for Siemens 3VL8 1600 A, Eaton NZM4 1600 A	1440 A	1	3060.0	05	32761

for rated currents see product description at [www.woehner.com](http://www.woehner.com)

### Socomec

for Socomec Sirco 1250 A or 1600 A	1550 A	1	3350.0	05	32752
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for rated currents see product description at [www.woehner.com](http://www.woehner.com)

all devices can be mounted directly on busbars 30, 40, 60, 80, 100, 120 x 10  
for further information on current carrying capacity, see product specifications at [www.woehner.com](http://www.woehner.com)



## EQUES® 185Power CrossLink® Technology - Busbar adapters 1600 A

aligned to switchgear



**Busbar adapter 1600 A, connection to the system at the bottom**, clamp connection for drill-free mounting on the busbar system, with and without **CrossLink® 185Power** touch-safe protection module

### ABB

Type	Rated current	Pack size	Weight kg/100 u.	PG	Part No.
for ABB Tmax T7/T6 800 A or T7/T6 630 A	800 A	1	2300.0	05	32730
for ABB Tmax T7 1000 A	1000 A	1	2300.0	05	32729
for ABB Tmax T7 1250 A	1220 A	1	3028.0	05	32726
for ABB Tmax T7, Emax2 1600 A	1320 A	1	3100.0	05	32797

for rated currents see product description at [www.woehner.com](http://www.woehner.com)

### Eaton

for Eaton NZM4 1000 A, 800 A or 630 A	1000 A	1	2400.0	05	32733
for Eaton NZM4 1250 A	1200 A	1	3180.0	05	32732
for Siemens 3VL8 1600 A or Eaton NZM4 1600 A	1400 A	1	2800.0	05	32731

for rated currents see product description at [www.woehner.com](http://www.woehner.com)

### Schneider Electric

for Schneider Electric NS1000, NS800 or NS630B	900 A	1	2400.0	05	32747
for Schneider Electric NS1250	1200 A	1	3200.0	05	32737
for Schneider Electric NS1600	1400 A	1	3350.0	05	32734

for rated currents see product description at [www.woehner.com](http://www.woehner.com)

### Siemens

for Siemens 3VL5 630A	630 A	1	2150.0	05	32796
for Siemens 3VL6 800 A or 630 A	650 A	1	2350.0	05	32795
for Siemens 3VL7 1000 A	1000 A	1	2200.0	05	32783
for Siemens 3VL7 1250 A	1150 A	1	3100.0	05	32771
for Siemens 3VL8 1600 A or Eaton NZM4 1600 A	1400 A	1	2800.0	05	32731

for rated currents see product description at [www.woehner.com](http://www.woehner.com)

### Socomec

for Socomec Sirco 1250 A or 1600 A	1500 A	1	3350.0	05	32764
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for rated currents see product description at [www.woehner.com](http://www.woehner.com)

all devices can be mounted directly on busbars 30, 40, 60, 80, 100, 120 x 10  
for further information on current carrying capacity, see product specifications at [www.woehner.com](http://www.woehner.com)



## EQUES® 185Power - Busbar adapters 1600 A

aligned to switchgear



**Busbar adapter 1600 A, connection to the system at the top and bottom**, screw connection for drilled busbars

### ABB

Type	Rated current	Pack size	Weight kg/100 u.	PG	Part No.
for ABB Tmax T7/T6 800 A or T7/T6 630 A	800 A	1	2150.0	05	32786
for ABB Tmax T7 1000 A	1000 A	1	2620.0	05	32785
for ABB Tmax T7 1250 A	1220 A	1	2800.0	05	32784
for ABB Tmax T7, Emax2 1600 A	1320 A	1	2950.0	05	32808

for rated currents see product description at [www.woehner.com](http://www.woehner.com)

### Eaton

for Eaton NZM4 1000 A, 800 A, 630 A	1000 A	1	2200.0	05	32779
for Eaton NZM4 1250 A	1200 A	1	2600.0	05	32781
for Siemens 3VL8 1600 A, Eaton NZM4 1600 A	1400 A	1	2950.0	05	32780

for rated currents see product description at [www.woehner.com](http://www.woehner.com)

### Legrand

for Legrand DPX <sup>3</sup> 1600 or GE FK1600	* 1440 A	1	2950.0	05	32809
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for rated currents see product description at [www.woehner.com](http://www.woehner.com)

\* only connection to system at the top possible

### Schneider Electric

for Schneider Electric NS1000, NS800 or NS630B	900 A	1	2200.0	05	32777
for Schneider Electric NS1250	1200 A	1	2900.0	05	32776
for Schneider Electric NS1600	1400 A	1	3010.0	05	32775

for rated currents see product description at [www.woehner.com](http://www.woehner.com)

### Siemens

for Siemens 3VL5 630 A	630 A	1	2000.0	05	32770
for Siemens 3VL6 800 A or 630 A	650 A	1	2080.0	05	32774
for Siemens 3VL7 1000 A	1000 A	1	2800.0	05	32773
for Siemens 3VL7 1250 A	1150 A	1	2800.0	05	32772
for Siemens 3VL8 1600 A, Eaton NZM4 1600 A	1400 A	1	2950.0	05	32780

for rated currents see product description at [www.woehner.com](http://www.woehner.com)

all devices can be mounted directly on busbars 30, 40, 60, 80, 100, 120 x 10  
for further information on current carrying capacity, see product specifications at [www.woehner.com](http://www.woehner.com)



## EQUES® 185Power CrossLink® Technology - Busbar adapters 1600 A

aligned to switchgear



**Busbar adapter 1600 A, connection to the system at the bottom, phase rotation,** clamp connection for drill-free mounting on the busbar system, with and without **CrossLink®185Power** touch-safe protection module

### ABB

Type	Rated current	Pack size	Weight kg/100 u.	PG	Part No.
for ABB Tmax T7 1250 A	1220 A	1	3000.0	05	32723
for ABB Tmax T7, Emax2 1600 A	1320 A	1	3230.0	05	32722

for rated currents see product description at [www.woehner.com](http://www.woehner.com)

### Eaton

for Eaton NZM4 1250 A	1200 A	1	3200.0	05	32788
for Eaton NZM4 1600 A	1400 A	1	3300.0	05	32787

for rated currents see product description at [www.woehner.com](http://www.woehner.com)

### Schneider Electric

for Schneider Electric NS 1250	1200 A	1	3000.0	05	32719
for Schneider Electric NS 1600	1400 A	1	3230.0	05	32718

for rated currents see product description at [www.woehner.com](http://www.woehner.com)

### Siemens

for Siemens 3VL7 1250 A	1150 A	1	3222.0	05	32739
for Siemens 3VL8 1600 A	1320 A	1	3432.0	05	32738

for rated currents see product description at [www.woehner.com](http://www.woehner.com)

all devices can be mounted directly on busbars 30, 40, 60, 80, 100, 120 x 10  
for further information on current carrying capacity, see product specifications at [www.woehner.com](http://www.woehner.com)



## EQUES® 185Power - Busbar adapters 1600 A

aligned to switchgear



**Busbar adapter, 1600 A, connection to the system at bottom, phase rotation,** screw connection for drilled busbars

### ABB

Type	Rated current	Pack size	Weight kg/100 u.	PG	Part No.
for ABB Tmax T7 1250 A	1220 A	1	2900.0	05	32725
for ABB Tmax T7, Emax2 1600 A	1320 A	1	3140.0	05	32724

for rated currents see product description at [www.woehner.com](http://www.woehner.com); adapters with phase rotation can also be used with connection to the system at the top

### Eaton

for Eaton NZM4 1250 A	1200 A	1	3000.0	05	32790
for Eaton NZM4 1600 A	1400 A	1	3150.0	05	32789

for rated currents see product description at [www.woehner.com](http://www.woehner.com); adapters with phase rotation can also be used with connection to the system at the top

### Schneider Electric

for Schneider Electric NS 1250	1200 A	1	2900.0	05	32721
for Schneider Electric NS 1600	1400 A	1	3140.0	05	32720

for rated currents see product description at [www.woehner.com](http://www.woehner.com); adapters with phase rotation can also be used with connection to the system at the top

### Siemens

for Siemens 3VL7 1250 A	1150 A	1	3172.0	05	32749
for Siemens 3VL8 1600 A	1320 A	1	3382.0	05	32748

for rated currents see product description at [www.woehner.com](http://www.woehner.com); adapters with phase rotation can also be used with connection to the system at the top

### Accessories, cover IP20

Article	Type	Pack size	Weight kg/100 u.	PG	Part No.
IP20 Protection cover (front) for adapter, incl. 3 top covers	for ABB Tmax T6/T7	1	125.6	05	32700
	for Eaton NZM4, Legrand DPX <sup>3</sup> 1600, GE FK1600	1	123.8	05	32701
	for Schneider Electric NS1600 – NS630B	1	122.8	05	32702
IP20 Protection cover (front) for adapter, incl. 3 top covers	for Siemens 3VL7 1000 A / 1250 A, 3VL8 1600 A	1	123.0	05	32703
	for Siemens 3VL5 630 A and 3VL6 800 A / 630 A	1	128.0	05	32706
touch-safe protection shroud IP20 (rear installation)	for all adapters	1	9.0	05	32704

### Accessories, current transformer, accuracy class 1

Type	Rated apparent power	Pack size	Weight kg/100 u.	PG	Part No.
current transformer 630 A / 5 A	5.00 VA	1	14.0	23	32983
current transformer 800 A / 5 A	5.00 VA	1	14.0	23	32984
current transformer 1000 A / 5 A	5.00 VA	1	14.0	23	32985
current transformer 1250 A / 5 A	5.00 VA	1	14.0	23	32986
current transformer 1600 A / 5 A	5.00 VA	1	14.0	23	32987

depending on the adapter type, 1 or 2 current transformers can be used per phase; see adapter product description at [www.woehner.com](http://www.woehner.com)

all devices can be mounted directly on busbars 30, 40, 60, 80, 100, 120 x 10  
for further information on current carrying capacity, see product specifications at [www.woehner.com](http://www.woehner.com)



## QUADRON®185Power CrossLink®Technology - NH in-line fuse-switch-disconnectors, size 00

3-pole switchable, 1-pole switchable or open



**NH in-line fuse-switch-disconnector, size 00**, 3-pole switchable, for drill-free mounting, connection at bottom / top

Type	Size	Rated current	Pack size	Weight kg/100 u.	PG	Part No.
screw M8, high version	* NH 00	160 A	1	261.5	12	<b>33700</b>
box terminal 70 mm <sup>2</sup> , high version	* NH 00	160 A	1	261.8	12	<b>33770</b>
screw M8, flat version	NH 00	160 A	1	218.2	12	<b>33704</b>
box terminal 70 mm <sup>2</sup> , flat version	NH 00	160 A	1	217.4	12	<b>33773</b>

terminal clamps required for mounting  
\* current transformer (can be integrated)

**NH in-line fuse-switch-disconnector, size 00**, 3-pole switchable, for drill-free mounting, with fuse monitoring, connection at bottom / top

screw M8, high version	* NH 00	160 A	1	270.0	12	<b>33720</b>
box terminal 70 mm <sup>2</sup> , high version	* NH 00	160 A	1	270.0	12	<b>33771</b>
screw M8, flat version	NH 00	160 A	1	220.0	12	<b>33724</b>
box terminal 70 mm <sup>2</sup> , flat version	NH 00	160 A	1	220.0	12	<b>33774</b>

terminal clamps required for mounting  
\* current transformer (can be integrated)

**NH in-line fuse-switch-disconnector, size 00**, 1-pole switchable, for drill-free mounting, connection at bottom / top

screw M8, high version	* NH 00	160 A	1	255.5	12	<b>33715</b>
box terminal 70 mm <sup>2</sup> , high version	* NH 00	160 A	1	256.3	12	<b>33772</b>
screw M8, flat version	NH 00	160 A	1	211.4	12	<b>33719</b>
box terminal 70 mm <sup>2</sup> , flat version	NH 00	160 A	1	212.0	12	<b>33775</b>

terminal clamps required for mounting  
\* current transformer (can be integrated)

**NH fuse-base, size 00**, open version, for drill-free mounting, connection at bottom / top

screw M8, flat version	NH 00	160 A	1	190.0	12	<b>33705</b>
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terminal clamps required for mounting



**CrossLink® terminal clamp**, for drill-free mounting on the busbar system

Article	Type	Size	Pack size	Weight kg/100 u.	PG	Part No.
CrossLink® terminal clamp	for busbar systems with touch-safe protection	00	3	4.0	12	<b>33737</b>
CrossLink® terminal clamp IP20	for busbar systems with touch-safe protection	00	3	4.4	12	<b>33765</b>

for mounting of one device on the CrossLink® touch-safe protection cover modules 3 clamps required

all devices can be mounted directly on busbars 30, 40, 60, 80, 100, 120 x 10

## QUADRON®185Power - NH in-line fuse-switch-disconnectors, size 00

3-pole switchable, 1-pole switchable or open



**NH in-line fuse-switch-disconnector, size 00**, 3-pole switchable, screw connection, connection at bottom / top

Type	Size	Rated current	Pack size	Weight kg/100 u.	PG	Part No.
screw M8, high version	* NH 00	160 A	1	261.5	12	<b>33700</b>
box terminal 70 mm <sup>2</sup> , high version	* NH 00	160 A	1	261.8	12	<b>33770</b>
screw M8, flat version	NH 00	160 A	1	218.2	12	<b>33704</b>
box terminal 70 mm <sup>2</sup> , flat version	NH 00	160 A	1	217.4	12	<b>33773</b>

terminal clamps enable drill-free mounting  
\* current transformer (can be integrated)

**NH in-line fuse-switch-disconnector, size 00**, 3-pole switchable, screw connection, with fuse monitoring, connection at bottom / top

screw M8, high version	* NH 00	160 A	1	270.0	12	<b>33720</b>
box terminal 70 mm <sup>2</sup> , high version	* NH 00	160 A	1	270.0	12	<b>33771</b>
screw M8, flat version	NH 00	160 A	1	220.0	12	<b>33724</b>
box terminal 70 mm <sup>2</sup> , flat version	NH 00	160 A	1	220.0	12	<b>33774</b>

terminal clamps enable drill-free mounting  
\* current transformer (can be integrated)

**NH in-line fuse-switch-disconnector, size 00**, 1-pole switchable, screw connection, connection at bottom / top

screw M8, high version	* NH 00	160 A	1	255.5	12	<b>33715</b>
box terminal 70 mm <sup>2</sup> , high version	* NH 00	160 A	1	256.3	12	<b>33772</b>
screw M8, flat version	NH 00	160 A	1	211.4	12	<b>33719</b>
box terminal 70 mm <sup>2</sup> , flat version	NH 00	160 A	1	212.0	12	<b>33775</b>

terminal clamps enable drill-free mounting  
\* current transformer (can be integrated)

**NH fuse-base, size 00**, open version, screw connection, connection at bottom / top

screw M8, flat version	NH 00	160 A	1	190.0	12	<b>33705</b>
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terminal clamps enable drill-free mounting



**Accessory terminal clamp**, for drill-free mounting on the busbar system

Article	Type	Size	Pack size	Weight kg/100 u.	PG	Part No.
terminal clamp	for busbar systems without system covers	00	3	14.0	12	<b>33739</b>

for mounting of one device 3 clamps required

all devices can be mounted directly on busbars 30, 40, 60, 80, 100, 120 x 10

## QUADRON®185Power CrossLink®Technology - NH in-line fuse-switch-disconnectors, size 1 - 3

3-pole switchable, 1-pole switchable or open



**NH in-line fuse-switch-disconnector, size 1 - 3**, 3-pole switchable, for drill-free mounting, connection at top / bottom

Type	Size	Rated current	Pack size	Weight kg/100 u.	PG	Part No.
screw M12	NH 1	250 A	1	480.0	12	<b>33701</b>
screw M12	NH 2	400 A	1	480.0	12	<b>33702</b>
screw M12	NH 3	630 A	1	582.3	12	<b>33703</b>

terminal clamps enable drill-free mounting

**NH in-line fuse switch-disconnector, size 1 - 3**, 3-pole switchable, for drill-free mounting, with fuse monitoring, connection at top / bottom

Type	Size	Rated current	Pack size	Weight kg/100 u.	PG	Part No.
screw M12	NH 1	250 A	1	540.0	12	<b>33721</b>
screw M12	NH 2	400 A	1	540.0	12	<b>33722</b>
screw M12	NH 3	630 A	1	640.0	12	<b>33723</b>

terminal clamps enable drill-free mounting

**NH in-line fuse-switch-disconnector, size 1 - 3**, 1-pole switchable, for drill-free mounting, connection at top / bottom

Type	Size	Rated current	Pack size	Weight kg/100 u.	PG	Part No.
screw M12	NH 1	250 A	1	495.0	12	<b>33716</b>
screw M12	NH 2	400 A	1	502.0	12	<b>33717</b>
screw M12	NH 3	630 A	1	574.0	12	<b>33718</b>

terminal clamps enable drill-free mounting

**Double NH in-line fuse-switch-disconnector, 1250 A**, 3-pole switchable, for drill-free mounting, connection at bottom

Type	Size	Rated current	Pack size	Weight kg/100 u.	PG	Part No.
screw M12, incl. terminal compartment cover	NH 3	1250 A	1	1556.0	12	<b>33731</b>

terminal clamps enable drill-free mounting

**NH in-line fuse-base, size 1 - 3**, open version, for drill-free mounting, connection at bottom / top

Type	Size	Rated current	Pack size	Weight kg/100 u.	PG	Part No.
screw M12	NH 1	250 A	1	365.0	12	<b>33706</b>
screw M12	NH 2	400 A	1	375.1	12	<b>33707</b>
screw M12	NH 3	630 A	1	450.0	12	<b>33708</b>

terminal clamps enable drill-free mounting



**CrossLink®-Terminal clamp**, for drill-free mounting on the busbar system

Article	Type	Size	Pack size	Weight kg/100 u.	PG	Part No.
CrossLink® terminal clamp	for busbar systems with CrossLink® touch-safe protection	1 - 3	3	15.0	12	<b>33738</b>

for mounting of one device on the CrossLink® touch-safe protection cover modules 3 clamps required

all devices can be mounted directly on busbars 30, 40, 60, 80, 100, 120 x 10

## QUADRON®185Power - NH in-line fuse-switch-disconnectors, size 1 - 3

3-pole switchable, 1-pole switchable or open



**NH in-line fuse-switch-disconnector, size 1 - 3**, 3-pole switchable, screw connection, connection at top / bottom

Type	Size	Rated current	Pack size	Weight kg/100 u.	PG	Part No.
screw M12	NH 1	250 A	1	480.0	12	<b>33701</b>
screw M12	NH 2	400 A	1	480.0	12	<b>33702</b>
screw M12	NH 3	630 A	1	582.3	12	<b>33703</b>

terminal clamps enable drill-free mounting

**NH in-line fuse-switch-disconnector, size 1 - 3**, 3-pole switchable, screw connection, with fuse monitoring, connection at top / bottom

Type	Size	Rated current	Pack size	Weight kg/100 u.	PG	Part No.
screw M12	NH 1	250 A	1	540.0	12	<b>33721</b>
screw M12	NH 2	400 A	1	540.0	12	<b>33722</b>
screw M12	NH 3	630 A	1	640.0	12	<b>33723</b>

terminal clamps enable drill-free mounting

**NH in-line fuse-switch-disconnector, size 1 - 3**, 1-pole switchable, screw connection, connection at top / bottom

Type	Size	Rated current	Pack size	Weight kg/100 u.	PG	Part No.
screw M12	NH 1	250 A	1	495.0	12	<b>33716</b>
screw M12	NH 2	400 A	1	502.0	12	<b>33717</b>
screw M12	NH 3	630 A	1	574.0	12	<b>33718</b>

terminal clamps enable drill-free mounting

**Double NH in-line fuse-switch-disconnector, 1250 A**, 3-pole switchable, screw connection, connection at bottom

Type	Size	Rated current	Pack size	Weight kg/100 u.	PG	Part No.
screw M12, incl. terminal compartment cover	NH 3	1250 A	1	1556.0	12	<b>33731</b>

terminal clamps enable drill-free mounting

**NH in-line fuse-base, size 1 - 3**, open version, screw connection, connection at bottom / top

Type	Size	Rated current	Pack size	Weight kg/100 u.	PG	Part No.
screw M12	NH 1	250 A	1	365.0	12	<b>33706</b>
screw M12	NH 2	400 A	1	375.1	12	<b>33707</b>
screw M12	NH 3	630 A	1	450.0	12	<b>33708</b>

terminal clamps enable drill-free mounting



**Accessory terminal clamp**, for drill-free mounting on the busbar system

Article	Type	Size	Pack size	Weight kg/100 u.	PG	Part No.
terminal clamp	for busbar systems without system covers	1 - 3	3	10.0	12	<b>33740</b>

for mounting of one device 3 clamps required

all devices can be mounted directly on busbars 30, 40, 60, 80, 100, 120 x 10

## QUADRON®185Power - Accessories, size 00

3-pole, 1-pole switchable and open version



### Accessories

Article	Type	Size	Pack size	Weight kg/100 u.	PG	Part No.
clamp connector	* for Cu 16 - 70 mm <sup>2</sup>	00	3	1.5	09	<b>33755</b>
wedge clamp terminal	* for Cu and Al 10 - 95 mm <sup>2</sup>	00	3	3.0	09	<b>33734</b>
terminal compartment cover, high version, connection bottom	for 33700, 33770, 33720, 33771, 33715, 33772 and QUADRON®185Power Speed size 00	00	1	18.2	12	<b>33732</b>
terminal compartment cover, flat version, connection bottom	for 33704, 33773, 33724, 33774, 33719, 33775, 33705	00	1	13.4	12	<b>33725</b>
terminal compartment cover, high version, connection top	for 33700, 33770, 33720, 33771, 33715, 33772	00	1	13.4	12	<b>33726</b>
terminal compartment cover, flat version, connection top	for 33704, 33773, 33724, 33774, 33719, 33775	00	1	13.4	12	<b>33727</b>
pilot switch	changeover 250 V AC / 5 A, 30V DC / 4 A	000 - 3	1	1.1	09	<b>33156</b>
lateral bearing strip	for front covers	00 - 3	2	10.7	12	<b>33758</b>
lateral cover support	for front covers	00 - 3	4	0.5	12	<b>33113</b>
grip lug cover	** for NH base and 33705	00	30	1.2	10	<b>79448</b>
plug support with mounting rail	for CT wiring	00	1	2.8	12	<b>33766</b>
component support with mount. rails	for fuse monitoring and CT wiring	00	1	5.5	12	<b>33767</b>

when using aluminium conductors, observe the maintenance instructions (see 8.2)

\* can only be used for size 00 with connection screws M8

\*\* 1 piece required per fuse

### Current transformer (can be integrated)

Type	accuracy class	Rated apparent power	Size	Pack size	Weight kg/100 u.	PG	Part No.
current transformer 80 A / 5 A	1	2.50 VA	00	1	14.0	23	<b>33741</b>
current transformer 150 A / 5 A			00	1	14.0	23	<b>33742</b>
current transformer 100 A / 5 A	0.5	1.50 VA	00	1	28.0	23	<b>33749</b>
current transformer 150 A / 5 A			00	1	28.0	23	<b>33751</b>
current transformer 100 A / 5 A, with declar. of conformity			00	1	28.0	23	<b>33750</b>
current transformer 150 A / 5 A, with declar. of conformity			00	1	28.0	23	<b>33752</b>

current transformers with declaration of conformity: national laws must be observed; in addition to the net price of the current transformers, the following cost are charged per transformer for the declaration of conformity, the costs cannot be discounted: current transformers up to 500 A: EUR 37; current transformers from 500 A to 1000 A: EUR 54

### Double adapter, for NH in-line fuse-switch-disconnector, size 00

for 2 devices size NH 00	00	1	55.0	12	<b>33728</b>
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### Current transformer for double adapter

Type	accuracy class	Rated apparent power	Size	Pack size	Weight kg/100 u.	PG	Part No.
current transformer 150 A / 5 A	1	1.50 VA	00 - 3	1	14.0	23	<b>33744</b>
current transformer 150 A / 5 A	0.5			1	28.0	23	<b>33753</b>
current transformer 150 A / 5 A, with declaration of conformity	0.5			1	28.0	23	<b>33754</b>

current transformers with declaration of conformity: national laws must be observed; in addition to the net price of the current transformers, the following cost are charged per transformer for the declaration of conformity, the costs cannot be discounted: current transformers up to 500 A: EUR 37; current transformers from 500 A to 1000 A: EUR 54

## QUADRON®185Power - Accessories, size 1 - 3

3-pole switchable, 1-pole switchable or open



### Accessories

Article	Type	Size	Pack size	Weight kg/100 u.	PG	Part No.
box terminal	* for Cu and Al 70 - 240 mm <sup>2</sup>	1 - 3	3	14.5	12	<b>33735</b>
box terminal	* for Cu and Al 120 - 300 mm <sup>2</sup>	1 - 3	3	25.5	12	<b>33736</b>
terminal compartment cover	universal for NH-rails size 1 - 3 and connection rail 800 A	1 - 3	1	30.0	12	<b>33733</b>
pilot switch	changeover 250 V AC / 5 A, 30V DC / 4 A	000 - 3	1	1.1	09	<b>33156</b>
lateral bearing strip	for front covers	00 - 3	2	10.7	12	<b>33758</b>
lateral cover support	for front covers	00 - 3	4	0.5	12	<b>33113</b>
grip lug cover	for 33706, 33707, 33708	00	6	57.5	12	<b>33759</b>
rear touch-safe protection cover	** rear protection for Phase L1	1 - 3	10	0.0	12	<b>33761</b>
plug support with mounting rail	for CT wiring	1 - 3	1	8.8	12	<b>33768</b>
component support with mounting rails	for fuse monitor and CT wiring	1 - 3	1	9.0	12	<b>33769</b>

\* when using aluminium conductors, observe the maintenance instructions (see 8.2)

\*\* to get rear finger safety in combination with CrossLink® touch-safe protection modules

### Current transformer (can be integrated), accuracy class 1

Article	Rated apparent power	Size	Pack size	Weight kg/100 u.	PG	Part No.
current transformer 150 A / 5 A	1.50 VA	00 - 3	1	14.0	23	<b>33744</b>
current transformer 200 A / 5 A	1.50 VA	1 - 3	1	14.0	23	<b>33745</b>
current transformer 250 A / 5 A	2.50 VA	1 - 3	1	14.0	23	<b>33746</b>
current transformer 400 A / 5 A	2.50 VA	1 - 3	1	14.0	23	<b>33747</b>
current transformer 600 A / 5 A	2.50 VA	1 - 3	1	14.0	23	<b>33748</b>

can also be used for connection rail 01438

### Current transformer (can be integrated), accuracy class 0.5

current transformer 150 A / 5 A	1.50 VA	00 - 3	1	28.0	23	<b>33753</b>
current transformer 200 A / 5 A	1.50 VA	1 - 3	1	28.0	23	<b>33292</b>
current transformer 250 A / 5 A	2.50 VA	1 - 3	1	28.0	23	<b>33294</b>
current transformer 400 A / 5 A	2.50 VA	1 - 3	1	28.0	23	<b>33298</b>

can also be used for connection rail 01438

### Current transformer (can be integrated), accuracy class 0.5; tested in accordance with the conformity procedure

current transformer 150 A / 5 A, with declaration of conformity	1.50 VA	00 - 3	1	28.0	23	<b>33754</b>
current transformer 200 A / 5 A, with declaration of conformity	1.50 VA	1 - 3	1	28.0	23	<b>33293</b>
current transformer 250 A / 5 A, with declaration of conformity	2.50 VA	1 - 3	1	28.0	23	<b>33295</b>
current transformer 400 A / 5 A, with declaration of conformity	2.50 VA	1 - 3	1	28.0	23	<b>33299</b>

can also be used for connection rail 01438; national laws must be observed; in addition to the net price of the transformer, the following cost are charged per transformer for the declaration of conformity, the costs cannot be discounted: CTs up to 500 A: EUR 37; transformers from 500 A to 1000 A: EUR 54

### Current transformer module, with terminal compartment cover, for NH in-line fuse-switch-disconnectors size 1 - 3

universal current transformer module	for mounting in the connection compartment	1 - 3	1	170.0	18	<b>33762</b>
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for matching transformer see page 4.19

## QUADRON®185Power Speed CrossLink®Technology - NH switch-disconnector-fuses, size 00

with fuses and snap-action switch mechanism



**In-line switch-disconnector-fuse NH, size 00, 3-pole switchable, clamp connection** for drill-free mounting **with and without CrossLink® touch-safe protection modules**, connection screw M8

Type	Size	Rated current	Pack size	Weight kg/100 u.	PG	Part No.
high version, connection bottom	* NH 00	160 A	1	504.0	18	<b>33614</b>
high version, connection top	* NH 00	160 A	1	459.0	18	<b>33616</b>
flat version, connection bottom	NH 00	160 A	1	455.3	18	<b>33610</b>
flat version, connection top	NH 00	160 A	1	467.0	18	<b>33612</b>

with three terminal clamps with insulated screw extension for mounting on the busbar system  
\* current transformer, can be integrated; combinable with sizes 1 - 3

**In-line switch-disconnector-fuse NH size 00, 3-pole switchable, with fuse monitoring, clamp connection** for drill-free mounting with and without CrossLink® touch-safe protection modules, connection screw M8

Type	Size	Rated current	Pack size	Weight kg/100 u.	PG	Part No.
high version, connection bottom	* NH 00	160 A	1	481.5	18	<b>33624</b>
high version, connection top	* NH 00	160 A	1	480.0	18	<b>33626</b>
flat version, connection bottom	NH 00	160 A	1	449.0	18	<b>33620</b>
flat version, connection top	NH 00	160 A	1	454.0	18	<b>33622</b>

with three terminal clamps with insulated screw extension for mounting on the busbar system  
\* current transformer, can be integrated; combinable with sizes 1 - 3

all devices can be mounted directly on busbars 30, 40, 60, 80, 100, 120 x 10  
fuse links are not included in the scope of delivery

## QUADRON®185Power Speed - NH switch-disconnector-fuses

with fuses and snap-action switch mechanism



**In-line switch-disconnector-fuse NH size 00, 3-pole switchable, screw connection**, connection screw M8

high version, connection bottom	* NH 00	160 A	1	462.5	18	<b>33615</b>
high version, connection top	* NH 00	160 A	1	450.0	18	<b>33617</b>
flat version, connection bottom	NH 00	160 A	1	409.0	18	<b>33611</b>
flat version, connection top	NH 00	160 A	1	415.5	18	<b>33613</b>

with three screws for mounting on the busbar system  
\* current transformer, can be integrated; combinable with sizes 1 - 3

**In-line switch-disconnector-fuse NH size 00, 3-pole switchable, with fuse monitoring, screw connection**, connection screw M8

high version, connection bottom	* NH 00	160 A	1	485.0	18	<b>33625</b>
high version, connection top	* NH 00	160 A	1	483.5	18	<b>33627</b>
flat version, connection bottom	NH 00	160 A	1	443.0	18	<b>33621</b>
flat version, connection top	NH 00	160 A	1	448.0	18	<b>33623</b>

with three screws for mounting on the busbar system  
\* current transformer, can be integrated; combinable with sizes 1 - 3

all devices can be mounted directly on busbars 30, 40, 60, 80, 100, 120 x 10  
fuse links are not included in the scope of delivery

## QUADRON®185Power Speed CrossLink®Technology - NH switch-disconnector-fuses, size 1 - 3

with fuses and snap-action switch mechanism



**In-line switch-disconnector-fuse NH size 1 - 3**, 3-pole switchable, clamp connection for drill-free mounting with and without CrossLink® touch-safe protection modules, connection screw M12

Type	Size	Rated current	Pack size	Weight kg/100 u.	PG	Part No.
connection bottom	NH 1	250 A	1	1176.0	18	<b>33630</b>
connection top	NH 1	250 A	1	1194.0	18	<b>33631</b>
connection bottom	NH 2	400 A	1	1250.0	18	<b>33632</b>
connection top	NH 2	400 A	1	1361.0	18	<b>33633</b>
connection bottom	NH 3	630 A	1	1421.0	18	<b>33634</b>
connection top	NH 3	500 A	1	1481.0	18	<b>33635</b>

CrossLink® terminal clamp required for mounting

**In-line switch-disconnector-fuse NH size 1 - 3**, 3-pole switchable, with fuse monitoring, clamp connection for drill-free mounting with and without CrossLink® touch-safe protection modules, connection screw M12

Type	Size	Rated current	Pack size	Weight kg/100 u.	PG	Part No.
connection bottom	NH 1	250 A	1	1267.0	18	<b>33636</b>
connection top	NH 1	250 A	1	1285.0	18	<b>33637</b>
connection bottom	NH 2	400 A	1	1420.0	18	<b>33638</b>
connection top	NH 2	400 A	1	1452.0	18	<b>33639</b>
connection bottom	NH 3	630 A	1	1512.0	18	<b>33640</b>
connection top	NH 3	500 A	1	1572.0	18	<b>33641</b>

CrossLink® terminal clamp required for mounting



**CrossLink® terminal clamp**, for free mounting on the busbar system

Article	Type	Size	Pack size	Weight kg/100 u.	PG	Part No.
mounting set with 3 terminal clamps	for drill-less mounting on the busbar system, with and without CrossLink® touch-safe protection covers	1 - 3	1	51.0	18	<b>33651</b>
insulated screw extension for terminal clamp	for safe live working with standard tools	1 - 3	3	5.8	18	<b>33652</b>

for mounting of one device on the CrossLink® touch-safe protection cover modules 3 clamps required

all devices can be mounted directly on busbars 30, 40, 60, 80, 100, 120 x 10  
fuse links are not included in the scope of delivery

## QUADRON®185Power Speed - NH switch-disconnector-fuses size 1 - 3

with fuses and snap-action switch mechanism



**In-line switch-disconnector-fuse NH size 1 - 3**, 3-pole switchable, screw connection, connection screw M12

Type	Size	Rated current	Pack size	Weight kg/100 u.	PG	Part No.
connection bottom	NH 1	250 A	1	1176.0	18	<b>33630</b>
connection top	NH 1	250 A	1	1194.0	18	<b>33631</b>
connection bottom	NH 2	400 A	1	1250.0	18	<b>33632</b>
connection top	NH 2	400 A	1	1361.0	18	<b>33633</b>
connection bottom	NH 3	630 A	1	1421.0	18	<b>33634</b>
connection top	NH 3	500 A	1	1481.0	18	<b>33635</b>

mounting set with 3 screws required

**In-line switch-disconnector-fuse NH size 1 - 3**, 3-pole switchable, screw connection, with fuse monitoring, connection screw M12

Type	Size	Rated current	Pack size	Weight kg/100 u.	PG	Part No.
connection bottom	NH 1	250 A	1	1267.0	18	<b>33636</b>
connection top	NH 1	250 A	1	1285.0	18	<b>33637</b>
connection bottom	NH 2	400 A	1	1420.0	18	<b>33638</b>
connection top	NH 2	400 A	1	1452.0	18	<b>33639</b>
connection bottom	NH 3	630 A	1	1512.0	18	<b>33640</b>
connection top	NH 3	500 A	1	1572.0	18	<b>33641</b>

mounting set with 3 screws required



**Mounting set**, for mounting on the busbar system

Article	Type	Size	Pack size	Weight kg/100 u.	PG	Part No.
mounting set with 3 bolts	for busbar connection on drilled busbars, including positioner	1 - 3	1	31.4	18	<b>33650</b>

all devices can be mounted directly on busbars 30, 40, 60, 80, 100, 120 x 10  
fuse links are not included in the scope of delivery

## QUADRON®185Power Speed - Accessories size 00



### Accessories

Article	Type	Size	Pack size	Weight kg/100 u.	PG	Part No.
terminal compartment cover, high version, connection bottom	for 33700, 33770, 33720, 33771, 33715, 33772 and QUADRON®185Power Speed size 00	00	1	18.2	12	<b>33732</b>
rear touch-safe protection	* for terminal compartment	00	1	7.0	18	<b>33653</b>
clamp connector	* for Cu 16 - 70 mm <sup>2</sup>	00	3	1.5	09	<b>33755</b>
wedge clamp terminal	* for Cu and Al 10 - 95 mm <sup>2</sup>	00	3	3.0	09	<b>33734</b>
bearing area extension, top	for front covers	00	1	0.9	18	<b>33645</b>
lateral bearing strip	for front covers	00 - 3	2	10.7	12	<b>33758</b>
lateral cover support	for front covers	00 - 3	4	0.5	12	<b>33113</b>
pilot switch	changeover 250 V AC / 5 A, 30 V DC / 4 A	00 - 3	1	2.9	18	<b>33642</b>

when using aluminium conductors, observe the maintenance instructions (see 8.2)

\* can only be used for size 00 with connection screws M8

### Current transformer (can be integrated)

Type	accuracy class	Rated apparent power	Size	Pack size	Weight kg/100 u.	PG	Part No.
current transformer 80 A / 5 A	1	2.50 VA	00	1	14.0	23	<b>33741</b>
current transformer 150 A / 5 A			00	1	14.0	23	<b>33742</b>
current transformer 100 A / 5 A	0.5	1.50 VA	00	1	28.0	23	<b>33749</b>
current transformer 150 A / 5 A			00	1	28.0	23	<b>33751</b>
current transformer 100 A / 5 A, with declar. of conformity			00	1	28.0	23	<b>33750</b>
current transformer 150 A / 5 A, with declar. of conformity			00	1	28.0	23	<b>33752</b>

current transformers with declaration of conformity: national laws must be observed; in addition to the net price of the current transformers, the following cost are charged per transformer for the declaration of conformity, the costs cannot be discounted: current transformers up to 500 A: EUR 37; current transformers from 500 A to 1000 A: EUR 54

### Double adapter, for NH in-line fuse-switch-disconnector, size 00

for 2 devices size NH 00	00	1	55.0	12	<b>33728</b>
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### Current transformer for double adapter

Type	accuracy class	Rated apparent power	Size	Pack size	Weight kg/100 u.	PG	Part No.
current transformer 150 A / 5 A	1	1.50 VA	00 - 3	1	14.0	23	<b>33744</b>
current transformer 150 A / 5 A	0.5			1	28.0	23	<b>33753</b>
current transformer 150 A / 5 A, with declaration of conformity	0.5			1	28.0	23	<b>33754</b>

current transformers with declaration of conformity: national laws must be observed; in addition to the net price of the current transformers, the following cost are charged per transformer for the declaration of conformity, the costs cannot be discounted: current transformers up to 500 A: EUR 37; current transformers from 500 A to 1000 A: EUR 54

## QUADRON®185Power Speed - Accessories, size 1 - 3



### Current transformer module, for QUADRON®185Power Speed - NH switch-disconnector fuse, size 1 - 3, with terminal compartment cover

Article	Type	Size	Pack size	Weight kg/100 u.	PG	Part No.
universal current transformer module	for mounting in the connection compartment	1 - 3	1	170.0	18	<b>33762</b>

including front and rear cover

### Current transformer (can be integrated into transformer module), accuracy class 1

Type	Rated apparent power	Pack size	Weight kg/100 u.	PG	Part No.
current transformer 250 A / 5 A	5.00 VA	1	28.0	23	<b>33782</b>
current transformer 400 A / 5 A	5.00 VA	1	28.0	23	<b>33785</b>
current transformer 600 A / 5 A	5.00 VA	1	28.0	23	<b>33788</b>
current transformer 750 A / 5 A	5.00 VA	1	28.0	23	<b>33791</b>

### Current transformer (can be integrated into transformer module), accuracy class 0.5

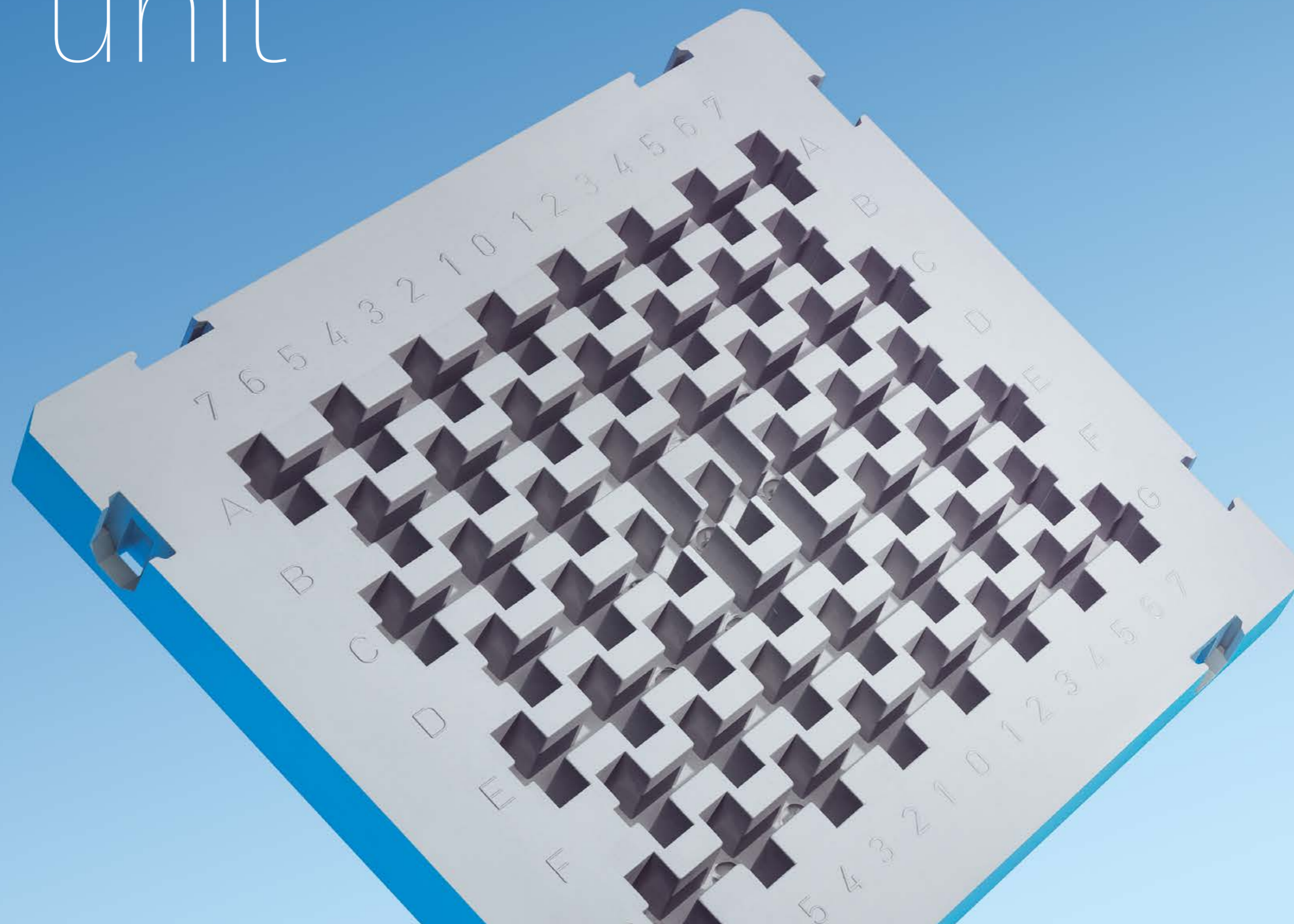
current transformer 250 A / 5 A	5.00 VA	1	28.0	23	<b>33780</b>
current transformer 400 A / 5 A	5.00 VA	1	28.0	23	<b>33783</b>
current transformer 600 A / 5 A	5.00 VA	1	28.0	23	<b>33786</b>
current transformer 750 A / 5 A	5.00 VA	1	28.0	23	<b>33789</b>

### Current transformer (can be integrated into transformer module), accuracy class 0.5; tested in accordance with the conformity procedure

current transformer 250 A / 5 A, with declaration of conformity	5.00 VA	1	28.0	23	<b>33781</b>
current transformer 400 A / 5 A, with declaration of conformity	5.00 VA	1	28.0	23	<b>33784</b>
current transformer 600 A / 5 A, with declaration of conformity	5.00 VA	1	28.0	23	<b>33787</b>
current transformer 750 A / 5 A, with declaration of conformity	5.00 VA	1	28.0	23	<b>33790</b>

current transformers with declaration of conformity: national laws must be observed; in addition to the net price of the current transformers, the following cost are charged per transformer for the declaration of conformity, the costs cannot be discounted: current transformers up to 500 A: EUR 37; current transformers from 500 A to 1000 A: EUR 54

# Centre feed unit



## FEEDING SYSTEM

# Centre feed unit

## Feeding system with high variability and connection convenience

Centre feed unit up to 4000 A combines the advantages of high short-circuit capacity, drill-less mounting, brace terminal technology and a clearly structured design. The fuseless equipment practice of this feeding system puts high requirements on the short-circuit capacity. The busbar supports have been designed specifically for this purpose. This also concerns the large number of connection

options for copper and aluminium conductors – whether for round conductors or laminated and solid flat conductor connections. Industrial production and type tests ensure compliance with the required safety standards. The current rating and short-circuit capacity up to 120 kA determined via the type test meet the demanding requirements for this feeding system.





## Double-T, triple-T and TCC section busbars

These well-established section busbars provide safe transmission of currents up to 4000 A. Double-T and triple-T section busbars can be connected on both sides. Versions:

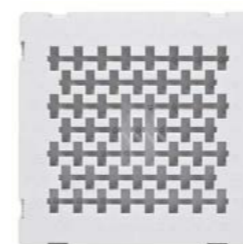
- double-T section busbar
- triple-T section busbar
- TCC section busbar



## CRITO® connection technology

These solutions provide for convenient connection of round conductors, flat conductors and cable lugs. Currents up to 3200 A can be brought to the busbar by the individual components.

- brace terminal technology
- round sector and flat conductor
- UL listed



## Busbar supports multi-pole

The busbar supports are suitable for 3- or 4-pole systems. Busbars from 300 to 1140 mm<sup>2</sup> can be used.

- variable configurations
- double-T and triple-T sections busbars can be used



## Busbar support 1-pole

The 1-pole lateral busbar support can also accommodate the TCC section busbars.

- Busbars from 500 to 1600 mm<sup>2</sup> can also be used.
- variable configurations
  - double-T, triple-T and TCC section busbars can be used

## Centre feed units

with TT and TTT section busbars



### Centre feed unit

Cabinet width	Mounting dimensions	Busbar length	Cross-section mm <sup>2</sup>	Pack size	Weight kg/100 u.	PG	Part No.
for cabinet width 600 mm	488 - 563	453	500	1	1434.0	11	<b>35007</b>
for cabinet width 800 mm	688 - 763	653		1	1716.0	11	<b>35006</b>
for cabinet width 600 mm	488 - 563	453	720	1	1716.0	11	<b>35005</b>
for cabinet width 800 mm	688 - 763	653		1	2488.0	11	<b>35004</b>
for cabinet width 600 mm	488 - 563	453	1140	1	2200.0	11	<b>35015</b>
for cabinet width 800 mm	688 - 763	653		1	2940.0	11	<b>35016</b>

### Universal conductor connection terminal 16 mm<sup>2</sup> to 300 mm<sup>2</sup>

For busbar	Connection min. - max.	Terminal space W x H	For use up to max.	Pack size	Weight kg/100 u.	PG	Part No.
flat busbars 10 mm and section busbars	16 - 120 mm <sup>2</sup> , AWG 4 - MCM 250	17 x 15	440 A	25	10.9	07	<b>01203</b>
30 x 10 and section busbars	95 - 300 mm <sup>2</sup>	41 x 25	630 A	3	85.7	07	<b>01094</b>

### Brace terminal for round conductors up to 300 mm<sup>2</sup>

For busbar	Connection min. - max.	For use up to max.	Pack size	Weight kg/100 u.	PG	Part No.
20, 25, 30 x 5, 10 and section busbars	* Cu / Al 95 - 185 mm <sup>2</sup>	500 A	6	31.2	07	<b>01318</b>
20, 25, 30 x 5, 10 and section busbars	* Cu / Al 95 - 300 mm <sup>2</sup>	600 A	3	42.5	07	<b>01760</b>

\* when using aluminium conductors, observe the maintenance instructions (see 8.2)

### Profile terminal, for double-T section busbar, at front and back of busbar section

Connection cross-section	End feed	Centre feed	Terminal space W x H	Pack size	Weight kg/100 u.	PG	Part No.
320 - 800 mm <sup>2</sup>	1600 A	1600 A	41 x 20 - 42	3	67.0	07	<b>01185</b>
500 - 750 mm <sup>2</sup>			51 x 5 - 28	3	70.5	07	<b>01906</b>
600 - 900 mm <sup>2</sup>			64 x 5 - 28	3	84.0	07	<b>01907</b>
500 - 1000 mm <sup>2</sup>	2000 A	2000 A	51 x 20 - 42	3	73.5	07	<b>01936</b>
600 - 1200 mm <sup>2</sup>			64 x 20 - 42	3	85.9	07	<b>01911</b>
800 - 1600 mm <sup>2</sup>			81 x 20 - 42	3	101.1	07	<b>01934</b>
1000 - 2000 mm <sup>2</sup>	2800 A	2800 A	101 x 20 - 42	3	113.7	07	<b>01935</b>

for the connection of flat busbars and laminated copper busbars

### Profile terminal, for triple-T-section busbar

Connection cross-section	End feed	Centre feed	Terminal space W x H	Pack size	Weight kg/100 u.	PG	Part No.
320 - 800 mm <sup>2</sup>	1600 A	1600 A	41 x 23 - 45	3	105.0	07	<b>01513</b>
500 - 1260 mm <sup>2</sup>	2000 A	2500 A	64 x 23 - 45	3	124.0	07	<b>01008</b>
1200 - 3600 mm <sup>2</sup>	2500 A	3200 A	101 x 23 - 45	3	172.7	07	<b>01186</b>

for the connection of flat busbars and laminated copper busbars



## Centre feed units

with TT and TTT section busbars



### Brace terminal, 55 to 105 mm wide, for flat conductors

For busbar	Terminal space W x H	End feed	Centre feed	Pack size	Weight kg/100 u.	PG	Part No.
30 x 10 and section busbars	55 x 10 - 28	1600 A	2000 A	3	50.0	07	<b>01069</b>
30 x 10 and section busbars	68 x 10 - 28			3	63.0	07	<b>01070</b>
30 x 10 and section busbars	105 x 10 - 28		2800 A	3	84.0	07	<b>01071</b>

for the connection of flat busbars and laminated copper busbars

### Clip-on screw connection, attachable, for DIN 46234 cable lugs

For busbar	Terminal space	For use up to max.	Pack size	Weight kg/100 u.	PG	Part No.
12, 15, 20, 25, 30 x 10 and section busbars	M8 x 8	490 A	20	16.5	07	<b>01514</b>
12, 15, 20, 25, 30 x 10 and section busbars	M10 x 10	630 A	6	36.2	07	<b>01047</b>

### Laminated copper busbars, insulated, length 2 m

Dimensions (Number of laminates x width x thickness)	Rated current at 30 K	Rated current at 50 K	Cross-section mm <sup>2</sup>	Pack size	Weight kg/100 u.	PG	Part No.
10 x 40 x 1	774 A	1053 A	400	1	746.0	06	<b>01615</b>
10 x 50 x 1	914 A	1244 A	500	1	932.0	06	<b>01509</b>
10 x 63 x 1	1088 A	1481 A	630	1	1180.0	06	<b>01510</b>
10 x 80 x 1	1305 A	1777 A	800	1	1490.0	06	<b>01061</b>
10 x 100 x 1	1550 A	2110 A	1000	1	1870.0	06	<b>01273</b>

you will find more laminated copper bars in the "accessories" chapter

### Component, for individual mounting

Article	Type	Pack size	Weight kg/100 u.	PG	Part No.
busbar support, lateral	for centre feed unit with double T and triple T busbars	2	458.0	11	<b>35008</b>
busbar support, 4-pole, centre	for centre feed unit with double T busbars	1	458.0	11	<b>35009</b>
busbar support, 3-pole, centre	for centre feed unit with triple T busbars	1	458.0	11	<b>35001</b>
additional cover holder	for centre feed unit	4	1.4	11	<b>35017</b>

### Section busbar, copper

Article	Type	Busbar length	Pack size	Weight kg/100 u.	PG	Part No.
double-T section busbar 500 mm <sup>2</sup>	length 453 mm, tinned	453	1	200.6	06	<b>01225</b>
double-T section busbar 500 mm <sup>2</sup>	length 650 mm, tinned	650	1	288.1	06	<b>01226</b>
double-T section busbar 720 mm <sup>2</sup>	length 453 mm, tinned	453	1	293.3	06	<b>01838</b>
double-T section busbar 720 mm <sup>2</sup>	length 653 mm, tinned	653	1	424.0	06	<b>01831</b>
triple-T section busbar 1140 mm <sup>2</sup>	length 453 mm, tinned	453	1	464.0	06	<b>01188</b>
triple-T section busbar 1140 mm <sup>2</sup>	length 653 mm, tinned	653	1	672.3	06	<b>01189</b>

for current carrying capacity of the busbars visit [www.woehner.com](http://www.woehner.com)



## Centre feed units

with TT, TTT and TCC section busbars



### Busbar holder, 1-pole, lateral

Type	Pack size	Weight kg/100 u.	PG	Part No.
for section busbar TT, TTT and TCC	6	11.0	06	<b>01369</b>

### Section busbar, copper, tin-plated

Type	Length	Pack size	Weight kg/100 u.	PG	Part No.
TCC section busbar 1600 mm <sup>2</sup>	2400	1	3416.0	06	<b>01610</b>

for the connection of flat busbars and laminated copper busbars

### Connection screw, with nut and spring washer for TCC section busbars

Type	Connection	Pack size	Weight kg/100 u.	PG	Part No.
hammer-head screw for TCC-profile, with nut and spring washer	M10 x 45	12	5.1	07	<b>01379</b>
bolt for TCC-profile, with nut and spring washer	M12 x 60	12	9.1	07	<b>01380</b>

### Brace terminal, 95 to 300 mm<sup>2</sup>, for round conductors

For busbar	Connection mm <sup>2</sup>	For use up to max.	Pack size	Weight kg/100 u.	PG	Part No.
20, 25, 30 x 5, 10 and section busbars	* 95 - 185	500 A	6	31.2	07	<b>01318</b>
20, 25, 30 x 5, 10 and section busbars	* 120 - 300	600 A	3	42.5	07	<b>01760</b>

for the connection of flat busbars and laminated copper busbars

\* when using aluminium conductors, observe the maintenance instructions (see 8.2)

### Brace terminal, 30 to 105 wide, for flat conductors

For busbar	Terminal space W x H	End feed	Centre feed	Pack size	Weight kg/100 u.	PG	Part No.
20, 25, 30 x 5, 10 and section busbars	30 x 20	630 A	750 A	6	30.3	07	<b>01319</b>
	32 x 20		800 A	3	34.7	07	<b>01759</b>
30 x 10 and section busbars	55 x 10 - 28	1600 A	2000 A	3	50.0	07	<b>01069</b>
	68 x 10 - 28			3	63.0	07	<b>01070</b>
	105 x 10 - 28			3	84.0	07	<b>01071</b>



# Panel



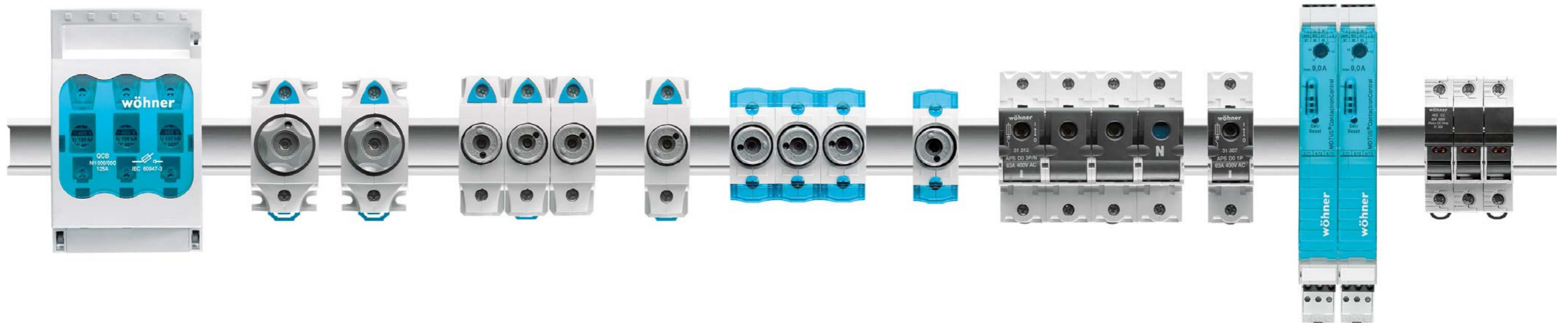
DEVICES FOR PANEL MOUNTED AND DIN RAIL

# Panel

## Components for conventional mounting

For conventional wiring, Wöhner provides a comprehensive range of components for DIN rail or mounting plate assembly. The fuse technology and associated connection technology meet the high safety and quality requirements set by international standards.

Thanks to their snap-action switch mechanisms, the switching devices offer high switching capacity and special protection via operator-independent switching. Selected products are ideal for special applications in the field of photovoltaics.





### CUSTO® Panel

The CUSTO® fuse-base D01 and D02 for installation in the 45 mm standard field cutout offer high security and favourable connection conditions.

- large terminal range up to 35 mm<sup>2</sup>
- dual-function terminal to 35 mm<sup>2</sup> + 16 mm<sup>2</sup>
- connection of all types of conductors
- integrated cover and comprehensive touch-safe protection



### TRITON® Panel

The TRITON® fuse-base D01, D02, DII and DIII in a particularly robust design with touch-safe protection in accordance with DGUV V3 for industrial applications.

- large terminal range up to 35 mm<sup>2</sup>
- dual-function incoming terminal
- connection of all types of conductors
- spring-loaded contact



### AMBUS® Panel

The holder for cylindrical fuses is available in 1-, 2- and 3-pole versions as well versions with a neutral conductor, LED, auxiliary switch and for semiconductor protection.

- 32 A (10x38), 50 A (14x51), 100 A (22x58)
- rated voltage to 690 V
- touch-safe protection to VDE 0106
- photovoltaic versions to 1000 V DC are also UL listed



### AMBUS® Panel UL version

Versions for Class CC to 30 A and Class J to 60 A fuses according to UL 248-4 / -8. All products are provided with touch-safe protection and convenient connection technology.

- short-circuit capacity up to 200 kA
- rated voltage 600 V
- versions available with LED as fuse indicator



### SECUR® Panel

The SECUR® fuse-holder especially for photovoltaic applications allows convenient fuse changes by means of a removable fuse carrier.

- Contacts in the carrier also feature touch-safe protection.
- for 10x85 (14x85) fuses up to 1500 V DC
- equipment width 22.5 mm
- UL listed



### SECUR® Panel

The D0 fuse-switch-disconnector offers a high degree of safety and comfort for the operator. Fuse replacement is possible only when switched off.

- dual-function terminal to 35 mm<sup>2</sup>
- captive fuse carrier with commercial gauge ring
- optional auxiliary switch



### QUADRON® Panel

The NH fuse-switch-disconnectors for sizes 000 to 4a safeguard and disconnect currents up to 1600 A.

- NH 000 to 2 can also be mounted on DIN rails
- NH 00 to 3 versions with fuse monitoring
- various accessories for connection and shrouding



### QUADRON® Panel Speed

One highlight is the QUADRON® Panel switch-disconnector with NH fuses. Its snap-action switch mechanism ensures safe, operator-independent switching.

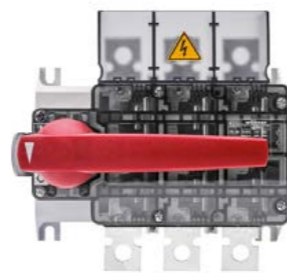
- double break
- lockable in OFF position
- FLAG indicator for switch position indication
- rotary drive versions or fuse monitoring



### CAPUS® Panel

Product series of small load switches.

- switch-disconnectors from 16 A - 160 A
- 3-pole and 4-pole versions
- optional door coupling rotary drives
- UL listed



### CAPUS® Panel

Product series of large load switches in three different versions.

- switch-disconnectors with NH fuse-link 160 A - 630 A
- switch-disconnectors from 125 A - 3150 A
- changeover switch from 125 A - 1000 A.
- also 3-pole + N versions



### MOTUS® Panel

The MOTUS® hybrid motor starter can supply motors up to 4 kW. The integrated functions – direct and reversing starter, overload protection and emergency switch-off – lead to a significant reduction in space and wiring requirements.

- 3 design versions: 0.6 A, 2.4 A and 9 A
- equipment width 22.5 mm
- up to 30 mil. switching cycles
- UL listed

## MOTUS®Panel - Hybrid-motor starters

for switching of inductive loads



**Hybrid motor starter**, with reversing function and CrossLink®Technology, 22.5 mm wide for mounting on mounting rails TH35 acc. to EN 60715

Type	Width	Height	Depth	Pack size	Weight kg/100 u.	PG	Part No.
0.075 - 0.6 A direct and reversing starter	22.5	175	138	1	58.1	21	36100
0.18 - 2.4 A direct and reversing starter	22.5	175	138	1	58.5	21	36103
1.5 - 9 A direct and reversing starter	22.5	175	138	1	59.2	21	36106

### Accessories

Accessories	Pack size	Weight kg/100 u.	PG	Part No.
connecting plug with cable connection, 2 units	1	7.6	21	36902
connecting plug with cable connection, 3 units	1	9.0	21	36903
connecting plug with cable connection, 4 units	1	10.9	21	36904

### Replacement component

Replacement component	Pack size	Weight kg/100 u.	PG	Part No.
electronic unit 0.075 - 0.6 A direct and reversing starter	1	50.9	21	36109
electronic unit 0.18 - 2.4 A direct and reversing starter	1	50.7	21	36110
electronic unit 1.5 - 9 A direct and reversing starter	1	51.4	21	36111
adapter for MOTUS®Panel	1	12.8	05	36112
fuse 16 A for version 0.6 A and 2.4 A	3	2.8	21	31567
fuse 20 A for version 9 A	3	2.8	21	31568
fuse 30 A for version 9 A for motors with heavy-duty starting	3	2.8	21	31569



## CUSTO®Panel - Panel mounted D0 fuse-bases

version with touch-safe protection, dual-function terminal on both sides



**D0 fuse-base**, version for distribution boards

Type	Rated voltage	Poles	Connection mm <sup>2</sup>	Pack size	Weight kg/100 u.	PG	Part No.
E 14 / 16 A / 1P	400 V	1-pole	1.5 - 35	9	7.6	03	31301
E 14 / 16 A / 3P		3-pole		3	23.0	03	31302
E 18 / 63 A / 1P		1-pole		9	7.6	03	31303
E 18 / 63 A / 3P		3-pole		3	23.0	03	31306

**Comb-type busbar**, length 1 m

Type	Centre feed	End feed	Cross-section mm <sup>2</sup>	Pack size	Weight kg/100 u.	PG	Part No.
comb-type busbar, 1-pole, bridge type, pitch 27 mm	130 A	80 A	16	25	19.0	06	31014
	220 A	130 A	35	10	50.0	06	31057
comb-type busbar, 3-pole, bridge type, pitch 27 mm	130 A	80 A	16	10	56.2	06	31012
	220 A	130 A	35	4	125.0	06	31056

**Connection terminal**, for comb-type busbars, bridge version

Article	Connection min. - max.	Type	Rated current	Pack size	Weight kg/100 u.	PG	Part No.
connection terminal, side connection	6 - 50 mm <sup>2</sup>	for 31014, 31024, 31309, 31311	125 A	25	2.5	07	31028
connection terminal, side connection				25	2.9	07	31029
connection terminal, front connection				25	2.9	07	31085
connection terminal, front connection	25 - 95 mm <sup>2</sup>	for 31057	225 A	3	9.0	07	01198
connection terminal, front connection				3	9.3	07	01228

a connection terminal is required for each phase

**End cover**, for comb-type busbars

Type	Pack size	Weight kg/100 u.	PG	Part No.
for 2-pole and 3-pole comb-type busbars 16 mm <sup>2</sup>	50	0.1	06	31027
for 3-pole comb-type busbars 35 mm <sup>2</sup>	10	0.2	06	31084

## TRITON®Panel - D0 panel mounted fuse-bases

touch-safe protection in accordance with EN 50274 / DGUV V3 for industrial applications with dual-function terminal on incoming connection, box terminal on outgoing terminal



### D0 fuse-base, industrial version, pitch 27 mm

Type	Rated voltage	Poles	Connection mm <sup>2</sup>	Pack size	Weight kg/100 u.	PG	Part No.
E 14 / 16 A / 1P	400 V	1-pole	1.5 - 35	9	12.8	02	<b>31286</b>
E 14 / 16 A / 3P	400 V	3-pole		3	38.4	02	<b>31288</b>
E 18 / 63 A / 1P	400 V	1-pole		9	13.9	02	<b>31291</b>
E 18 / 63 A / 3P	400 V	3-pole		3	41.4	02	<b>31293</b>

### Comb-type busbar, length 1 m

Type	Cross-section mm <sup>2</sup>	Centre feed	End feed	Pack size	Weight kg/100 u.	PG	Part No.
comb type busbar, 1-pole, fork type, pitch 27 mm	16	130 A	80 A	25	24.6	06	<b>31024</b>
comb type busbar, 3-pole, fork type, pitch 27 mm	16			10	56.0	06	<b>31026</b>
comb-type busbar, 1-pole, bridge type, pitch 27 mm	16			25	19.0	06	<b>31014</b>
comb-type busbar, 3-pole, bridge type, pitch 27 mm	16			10	56.2	06	<b>31012</b>
	35	220 A	130 A	4	125.0	06	<b>31056</b>

### End cover, for comb-type busbars

for 2-pole and 3-pole comb-type busbars 16 mm <sup>2</sup>	50	0.1	06	<b>31027</b>
for 3-pole comb-type busbars 35 mm <sup>2</sup>	10	0.2	06	<b>31084</b>

### Connection terminal, for comb-type busbars, bridge version

Article	Type	Connection mm <sup>2</sup>	Rated current	Pack size	Weight kg/100 u.	PG	Part No.
connection terminal, side connection	for 31014, 31024, 31309, 31311	6 - 50	125 A	25	2.5	07	<b>31028</b>
connection terminal, side connection	for 31012, 31310, 31312	6 - 50	125 A	25	2.9	07	<b>31029</b>
connection terminal, front connection	for 31012, 31310, 31312	6 - 50	125 A	25	2.9	07	<b>31085</b>
connection terminal, front connection	for 31056	25 - 95	225 A	3	9.3	07	<b>01228</b>

a connection terminal is required for each phase

### Label holder

Type	Pack size	Weight kg/100 u.	PG	Part No.
for Triton, snap-on	100	0.1	02	<b>31086</b>

### Label, for label holder

clip 20 x 9	100	0.1	03	<b>31004</b>
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## SECUR®Panel - D0 switch-disconnector-fuses 63 A

touch-safe protection in accordance with EN 50274/DGUV V5, dual-function terminal on both sides



### D0 switch-disconnector-fuses

Type	Rated current	Connection mm <sup>2</sup>	Pack size	Weight kg/100 u.	PG	Part No.
1-pole	63 A	1.5 - 35	3	14.0	03	<b>31307</b>
1-pole+N			2	26.2	03	<b>31308</b>
2-pole			2	27.8	03	<b>31313</b>
3-pole			1	42.0	03	<b>31314</b>
3-pole+N			1	54.0	03	<b>31315</b>

400 V AC / 130 V DC for 2-pole version

### D0 Switch-disconnector-fuses, with LED

1-pole	63 A	1.5 - 35	3	14.2	03	<b>31556</b>
3-pole			1	42.6	03	<b>31557</b>

400 V AC / 130 V DC for 2-pole version  
LED signals tripped fuse

### Reducer

Type	Pack size	Weight kg/100 u.	PG	Part No.
reducer D02 for D01 fuses 2 - 16 A	20	0.1	01	<b>31902</b>

### Pilot switch, for monitoring the switch position, 9 mm wide

1 NO / 1 NC : 400 V AC / 2 A, 24 V DC / 6 A	1	5.4	03	<b>31316</b>
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### Comb-type busbar, length 1 m

Type	Cross-section mm <sup>2</sup>	Centre feed	End feed	Pack size	Weight kg/100 u.	PG	Part No.
comb-type busbar, 1-pole, bridge type, pitch 27 mm	16	130 A	80 A	25	19.0	06	<b>31014</b>
	35	220 A	130 A	10	50.0	06	<b>31057</b>
comb-type busbar, 3-pole, bridge type, pitch 27 mm	16	130 A	80 A	10	56.2	06	<b>31012</b>
	35	220 A	130 A	4	125.0	06	<b>31056</b>

### End cover, for comb-type busbars

Type	Pack size	Weight kg/100 u.	PG	Part No.
for 2-pole and 3-pole comb-type busbars 16 mm <sup>2</sup>	50	0.1	06	<b>31027</b>
for 3-pole comb-type busbars 35 mm <sup>2</sup>	10	0.2	06	<b>31084</b>

### Connection terminal, for comb-type busbars, bridge version

Article	Type	Connection mm <sup>2</sup>	Pack size	Weight kg/100 u.	PG	Part No.
connection terminal, side connection	for 31014, 31024, 31309, 31311	6 - 50	25	2.5	07	<b>31028</b>
	for 31012, 31310, 31312		25	2.9	07	<b>31029</b>
connection terminal, front connection	for 31012, 31310, 31312		25	2.9	07	<b>31085</b>
	for 31057	25 - 95	3	9.0	07	<b>01198</b>
	for 31056		3	9.3	07	<b>01228</b>

a connection terminal is required for each phase

fuse links not included

## TRITON®Panel - D fuse-bases

touch-safe protection in accordance with EN 50274 / DGUV V3 for industrial applications



### D fuse-base, industrial version, for screw-in gauge rings

Type	Rated voltage	Poles	Connection mm <sup>2</sup>	Pack size	Weight kg/100 u.	PG	Part No.
E 27 / 25 A / 1P, for screw-in gauge rings	500 V	1	1.5 - 35	9	15.2	02	<b>31173</b>
E 27 / 25 A / 3P, for screw-in gauge rings	500 V	3	1.5 - 35	3	45.7	02	<b>31174</b>
E 33 / 63 A / 1P, for screw-in gauge rings	500 V	1	1.5 - 35	9	18.6	02	<b>31175</b>
E 33 / 63 A / 3P, for screw-in gauge rings	500 V	3	1.5 - 35	3	53.8	02	<b>31176</b>

\* acc. to VDE 0636-31 also for 690 V AC / 600 V DC

### Comb-type busbar, length 1 m

Type	Cross-section mm <sup>2</sup>	Centre feed	End feed	Pack size	Weight kg/100 u.	PG	Part No.
1-pole comb-type busbar, for E27, pitch 40 mm	16	130 A	80 A	25	21.5	06	<b>31309</b>
3-pole comb-type busbar, for E27, pitch 40 mm				10	51.4	06	<b>31310</b>
1-pole comb-type busbar, for E33, pitch 50 mm				25	21.0	06	<b>31311</b>
3-pole comb-type busbar, for E33, pitch 50 mm				10	50.5	06	<b>31312</b>

### End cover, for comb-type busbars

Type	Pack size	Weight kg/100 u.	PG	Part No.
for 2-pole and 3-pole comb-type busbars 16 mm <sup>2</sup>	50	0.1	06	<b>31027</b>

### Connection terminal, for comb-type busbars

Article	Type	Connection mm <sup>2</sup>	Rated current	Pack size	Weight kg/100 u.	PG	Part No.
connection terminal, side connection	for 31014, 31024, 31309, 31311	6 - 50	125 A	25	2.5	07	<b>31028</b>
connection terminal, side connection	for 31012,			25	2.9	07	<b>31029</b>
connection terminal, front connection	31310, 31312			25	2.9	07	<b>31085</b>

a connection terminal is required for each phase

### Label holder

Type	Pack size	Weight kg/100 u.	PG	Part No.
for Triton, snap-on	100	0.1	02	<b>31086</b>

### Label, for label holder

Type	Pack size	Weight kg/100 u.	PG	Part No.
clip 20 x 9	100	0.1	03	<b>31004</b>

## AMBUS®Panel - Fuse-holders for IEC cylindrical fuses

type AES with box terminals, with touch-safe protection in accordance with EN 50274



### Fuse-holder for cylindrical fuses, standard version

Type	Rated current	Poles	Connection	Width	Pack size	Weight kg/100 u.	PG	Part No.
10x38	32 A	1-pole	0.75 - 25 mm <sup>2</sup> / AWG 18 - 4	18	12	5.2	17	<b>31110</b>
		2-pole		36	6	10.3	17	<b>31112</b>
		3-pole		54	4	15.5	17	<b>31113</b>
14x51	50 A	1-pole	1.5 - 35 mm <sup>2</sup> / AWG 14 - 2	27	6	9.7	17	<b>31115</b>
		2-pole		54	3	20.2	17	<b>31117</b>
		3-pole		81	2	30.4	17	<b>31118</b>
22x58	100 A	1-pole	4 - 50 mm <sup>2</sup> / AWG 10 - 1/0	36	6	15.8	17	<b>31120</b>
		2-pole		72	3	32.2	17	<b>31122</b>
		3-pole		108	2	48.6	17	<b>31123</b>

### Fuse-holder for cylindrical fuses, standard version with LED 110 - 690 V AC / DC

Type	Rated current	Poles	Connection	Width	Pack size	Weight kg/100 u.	PG	Part No.
10x38	32 A	1-pole	0.75 - 25 mm <sup>2</sup> / AWG 18 - 4	18	12	5.7	17	<b>31130</b>
10x38		2-pole		36	6	11.3	17	<b>31132</b>
10x38		3-pole		54	4	17.0	17	<b>31133</b>
14x51	50 A	1-pole	1.5 - 35 mm <sup>2</sup> / AWG 14 - 2	27	6	9.8	17	<b>31135</b>
14x51		3-pole		81	2	30.5	17	<b>31138</b>
22x58	100 A	1-pole	4 - 50 mm <sup>2</sup> / AWG 10 - 1/0	36	6	15.9	17	<b>31140</b>
22x58		3-pole		108	2	48.7	17	<b>31143</b>

LED signals tripped fuse

### Fuse-holder for cylindrical fuses, standard version with LED 12 - 72 V AC / DC

Type	Rated current	Poles	Connection	Width	Pack size	Weight kg/100 u.	PG	Part No.
10x38	32 A	1-pole	0.75 - 25 mm <sup>2</sup> / AWG 18 - 4	18	12	5.7	17	<b>31930</b>

LED signals tripped fuse

### Fuse-holder for cylindrical fuses, standard version, neutral conductor on right

Type	Rated current	Poles	Connection	Width	Pack size	Weight kg/100 u.	PG	Part No.
10x38	32 A	1-pole+N	0.75 - 25 mm <sup>2</sup> / AWG 18 - 4	36	6	11.3	17	<b>31111</b>
10x38		3-pole+N		72	3	21.7	17	<b>31114</b>
14x51	50 A	1-pole+N	1.5 - 35 mm <sup>2</sup> / AWG 14 - 2	54	3	21.8	17	<b>31116</b>
14x51		3-pole+N		108	1	42.7	17	<b>31119</b>
22x58	100 A	1-pole+N	4 - 50 mm <sup>2</sup> / AWG 10 - 1/0	72	3	35.8	17	<b>31121</b>
22x58		3-pole+N		144	1	67.5	17	<b>31124</b>

### Fuse-holder for cylindrical fuses, standard version, neutral conductor on left

Type	Rated current	Poles	Connection	Width	Pack size	Weight kg/100 u.	PG	Part No.
14x51	50 A	3-pole+N	1.5 - 35 mm <sup>2</sup> / AWG 14 - 2	108	1	42.7	17	<b>31168</b>
22x58	100 A	3-pole+N	4 - 50 mm <sup>2</sup> / AWG 10 - 1/0	144	1	67.5	17	<b>31171</b>

### Fuse-holder for cylindrical fuses, standard design, integrated neutral conductor (left)

Type	Rated current	Poles	Connection	Width	Pack size	Weight kg/100 u.	PG	Part No.
10x38	32 A	1-pole+N	1.5 - 10 mm <sup>2</sup>	18	12	9.0	17	<b>31273</b>
10x38		3-pole+N	1.5 - 10 mm <sup>2</sup>	54	4	22.0	17	<b>31274</b>

### N-module

Type	Rated current	Poles	Connection	Width	Pack size	Weight kg/100 u.	PG	Part No.
10x38	32 A	N	0.75 - 25 mm <sup>2</sup> / AWG 18 - 4	18	12	6.2	17	<b>31258</b>

## AMBUS®Panel - Fuse-holders for IEC cylindrical fuses

type AES with box terminals, with touch-safe protection in accordance with EN 50274



### Fuse-holder for cylindrical fuses, version for semiconductor protection fuses

Type	Rated current	Poles	Connection	Width	Pack size	Weight kg/100 u.	PG	Part No.
10x38	32 A	1-pole	0.75 - 25 mm <sup>2</sup> / AWG 18 - 4	18	12	5.2	17	31275
		2-pole		36	6	10.3	17	31276
		3-pole		54	4	15.5	17	31277
14x51	50 A	1-pole	1.5 - 35 mm <sup>2</sup> / AWG 14 - 2	27	6	9.7	17	31278
		2-pole		54	3	20.2	17	31279
		3-pole		81	2	30.4	17	31280
22x58	100 A	1-pole	4 - 50 mm <sup>2</sup> / AWG 10 - 1/0	36	6	15.8	17	31281
		2-pole		72	3	32.2	17	31282
		3-pole		108	2	48.6	17	31283

### Fuse-holder for cylindrical fuses, version for semiconductor protection fuses, with pilot switch

Type	Rated current	Poles	Connection	Width	Pack size	Weight kg/100 u.	PG	Part No.
14x51	50 A	1-pole	1.5 - 35 mm <sup>2</sup> / AWG 14 - 2	27	6	11.6	17	31940
14x51		2-pole		54	3	23.5	17	31972
14x51		3-pole		81	2	34.6	17	31941
22x58	100 A	1-pole	4 - 50 mm <sup>2</sup> / AWG 10 - 1/0	36	6	18.1	17	31942
22x58		2-pole		72	3	36.6	17	31957
22x58		3-pole		108	2	54.1	17	31943

Pilot switch indicates when no fuse is inserted, holder is open, or fuse (with striker) is tripped

### Fuse holder for cylindrical fuses, photovoltaic version, 1000 V

Type	Rated current	Poles	Connection	Width	Pack size	Weight kg/100 u.	PG	Part No.
10x38 / 1P	30 A	1-pole	0.75 - 25 mm <sup>2</sup> / AWG 18 - 4	18	12	5.2	17	31971
10x38 / 1P / LED *		1-pole		18	12	5.7	17	31973
10x38 / 2P		2-pole		36	6	10.3	17	31974

\* LED indicates blown fuse, operating range 400 - 1000 V

### Fuse-holder for cylindrical fuses, photovoltaic version, 1500 V

Type	Rated current	Poles	Connection	Width	Pack size	Weight kg/100 u.	PG	Part No.
10x85 *	32 A	1-pole	0.75 - 25 mm <sup>2</sup> / AWG 18 - 4	22.5	5	9.2	17	31555

\* also suitable for 14 x 85 fuses



## AMBUS®Panel - Accessories

for AES fuse-holder for cylindrical fuses



### Comb-type busbar, length 1 m

Type	Cross-section mm <sup>2</sup>	Centre feed	End feed	Pack size	Weight kg/100 u.	PG	Part No.
comb-type busbar, 1-pole, bridge type, pitch 18 mm	16	130 A	80 A	25	21.8	06	31101
comb-type busbar, 3-pole, bridge type, pitch 18 mm				10	59.4	06	31102
comb-type busbar, 1-pole, bridge type, pitch 27 mm				25	19.0	06	31014
comb-type busbar, 3-pole, bridge type, pitch 27 mm	25	200 A	100 A	10	56.2	06	31012
comb-type busbar, 1-pole, bridge type, pitch 18 mm				10	47.5	06	31548
comb-type busbar, 2-pole, bridge type, pitch 18 mm				10	81.0	06	31561
comb-type busbar, 3-pole, bridge type, pitch 18 mm	35	220 A	130 A	10	113.3	06	31549
comb-type busbar, 1-pole, bridge type, pitch 27 mm				10	50.0	06	31057
comb-type busbar, 3-pole, bridge type, pitch 27 mm				4	125.0	06	31056

### End cover, for comb-type busbars

Type	Pack size	Weight kg/100 u.	PG	Part No.
for 2-pole and 3-pole comb-type busbars 16 mm <sup>2</sup>	50	0.1	06	31027
for 1-pole comb-type busbars 25 mm <sup>2</sup>	20	0.1	06	31042
for 2-pole and 3-pole comb-type busbars 25 mm <sup>2</sup>	20	0.2	06	31552
for 3-pole comb-type busbars 35 mm <sup>2</sup>	10	0.2	06	31084

### Connection terminal, for comb-type busbars

Article	Type	Connection mm <sup>2</sup>	Rated current	Pack size	Weight kg/100 u.	PG	Part No.
connection terminal, side connection	for 31101, 31102	6 - 25	80 A	50	1.2	07	31103
connection terminal, front connection	for 31101, 31102			50	1.2	07	31157
connection terminal, side connection	for 31548	6 - 35	115 A	10	3.0	07	31039
	for 31549, 31561			10	3.5	07	31550
connection terminal, side connection	for 31014, 31024, 31309, 31311	6 - 50	125 A	25	2.5	07	31028
	for 31012, 31310, 31312			25	2.9	07	31029
	connection terminal, front connection			for 31012, 31310, 31312	25	2.9	07
connection terminal, front connection	for 31057	25 - 95	225 A	3	9.0	07	01198
	for 31056			3	9.3	07	01228

a connection terminal is required for each phase

### Connection set, for custom combinations of multipole units

Type	Pack size	Weight kg/100 u.	PG	Part No.
connection kit 10x38, 2-pole	1	2.5	17	31564
connection kit 10x38, 3-pole	1	3.6	17	31565
connection kit 14x51, 2-pole	1	3.6	17	31269

10 multipole devices can be produced with each set, depending on the version (2 or 3-pole)

### Spacer 4.5 mm, set for 50 fuse holders

Type	Pack size	Weight kg/100 u.	PG	Part No.
set for 50 fuse holders 31971 and 31973	1	1.2	17	31563



## AMBUS®Panel - Fuse-holders for Class CC fuses

type AES with box terminals, with touch-safe protection in accordance with EN 50274, for fuses that conform to UL 248-4



### Class CC fuse-holder for cylindrical fuses, Class CC, standard version

Type	Poles	Connection	Width	Pack size	Weight kg/100 u.	PG	Part No.
30 A / 600 V	1-pole	0.75 - 25 mm <sup>2</sup> / AWG 18 - 4	18	12	5.5	17	31295
30 A / 600 V	2-pole		36	6	11.3	17	31296
30 A / 600 V	3-pole		54	4	17.0	17	31297

### Class CC fuse-holder for cylindrical fuses, Class CC, standard version with LED 110 - 690 V AC / DC

Type	Poles	Connection	Width	Pack size	Weight kg/100 u.	PG	Part No.
30 A / 600 V	1-pole	0.75 - 25 mm <sup>2</sup> / AWG 18 - 4	18	12	6.2	17	31298
30 A / 600 V	2-pole		36	6	12.3	17	31299
30 A / 600 V	3-pole		54	4	18.5	17	31300

LED signals tripped fuse

### Class CC fuse-holder for cylindrical fuses, Class CC, standard version with LED 12 - 72 V AC / DC

Type	Poles	Connection	Width	Pack size	Weight kg/100 u.	PG	Part No.
30 A / 12 - 72 V	1-pole	0.75 - 25 mm <sup>2</sup> / AWG 18 - 4	18	12	6.2	17	31929

LED signals tripped fuse

### Comb-type busbar, length 1 m

Type	Cross-section mm <sup>2</sup>	Centre feed	End feed	Pack size	Weight kg/100 u.	PG	Part No.
comb-type busbar, 1-pole, bridge type, pitch 18 mm	25	200 A	100 A	10	47.5	06	31548
comb-type busbar, 2-pole, bridge type, pitch 18 mm				10	81.0	06	31561
comb-type busbar, 3-pole, bridge type, pitch 18 mm				10	113.3	06	31549

### Connection terminal, for comb-type busbars

Type	Connection mm <sup>2</sup>	Pack size	Weight kg/100 u.	PG	Part No.
for 31548	6 - 35	10	3.0	07	31039
for 31549, 31561	6 - 35	10	3.5	07	31550

a connection terminal is required for each phase

### End cover, for comb-type busbars

Type	Pack size	Weight kg/100 u.	PG	Part No.
for 1-pole comb-type busbars 25 mm <sup>2</sup>	20	0.1	06	31042
for 2-pole and 3-pole comb-type busbars 25 mm <sup>2</sup>	20	0.2	06	31552



## AMBUS®Panel - QUADRON®Panel - Fuse-holders for Class J fuses

with touch-safe protection, for fuses that comply with UL 248-4



### Class J fuse-holder, AMBUS®Panel, DIN rail mounted, standard version

Type	Poles	Connection	Width	Pack size	Weight kg/100 u.	PG	Part No.
30 A / 600 V (21x57)	1-pole	0.75 - 50 mm <sup>2</sup> / AWG 18 - 1	36	6	15.8	16	31284
	2-pole		72	3	32.2	16	31285
	3-pole		108	2	48.6	16	31287
60 A / 600 V (27x60)	1-pole	2.5 - 50 mm <sup>2</sup> / AWG 14 - 1	40	6	18.2	16	31920
	2-pole		80	3	37.0	16	31921
	3-pole		120	2	55.9	16	31922

### Class J fuse-holder, AMBUS®Panel, DIN rail mounted, standard version with LED 110 - 600 V AC / DC

Type	Poles	Connection	Width	Pack size	Weight kg/100 u.	PG	Part No.
30 A / 600 V (21x57)	1-pole	0.75 - 50 mm <sup>2</sup> / AWG 18 - 1	36	6	15.8	16	31932
30 A / 600 V (21x57)	2-pole		72	3	32.2	16	31933
30 A / 600 V (21x57)	3-pole		108	2	48.6	16	31934
60 A / 600 V (27x60)	1-pole	2.5 - 50 mm <sup>2</sup> / AWG 14 - 1	40	6	18.2	16	31923
60 A / 600 V (27x60)	2-pole		80	3	37.0	16	31924
60 A / 600 V (27x60)	3-pole		120	2	55.9	16	31925

LED signals tripped fuse

### Class J fuse-holder, QUADRON®Panel, for screwing onto mounting plate

Type	Poles	Connection	Width	Pack size	Weight kg/100 u.	PG	Part No.	
100 A / 600 V (29 x 118)	*	3-pole	4 - 50 mm <sup>2</sup> / AWG 14 - 2/0	106	1	107.0	16	33408
200 A / 600 V (41x146)				184	1	203.0	16	33409
400 A / 600 V (54x181)				256	1	672.0	16	33308

\* do not use fuse links with sharp-edged blades



## QUADRON®Panel - Fuse-bases for NH fuses

for standard and long version (PV)



### NH fuse-base for photovoltaic, 1-pole, with touch-safe protection, screw on both sides, 1000 V AC / 1500 V DC

Type	Rated current	Rated voltage	Size	Pack size	Weight kg/100 u.	PG	Part No.
both sides screw M10	250 A		NH 1XL	3	51.0	10	03290
both sides screw M12 *	600 A		NH 2XL / 3L	3	106.0	10	03294

\* for fuse-link NH 2XL or NH 3L in accordance with IEC 60269-6 with max. 100 W power dissipation

### NH fuse-base for photovoltaic, 1-pole, with touch-safe protection, 1000 V AC / 1500 V DC

Type	Rated current	Rated voltage	Size	Pack size	Weight kg/100 u.	PG	Part No.
incoming connection screw M10, outgoing connection to busbar 2x 30 x 10	250 A	1500 V	NH 1XL	3	58.0	10	03289
incoming connection screw M10, outgoing connection to busbar 2x 30 x 10, for integrated mounting of CTs type LEM HTA	250 A	1500 V	NH 1XL	3	63.0	10	03288
incoming connection screw M10, outgoing connection to busbar 2x 40 x 10 *	600 A	1500 V	NH 2XL / 3L	3	110.0	10	03293

\* for fuse-link NH 2XL or NH 3L in accordance with IEC 60269-6 with max. 100 W power dissipation; information on rated load factors with regard to current carrying capacity is available on request or at www.wohner.com

### Accessories

Type	Pack size	Weight kg/100 u.	PG	Part No.
grip lug cover	* 30	1.5	10	79449

\* 2 pieces required per fuse

### NH fuse-base, size 00, barrier version

Type	Rated current	Size	Number of poles	Connection mm²	Pack size	Weight kg/100 u.	PG	Part No.
both sides screw M8, without barrier	160 A	NH 00	1	70	10	12.6	10	03350
both sides screw, with 2 barriers			3		4	45.7	10	03351
both sides terminal, without barrier			1		10	13.0	10	03354
both sides clamp, with 2 barriers			3		4	45.5	10	03355

### NH fuse-base, size 00 – 1 – 2 – 3, version with touch-safe protection

Type	Rated current	Size	Number of poles	Connection mm²	Pack size	Weight kg/100 u.	PG	Part No.			
both sides screw M8	160 A	NH 00	1	70	12	15.2	10	03758			
			3		4	48.4	10	03759			
both sides clamp			1		12	15.5	10	03760			
			3		4	49.4	10	03761			
both sides screw M10	250 A	NH 1	1	150	3	48.6	10	03762			
			3		1	158.3	10	03763			
both sides clamp			3		1	161.6	10	03765			
			both sides screw M10		400 A	NH 2	240	3	93.1	10	03766
1	288.3	10		03767							
both sides screw M12	630 A	NH 3		240				3	110.8	10	03768
								1	340.0	10	03769



## QUADRON®Panel - Accessories

for NH fuse-bases



### Grip lug cover, fits NH bases with touch-safe protection

Type	Size	Pack size	Weight kg/100 u.	PG	Part No.
for NH base and 33705	* 00	30	1.2	10	79448
for NH fuse-base	** 1 - 3	30	1.5	10	79449

\* 1 piece required per fuse

\*\* 2 pieces required per fuse

### Barrier and barrier support

Article	Type	Pack size	Weight kg/100 u.	PG	Part No.
barrier	for 03350, 03351, 03354, 03355	100	2.2	10	03377
barrier support, for lateral barrier	for 03350, 03351, 03354, 03355	10	0.8	10	03359

### Neutral conductor, screw-on mounting

Rated current	Type	Connection mm²	Pack size	Weight kg/100 u.	PG	Part No.
160 A	clamp, both sides	70	10	14.1	10	03620
160 A	screw M8 at both sides		10	14.2	10	03519

### Neutral conductor, disconnectable, screws-on or clip-on onto mounting rail TH 35 EN 60715

Rated current	Connection mm²	Pack size	Weight kg/100 u.	PG	Part No.
63 A	10	50	2.6	10	05188

### Neutral conductor, disconnectable, screw-on mounting

Rated current	Type	Length	Connection mm²	Pack size	Weight kg/100 u.	PG	Part No.
160 A	clamp on both sides	70	120	10	19.2	10	03668
250 A	screw M8 at both sides	120		10	19.5	10	03657
400 A	screw M10 at both sides	240	200	3	58.9	10	03757
630 A	screw M12 at both sides			3	58.9	10	03213

### Connecting terminal

Rated current	Type	Length	Connection mm²	Pack size	Weight kg/100 u.	PG	Part No.
160 A	60 mm long, both sides clamp	60	70	10	9.1	10	03193
160 A	125 mm long, both sides clamp	125	70	10	14.6	10	03173
250 A	100 mm long, both sides screw M10	100	120	10	16.8	10	03195
250 A	200 mm long, both sides screw M10	198	120	10	30.6	10	03196
630 A	100 mm long, both sides screw M12	100	240	10	25.6	10	03197
630 A	200 mm long, both sides screw M12	198	240	10	42.0	10	03198

possible combinations: 3-pole NH bases with neutral conductor

(neutral conductor attachable to NH base)

03355 + 03620 (clamp on both sides)

03351 + 03519 (M8 screw on both sides)

other combinations possible if the neutral conductors are fitted separately

**QUADRON®Panel - NH fuse-switch-disconnectors size 000 - 4a**

type LTS and QCB for panel mounted

**NH fuse-switch-disconnector, size 000 - 3**, 3-pole

Type	Rated current	Size	Pack size	Weight kg/100 u.	PG	Part No.
box terminal	125 A	NH 000	1	57.2	09	33217
clamp 70 mm <sup>2</sup>	160 A	NH 00	1	78.0	09	33199
screw M8			1	77.7	09	33200
box terminal	250 A	NH 1	1	191.0	09	33393
screw M10			1	171.0	09	33201
screw M10	400 A	NH 2	1	362.0	09	33202
screw M12	630 A	NH 3	1	490.0	09	33203

**NH fuse-switch-disconnector, size 4a**, 3-pole

2x screw M12	1600 A	NH 4a		1534.0	09	33204
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**NH fuse-switch-disconnector, size 00**, 3-pole, with short touch-safe protection

clamp 70 mm <sup>2</sup> , with short protection cover	160 A	NH 00	1	71.6	09	33221
screw M8, with short protection cover			1	71.9	09	33222

**NH fuse-switch-disconnector, size 00 - 3**, 3-pole, with electronic fuse monitoring

clamp 70 mm <sup>2</sup>	160 A	NH 00	1	93.0	09	33328
screw M8			1	92.0	09	33329
screw M10	250 A	NH 1	1	229.0	09	33330
screw M10	400 A	NH 2	1	380.0	09	33331
screw M12	630 A	NH 3	1	524.0	09	33332

circuit diagram for fuse monitoring is available at [www.woehner.com](http://www.woehner.com)**NH fuse-switch-disconnector, size 00 - 3**, 3-pole, with electromechanical fuse monitoring

clamp 70 mm <sup>2</sup>	160 A	NH 00	1	127.0	09	33207
screw M8			1	126.0	09	33208
screw M10	250 A	NH 1	1	255.0	09	33149
screw M10	400 A	NH 2	1	412.0	09	33150
screw M12	630 A	NH 3	1	556.0	09	33151

circuit diagram for fuse monitoring is available at [www.woehner.com](http://www.woehner.com)**QUADRON®Panel - Accessories**

NH fuse-switch-disconnector, size 000 - 3

**Comb-type busbar**, closed version with end covers

Type	Cross-section mm <sup>2</sup>	Usable with	Pack size	Weight kg/100 u.	PG	Part No.
comb-type busbar, 3-pole, for 2 NH fuse switch disconnectors	35	33217	4	23.0	09	33906
comb-type busbar, 3-pole, for 2 NH fuse switch disconnectors		33200	4	27.1	09	33376
comb-type busbar, 3-pole, for 3 NH fuse switch disconnectors		4	44.7	09	33377	
comb-type busbar, 3-pole, for 4 NH fuse switch disconnectors		4	62.3	09	33392	

**Connection terminal**, for comb-type busbars

Type	Connection mm <sup>2</sup>	Pack size	Weight kg/100 u.	PG	Part No.
for 3-pole comb-type busbar 35 mm <sup>2</sup> , suitable for NH-fuse-switch-disconnector size 000 with box terminal	6 - 35	3	4.0	09	33907
for 3-pole comb-type busbar 35 mm <sup>2</sup> , suitable for NH-fuse-switch-disconnector size 00 with screw connection	25 - 95	3	12.1	09	33378

**Connection accessories**

Type	Connection	Size	Pack size	Weight kg/100 u.	PG	Part No.
box terminal for Cu cables	35 - 185 mm <sup>2</sup> / 24 x 3 - 21	1	3	10.0	09	33909
clamp connector	1.5 - 70 mm <sup>2</sup> / 12 x 1 - 10	00	3	1.5	09	03727
clamp connector for Cu cables	70 - 150 mm <sup>2</sup> / 18 x 2 - 14	1	1	6.3	09	33163
clamp connector for Cu cables	120 - 240 mm <sup>2</sup> / 21 x 1 - 14	2	1	10.6	09	33164
clamp connector for Cu cables	150 - 300 mm <sup>2</sup> / 25 x 1 - 13	3	1	12.5	09	33165
M8 screw connector	70	00	3	1.4	09	30894
prism terminal, single, for Cu and Al cables	* 16 - 70 mm <sup>2</sup>	00	3	3.0	09	33224
prism terminal, single, for Cu and Al cables	* 35 - 150 mm <sup>2</sup>	1	1	11.6	09	33166
prism terminal, single, for Cu and Al cables	* 50 - 240 mm <sup>2</sup>	2	1	19.9	09	33167
prism terminal, single, for Cu and Al cables	* 150 - 300 mm <sup>2</sup>	3	1	24.7	09	33168
prism terminal, double, for Cu cables	2x 35 - 70 mm <sup>2</sup>	1	1	16.6	09	33145
prism terminal, double, for Cu cables	2x 70 - 120 mm <sup>2</sup>	2	1	27.8	09	33146
prism terminal, double, for Cu cables	2x 150 mm <sup>2</sup>	3	1	36.8	09	33147
prism terminal, double, for Cu cables	2x 185 mm <sup>2</sup>	3	1	36.8	09	33385
tunnel terminal for screw connection M8	1x 2.5 - 16 mm <sup>2</sup> + 2x 2.5 - 25 mm <sup>2</sup>	00	3	4.2	09	01182

\* when using aluminium conductors, observe the maintenance instructions (see 8.2)



## QUADRON®Panel - Accessories

NH fuse-switch-disconnectors, size 000 - 3



**Cover**, for cable lugs, attachable at the top and bottom

Type	Size	Pack size	Weight kg/100 u.	PG	Part No.
for 33200, 33208, 33329, 33394, 33398, 33420	00	1	2.8	09	<b>79811</b>
for 33221, 33222	00	2	4.8	09	<b>33223</b>
for QCB-NH1 and QCS 320 A	1	2	10.7	09	<b>33142</b>
for QCB-NH2	2	2	10.9	09	<b>33143</b>
for QCB-NH3	3	2	15.6	09	<b>33144</b>

**Cover**, for connection area, attachable at the top and bottom

Type	Size	Pack size	Weight kg/100 u.	PG	Part No.
for NH fuse-switch-disconnector size 2	2	2	4.0	09	<b>33418</b>
for NH fuse-switch-disconnector size 3, max. 600 A	3	2	5.4	09	<b>33419</b>

**Barrier for handle**

Type	Size	Pack size	Weight kg/100 u.	PG	Part No.
for closing of handle area from rear	1 - 3	10	2.2	09	<b>33155</b>

**Trim frame**, cover with front plate assembly

Type	W x L	Size	Pack size	Weight kg/100 u.	PG	Part No.
trim frame, single	130 x 210 x 2	000	10	3.1	09	<b>33219</b>
trim frame, double	199 x 166 x 2	000	10	3.9	09	<b>33220</b>
trim frame, single	130 x 210 x 2	00	10	1.9	09	<b>78893</b>
trim frame, double	232 x 210 x 2	00	10	2.9	09	<b>78105</b>
trim frame, triple	340 x 210 x 2	00	10	3.8	09	<b>78139</b>
trim frame, single	* 143 x 210 x 2	00	10	3.3	09	<b>33225</b>
trim frame, double	* 250 x 210 x 2	00	10	5.6	09	<b>33226</b>
trim frame, single	215 x 330 x 2	1	1	11.7	09	<b>33152</b>
trim frame, single	248 x 330 x 2	2	1	9.4	09	<b>33153</b>
trim frame, single	290 x 330 x 2	3	1	13.2	09	<b>33154</b>

\* for 33221, 33222

## QUADRON®Panel - Accessories

NH fuse-switch-disconnectors, size 000 - 3



**Pilot switch**, for monitoring the disconnecter lid position

Type	Size	Pack size	Weight kg/100 u.	PG	Part No.
changeover 250 V AC / 5 A, 30 V DC / 4 A	1	1	1.3	09	<b>33917</b>
changeover 250 V AC / 5 A, 30V DC / 4 A	000 - 3	1	1.1	09	<b>33156</b>

33156 not usable for fuse switch disconnectors size 1

**Disconnecter lid interlock**

Type	Size	Pack size	Weight kg/100 u.	PG	Part No.
for sealing wire	000	10	0.1	09	<b>33051</b>
for sealing wire	00	10	0.2	09	<b>03849</b>
for sealing wire or 3 padlocks with shackle of 4 - 7 mm	1 - 3	10	0.5	09	<b>33157</b>

**Rapid mounting set**, for rails in accordance with EN 60715 (TH 35 x 7.5 mm)

Type	Size	Pack size	Weight kg/100 u.	PG	Part No.
for 1 mounting rail	000	1	0.6	09	<b>33247</b>
for 2 mounting rails, rails centre distance 125 mm or 150 mm	00	1	18.5	09	<b>33193</b>
for 2 mounting rails, rails centre distance 125 mm or 150 mm	1 - 2	1	51.0	09	<b>33158</b>

**Arc chamber**

Type	Size	Pack size	Weight kg/100 u.	PG	Part No.
retrofit package for higher utilisation category	1	3	10.7	09	<b>33918</b>

## QUADRON®Panel - Switch-disconnectors 160 A - 320 A and size 00 - 1

type QCS, with snap-action switch mechanism



### Switch-disconnector, 3-pole switchable, with snap-action switch mechanism, with multifunction handle

Type	Rated current	Width	Pack size	Weight kg/100 u.	PG	Part No.
box terminal	* 160 A	106	1	203.0	14	<b>33542</b>
screw M10	* 320 A	184	1	539.0	14	<b>33552</b>

\* as main switch or emergency off switch only with the following maximum operating current:  
160 A version: 125 A / 690 V AC; 320 A version: 280 A / 400 V AC, 250 A / 690 V AC

### Switch-disconnector, 3-pole switchable, with snap-action switch mechanism, with door coupling rotary drive

box terminal, for door coupling twist handle	* 160 A	106	1	203.0	14	<b>33545</b>
screw M10, for door coupling rotary handle	* 320 A	184	1	516.0	14	<b>33555</b>

additional extension shaft and door coupling rotary handle required  
\* as main switch or emergency off switch only with the following maximum operating current:  
160 A version: 125 A / 690 V AC; 320 A version: 280 A / 400 V AC, 250 A / 690 V AC

### NH switch-disconnector-fuses, 3-pole switchable, with snap-action switch mechanism, with multifunction handle

Type	Rated current	Size	Width	Pack size	Weight kg/100 u.	PG	Part No.
box terminal	125 A	NH 00	106	1	208.0	15	<b>33502</b>
box terminal, with electronic fuse monitoring	125 A	NH 00	106	1	208.0	15	<b>33507</b>
screw M10	250 A	NH 1	184	1	540.0	15	<b>33512</b>

fuse monitoring on request  
fuses are not included in the scope of delivery

### NH switch-disconnector-fuses, 3-pole switchable, with snap-action switch mechanism, with door coupling rotary drive

box terminal, for door coupling rotary handle	125 A	NH 00	106	1	201.6	15	<b>33505</b>
screw M10, for door coupling rotary handle	250 A	NH 1	184	1	528.0	15	<b>33515</b>

additional extension shaft and door coupling rotary handle required  
fuses are not included in the scope of delivery

### Accessories

Type	Usable for version	Connection mm²	Pack size	Weight kg/100 u.	PG	Part No.	
connection for auxiliary line, for box terminal	QCB-NH00, QCS-NH00, QCS 160 A	6.3 x 0.8	3	0.6	09	<b>33915</b>	
connecting terminal 120 mm²	QCS-NH00, QCS 160 A	120	3	12.1	14	<b>33914</b>	
box terminal for Cu cables	QCB-NH1, QCS-NH1, QCS 320 A	35 - 185 mm² / 24 x 3 - 21	3	10.0	09	<b>33909</b>	
prism terminal, single, for Cu and Al cables			*	1	11.6	09	<b>33166</b>
prism terminal, double, for Cu cables				1	16.6	09	<b>33145</b>
cover for cable lugs, top / bottom attachable				2	10.7	09	<b>33142</b>
pilot switch for monitoring the switch position	QCS-NH00 / 1, QCS 160 A / 320 A		1	1.1	14	<b>33908</b>	
door coupling rotary handle, black, without shaft		**	1	57.0	14	<b>33910</b>	
door coupling rotary handle, red-yellow, without shaft		**	1	57.0	14	<b>33911</b>	
extension shaft, 290 mm long			1	13.0	14	<b>33912</b>	
extension shaft, 490 mm long			1	22.0	14	<b>33913</b>	

for current capacity of the terminals visit [www.woehner.com](http://www.woehner.com)  
\* when using aluminium conductors, observe the maintenance instructions (see 8.2)  
\*\* switch can also be installed 90° left / right, always with the same handle position

fuse links not included

## CAPUS®Panel - Switch-disconnectors 3-pole 16 A - 160 A

type SD1, SD2, SD3



### Switch-disconnectors, 3-pole, with rotary handle graphite-grey

Article	Type	Rated current	Dimensions	Pack size	Weight kg/100 u.	PG	Part No.
box terminal 1.5 - 16 mm², graphite grey handle	SD1-3-16	16 A	36 x 81 x 79	1	13.0	14	<b>33808</b>
box terminal 1.5 - 16 mm², graphite grey handle	SD1-3-25	25 A	36 x 81 x 79	1	13.0	14	<b>33812</b>
box terminal 1.5 - 16 mm², graphite grey handle	SD1-3-32	32 A	36 x 81 x 79	1	13.0	14	<b>33816</b>
box terminal 1.5 - 16 mm², graphite grey handle	SD1-3-40	40 A	36 x 81 x 79	1	13.0	14	<b>33820</b>
box terminal 16 - 25 mm², graphite grey handle	SD1-3-63	63 A	36 x 81 x 79	1	13.0	14	<b>33824</b>
box terminal 16 - 50 mm², graphite grey handle	SD2-3-63	63 A	52 x 100 x 79	1	25.0	14	<b>33868</b>
box terminal 16 - 50 mm², graphite grey handle	SD2-3-80	80 A	52 x 100 x 79	1	25.0	14	<b>33872</b>
box terminal 25 - 50 mm², graphite grey handle	SD2-3-100	100 A	52 x 100 x 79	1	25.0	14	<b>33876</b>
box terminal 10 - 70 mm², graphite grey handle	SD3-3-125	125 A	65 x 113 x 80	1	40.0	14	<b>33027</b>
box terminal 10 - 70 mm², graphite grey handle	SD3-3-160	160 A	65 x 113 x 80	1	40.0	14	<b>33031</b>



### Switch-disconnectors, 3-pole, with rotary handle red-yellow

box terminal 1.5 - 16 mm², yellow-red handle	SD1-3-16	16 A	36 x 81 x 79	1	13.0	14	<b>33838</b>
box terminal 1.5 - 16 mm², yellow-red handle	SD1-3-25	25 A	36 x 81 x 79	1	13.0	14	<b>33842</b>
box terminal 1.5 - 16 mm², yellow-red handle	SD1-3-32	32 A	36 x 81 x 79	1	13.0	14	<b>33846</b>
box terminal 1.5 - 16 mm², yellow-red handle	SD1-3-40	40 A	36 x 81 x 79	1	13.0	14	<b>33850</b>
box terminal 16 - 25 mm², yellow-red handle	SD1-3-63	63 A	36 x 81 x 79	1	13.0	14	<b>33854</b>
box terminal 16 - 50 mm², yellow-red handle	SD2-3-63	63 A	52 x 100 x 79	1	25.0	14	<b>33884</b>
box terminal 16 - 50 mm², yellow-red handle	SD2-3-80	80 A	52 x 100 x 79	1	25.0	14	<b>33888</b>
box terminal 25 - 50 mm², yellow-red handle	SD2-3-100	100 A	52 x 100 x 79	1	25.0	14	<b>33892</b>
box terminal 10 - 70 mm², yellow-red handle	SD3-3-125	125 A	65 x 113 x 80	1	40.0	14	<b>33035</b>
box terminal 10 - 70 mm², yellow-red handle	SD3-3-160	160 A	65 x 113 x 80	1	40.0	14	<b>33040</b>

## CAPUS®Panel - Switch-disconnectors 3-pole + N, 16 A - 160 A

type SD1, SD2, SD3



### Switch-disconnectors, 3-pole + N, with rotary handle graphite-grey

Article	Type	Rated current	Dimensions	Pack size	Weight kg/100 u.	PG	Part No.
box terminal 1.5 - 16 mm <sup>2</sup> , graphite grey handle	SD1-4-16	16 A	51 x 81 x 79	1	16.0	14	<b>33809</b>
box terminal 1.5 - 16 mm <sup>2</sup> , graphite grey handle	SD1-4-25	25 A	51 x 81 x 79	1	16.0	14	<b>33813</b>
box terminal 1.5 - 16 mm <sup>2</sup> , graphite grey handle	SD1-4-32	32 A	51 x 81 x 79	1	16.0	14	<b>33817</b>
box terminal 1.5 - 16 mm <sup>2</sup> , graphite grey handle	SD1-4-40	40 A	51 x 81 x 79	1	16.0	14	<b>33821</b>
box terminal 16 - 25 mm <sup>2</sup> , graphite grey handle	SD1-4-63	63 A	51 x 81 x 79	1	16.0	14	<b>33825</b>
box terminal 16 - 50 mm <sup>2</sup> , graphite grey handle	SD2-4-63	63 A	69 x 100 x 79	1	32.0	14	<b>33869</b>
box terminal 16 - 50 mm <sup>2</sup> , graphite grey handle	SD2-4-80	80 A	69 x 100 x 79	1	32.0	14	<b>33873</b>
box terminal 25 - 50 mm <sup>2</sup> , graphite grey handle	SD2-4-100	100 A	69 x 100 x 79	1	32.0	14	<b>33877</b>
box terminal 10 - 70 mm <sup>2</sup> , graphite grey handle	SD3-4-125	125 A	87 x 113 x 80	1	50.0	14	<b>33028</b>
box terminal 10 - 70 mm <sup>2</sup> , graphite grey handle	SD3-4-160	160 A	87 x 113 x 80	1	50.0	14	<b>33032</b>



### Switch-disconnectors, 3-pole + N, with rotary handle red-yellow

box terminal 1.5 - 16 mm <sup>2</sup> , yellow-red handle	SD1-4-16	16 A	51 x 81 x 79	1	16.0	14	<b>33839</b>
box terminal 1.5 - 16 mm <sup>2</sup> , yellow-red handle	SD1-4-25	25 A	51 x 81 x 79	1	16.0	14	<b>33843</b>
box terminal 1.5 - 16 mm <sup>2</sup> , yellow-red handle	SD1-4-32	32 A	51 x 81 x 79	1	16.0	14	<b>33847</b>
box terminal 1.5 - 16 mm <sup>2</sup> , yellow-red handle	SD1-4-40	40 A	51 x 81 x 79	1	16.0	14	<b>33851</b>
box terminal 16 - 25 mm <sup>2</sup> , yellow-red handle	SD1-4-63	63 A	51 x 81 x 79	1	16.0	14	<b>33855</b>
box terminal 16 - 50 mm <sup>2</sup> , yellow-red handle	SD2-4-63	63 A	69 x 100 x 79	1	32.0	14	<b>33885</b>
box terminal 16 - 50 mm <sup>2</sup> , yellow-red handle	SD2-4-80	80 A	69 x 100 x 79	1	32.0	14	<b>33838</b>
box terminal 25 - 50 mm <sup>2</sup> , yellow-red handle	SD2-4-100	100 A	69 x 100 x 79	1	32.0	14	<b>33893</b>
box terminal 10 - 70 mm <sup>2</sup> , yellow-red handle	SD3-4-125	125 A	87 x 113 x 80	1	50.0	14	<b>33037</b>
box terminal 10 - 70 mm <sup>2</sup> , yellow-red handle	SD3-4-160	160 A	87 x 113 x 80	1	50.0	14	<b>33041</b>



## CAPUS®Panel - Handles and accessories



### Rotary handle

Article	Type	Pack size	Weight kg/100 u.	PG	Part No.
rotary handle for door coupling drive, black, without shaft	SD1-3, SD1-4, SD2-3, SD2-4	1	10.0	14	<b>33665</b>
rotary handle for door coupling drive, yellow-red, without shaft	SD1-3, SD1-4, SD2-3, SD2-4, SD3-3, SD3-4	1	10.0	14	<b>33666</b>
rotary handle for door coupling drive, black, without shaft, with defeater	SD1-3, SD1-4, SD2-3, SD2-4, SD3-3, SD3-4	1	10.0	14	<b>33669</b>
rotary handle for door coupling drive, yellow-red, without shaft, with defeater	SD1-3, SD1-4, SD2-3, SD2-4, SD3-3, SD3-4	1	10.0	14	<b>33670</b>



### Extension shaft

extension shaft, 100 mm long	SD1-3, SD1-4, SD2-3, SD2-4, SD3-3, SD3-4	1	30.0	14	<b>33680</b>
extension shaft, 200 mm long	SD1-3, SD1-4, SD2-3, SD2-4, SD3-3, SD3-4	1	30.0	14	<b>33681</b>
extension shaft, 300 mm long	SD1-3, SD1-4, SD2-3, SD2-4, SD3-3, SD3-4	1	30.0	14	<b>33682</b>



### Pilot switch, for monitoring the switch setting

1 n/c + 1 n/o, screw terminal	SD1-3, SD1-4, SD2-3, SD2-4, SD3-3, SD3-4	1	5.0	14	<b>33692</b>
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### Terminal space cover

connection space cover	SD1-3	1	4.0	14	<b>33694</b>
connection space cover	SD2-3	1	4.0	14	<b>33695</b>
connection space cover	SD3-3	1	4.0	14	<b>33696</b>
connection space cover	SD1-4	1	4.0	14	<b>33697</b>
connection space cover	SD2-4	1	4.0	14	<b>33698</b>
connection space cover	SD3-4	1	4.0	14	<b>33699</b>



## CAPUS®Panel - NH switch-disconnectors-fuses size 00 - 3

type LTS-F



### NH switch-disconnector-fuses, 3-pole, 690 V AC, with rotary handle

Type	Rated current	Size	Pack size	Weight kg/100 u.	PG	Part No.
screw M8, graphite grey handle	160 A	NH 00	1	230.0	15	<b>33337</b>
screw M10, graphite grey handle	250 A	NH 1	1	726.0	15	<b>33338</b>
screw M10, graphite grey handle	400 A	NH 2	1	760.0	15	<b>33339</b>
screw M12, graphite grey handle	630 A	NH 3	1	1310.0	15	<b>33340</b>
screw M8, red handle	160 A	NH 00	1	230.0	15	<b>33359</b>
screw M10, red handle	250 A	NH 1	1	724.0	15	<b>33360</b>
screw M10, red handle	400 A	NH 2	1	768.0	15	<b>33361</b>
screw M12, red handle	630 A	NH 3	1	1280.0	15	<b>33362</b>

fuses and terminal compartment covers are not included in the scope of delivery

### Terminal space cover, attachable at top and bottom

Type	Usable with	Pack size	Weight kg/100 u.	PG	Part No.
for covering all connections, dark grey	LTS-250, LTS-F 160	2	4.0	14	<b>33350</b>
	LTS-400/630, LTS-F 250/400	2	12.0	14	<b>33351</b>
	LTS-800, LTS-F 630	2	20.0	14	<b>33352</b>

### Pilot switch, for monitoring the switch setting

Type	Usable with	Pack size	Weight kg/100 u.	PG	Part No.
1 n/c + 1 n/o, plug connectors 6.3 x 0.8	LTS, LTS-F	1	2.5	14	<b>33347</b>

### Door coupling drive, without rotary handle

Type	Usable with	Pack size	Weight kg/100 u.	PG	Part No.
door coupling rotary drive, graphit-grey blind cover	LTS-250/400/630 LTS-F 160/250/400	1	23.5	14	<b>33342</b>
door coupling rotary drive, graphite-grey blind cover, for closing with padlocks and door inter-locking	LTS-250/400/630, LTS-F160/250/400	1	38.0	14	<b>33345</b>
	LTS-800, LTS-F630	1	67.0	14	<b>33346</b>
door coupling rotary drive, red-yellow blind cover, for closing with padlocks and door inter-locking	LTS-250/400/630, LTS-F 160/250/400	1	38.0	14	<b>33348</b>
	LTS-800, LTS-F 630	1	56.0	14	<b>33349</b>
extension shaft, 300 mm long	LTS-250/400/630, LTS-F 160/250/400	1	30.0	14	<b>33246</b>
	LTS-800, LTS-F 630	1	57.3	14	<b>33283</b>
extension shaft, 550 mm long	LTS-250/400/630, LTS-F 160/250/400	1	29.0	14	<b>33380</b>
	LTS-800, LTS-F 630	1	38.0	14	<b>33381</b>

### Connection accessories

Type	Usable with	Connection	Pack size	Weight kg/100 u.	PG	Part No.
clamp connector for Cu conductors	LTS-F 160	2.5 - 70 mm <sup>2</sup> / 12 x 10	3	2.9	14	<b>33363</b>
clamp connector for Cu cables	QCB-NH1, QCS-NH1, LTS-F 250, LTS 400	70 - 150 mm <sup>2</sup> / 18 x 2 - 14	1	6.3	09	<b>33163</b>
clamp connector for Cu cables	QCB-NH2, LTS-F 400, LTS 630	120 - 240 mm <sup>2</sup> / 21 x 1 - 14	1	10.6	09	<b>33164</b>
clamp connector for Cu cables	QCB-NH3, LTS-F 630, LTS 800	150 - 300 mm <sup>2</sup> / 25 x 1 - 13	1	12.5	09	<b>33165</b>
wedge clamp terminal, single, for Cu and Al cond.	LTS-F 250, LTS 400	70 - 150 mm <sup>2</sup>	3	11.6	14	<b>33366</b>
wedge clamp terminal, single, for Cu and Al cond.	LTS-F 400, LTS 630	120 - 240 mm <sup>2</sup>	3	20.0	14	<b>33367</b>

when using aluminium conductors, observe the maintenance instructions (see 8.2)

fuse links not included

## CAPUS®Panel - Switch-disconnectors 250 A - 800 A

type LTS



### Switch-disconnector, 3-pole, 500 V AC, with rotary handle

Type	Rated current	Pack size	Weight kg/100 u.	PG	Part No.
screw M10, graphite grey handle	250 A	1	194.0	14	<b>33333</b>
	400 A	1	538.0	14	<b>33334</b>
	630 A	1	546.0	14	<b>33335</b>
screw M12, graphite grey handle	800 A	1	944.0	14	<b>33336</b>
screw M10, red handle	250 A	1	194.0	14	<b>33355</b>
	400 A	1	546.0	14	<b>33356</b>
	630 A	1	544.0	14	<b>33357</b>
screw M12, red handle	800 A	1	940.0	14	<b>33358</b>

fuses and terminal compartment covers are not included in the scope of delivery.

### Terminal space cover, attachable at top / bottom

Type	Usable with	Pack size	Weight kg/100 u.	PG	Part No.
for covering all connections, dark grey	LTS-250, LTS-F 160	2	4.0	14	<b>33350</b>
	LTS-400/630, LTS-F 250/400	2	12.0	14	<b>33351</b>
	LTS-800, LTS-F 630	2	20.0	14	<b>33352</b>

### Pilot switch, for monitoring the switch setting

Type	Usable with	Pack size	Weight kg/100 u.	PG	Part No.
1 n/c + 1 n/o, plug connectors 6.3 x 0.8	LTS, LTS-F	1	2.5	14	<b>33347</b>

### Door coupling drive, without rotary handle

Type	Usable with	Pack size	Weight kg/100 u.	PG	Part No.
door coupling rotary drive, graphit-grey blind cover	LTS-250/400/630 LTS-F 160/250/400	1	23.5	14	<b>33342</b>
door coupling rotary drive, graphite-grey blind cover, for closing with padlocks and door inter-locking	LTS-250/400/630, LTS-F160/250/400	1	38.0	14	<b>33345</b>
	LTS-800, LTS-F630	1	67.0	14	<b>33346</b>
door coupling rotary drive, red-yellow blind cover, for closing with padlocks and door inter-locking	LTS-250/400/630, LTS-F 160/250/400	1	38.0	14	<b>33348</b>
	LTS-800, LTS-F 630	1	56.0	14	<b>33349</b>
extension shaft, 300 mm long	LTS-250/400/630, LTS-F 160/250/400	1	30.0	14	<b>33246</b>
	LTS-800, LTS-F 630	1	57.3	14	<b>33283</b>
extension shaft, 550 mm long	LTS-250/400/630, LTS-F 160/250/400	1	29.0	14	<b>33380</b>
	LTS-800, LTS-F 630	1	38.0	14	<b>33381</b>

### Connection accessories

Type	Usable with	Connection mm <sup>2</sup>	Pack size	Weight kg/100 u.	PG	Part No.
clamp connector for lam. Cu	LTS 250	14 x 9	3	3.5	14	<b>33364</b>
clamp connector for Cu cables	QCB-NH1, QCS-NH1, LTS-F 250, LTS 400	18 x 10	1	6.3	09	<b>33163</b>
clamp connector for Cu cables	QCB-NH2, LTS-F 400, LTS 630	21 x 13	1	10.6	09	<b>33164</b>
clamp connector for Cu cables	QCB-NH3, LTS-F 630, LTS 800	25 x 13	1	12.5	09	<b>33165</b>
wedge clamp terminal, single, for Cu and Al cond. *	LTS 250	70 - 120	3	6.7	14	<b>33365</b>
wedge clamp terminal, single, for Cu and Al cond. *	LTS-F 250, LTS 400	70 - 150	3	11.6	14	<b>33366</b>
wedge clamp terminal, single, for Cu and Al cond. *	LTS-F 400, LTS 630	120 - 240	3	20.0	14	<b>33367</b>

\* when using aluminium conductors, observe the maintenance instructions (see 8.2)

## CAPUS®Panel - Switch-disconnectors 125 A - 3150 A

type LTS-T



### Switch-disconnector, 3-pole, without rotary handle, without shaft

Type	Rated current	Pack size	Weight kg/100 u.	PG	Part No.
box terminal 95 mm <sup>2</sup>	125 A	1	80.0	14	<b>33424</b>
screw M8	125 A	1	80.0	14	<b>33425</b>
box terminal 95 mm <sup>2</sup>	160 A	1	80.0	14	<b>33426</b>
screw M8	160 A	1	80.0	14	<b>33427</b>
screw M10	200 A	1	80.0	14	<b>33428</b>
screw M10	250 A	1	90.0	14	<b>33429</b>
screw M10	315 A	1	170.0	14	<b>33430</b>
screw M10	400 A	1	170.0	14	<b>33431</b>
screw M10	630 A	1	420.0	14	<b>33432</b>
screw M10	800 A	1	420.0	14	<b>33433</b>
screw M14	* 1250 A	1	700.0	14	<b>33434</b>
screw M14	1600 A	1	1850.0	14	<b>33435</b>
screw M14	1800 A	1	1850.0	14	<b>33436</b>
screw M12	2000 A	1	5500.0	14	<b>33437</b>
screw M12	2500 A	1	5500.0	14	<b>33438</b>
screw M12	3150 A	1	5600.0	14	<b>33439</b>

rated current at 400 V AC  
\* delivery time on request

### Switch-disconnector, 3-pole + N, without rotary handle, without shaft

Type	Rated current	Pack size	Weight kg/100 u.	PG	Part No.
box terminal 95 mm <sup>2</sup>	125 A	1	90.0	14	<b>33440</b>
screw M8	125 A	1	90.0	14	<b>33441</b>
box terminal 95 mm <sup>2</sup>	160 A	1	90.0	14	<b>33442</b>
screw M8	160 A	1	90.0	14	<b>33443</b>
screw M10	200 A	1	90.0	14	<b>33444</b>
screw M10	250 A	1	100.0	14	<b>33445</b>
screw M10	315 A	1	190.0	14	<b>33446</b>
screw M10	400 A	1	190.0	14	<b>33447</b>
screw M10	630 A	1	450.0	14	<b>33448</b>
screw M10	800 A	1	450.0	14	<b>33449</b>
screw M14	* 1250 A	1	760.0	14	<b>33450</b>
screw M14	1600 A	1	2100.0	14	<b>33451</b>
screw M12	2000 A	1	7500.0	14	<b>33452</b>
screw M12	2500 A	1	7500.0	14	<b>33453</b>
screw M12	3150 A	1	7600.0	14	<b>33454</b>

\* delivery time on request

## CAPUS®Panel - Handles and accessories

for switch-disconnector type LTS-T



### Rotary handle

Type	Usable with	Pack size	Weight	PG	Part No.
rotary handle for door coupling drive, graphite grey, with shaft	LTS-T 125,160,200,250	1	25.0	14	<b>33921</b>
door coupling rotary handle, graphite grey, with shaft	LTS-T 315,400	1	35.0	14	<b>33922</b>
	LTS-T 630,800	1	50.0	14	<b>33923</b>
	LTS-T 1250	1	80.0	14	<b>33924</b>
	LTS-T 1600,1800,2000,2500,3150	1	80.0	14	<b>33925</b>
door coupling rotary handle, yellow-red, with shaft	LTS-T 125,160,200,250	1	25.0	14	<b>33970</b>
	LTS-T 315,400	1	35.0	14	<b>33971</b>
	LTS-T 630,800	1	50.0	14	<b>33972</b>
	LTS-T 1250	1	80.0	14	<b>33973</b>
	LTS-T 1600,1800,2000,2500,3150	1	80.0	14	<b>33974</b>
direct rotary handle, graphite grey, with shaft	LTS-T 125,160,200,250	1	5.0	14	<b>33926</b>
	LTS-T 315,400	1	20.0	14	<b>33927</b>
	LTS-T 630,800	1	25.0	14	<b>33928</b>
	LTS-T 1250	1	30.0	14	<b>33929</b>
	LTS-T 1600,1800,2000,2500,3150	1	30.0	14	<b>33930</b>

### Terminal cover

for covering all terminals at one side of the switch, transparent	LTS-T 315	1	10.0	14	<b>33939</b>
	LTS-T 630,800	1	15.0	14	<b>33940</b>
	LTS-T 1250	1	20.0	14	<b>33941</b>
	LTS-T 1600,1800	1	45.0	14	<b>33942</b>

### Terminal space cover

for covering all terminals at one side of the switch, transparent	LTS-T 125,160,200,250	1	10.0	14	<b>33943</b>
	LTS-T 315,400	1	15.0	14	<b>33944</b>
	LTS-T 630,800	1	20.0	14	<b>33945</b>

### Pilot switch, for monitoring of the switch position

1 n/c + 1 n/o, plug connectors 6.3 x 0.8	LTS-T, LTSU-T	1	5.0	14	<b>33946</b>
2 n/c + 2 n/o, plug connectors 6.3 x 0.8		1	10.0	14	<b>33947</b>

### Rapid mounting set

rapid mounting set for 1 mounting rail TH 35	LTS-T 125,160	1	4.0	14	<b>33177</b>
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## CAPUS® Panel - Changeover switches 125 A - 1000 A

type LTSU-T



### Changeover switch, 3-pole, without rotary handle, without shaft

Type	Rated current	Pack size	Weight kg/100 u.	PG	Part No.
screw M8	* 125 A	1	180.0	14	<b>33455</b>
screw M8	* 160 A	1	180.0	14	<b>33456</b>
screw M10	* 200 A	1	190.0	14	<b>33457</b>
screw M10	250 A	1	550.0	14	<b>33458</b>
screw M10	315 A	1	550.0	14	<b>33459</b>
screw M10	400 A	1	550.0	14	<b>33460</b>
screw M12	630 A	1	1260.0	14	<b>33461</b>
screw M12	800 A	1	1260.0	14	<b>33462</b>
screw M14	1000 A	1	2430.0	14	<b>33463</b>

rated current at 400 V AC

\* bridge cable required; 6 or 8 connections available

### Changeover switch, 3-pole + N, without rotary handle, without shaft

screw M8	* 125 A	1	210.0	14	<b>33464</b>
screw M8	* 160 A	1	210.0	14	<b>33465</b>
screw M10	* 200 A	1	220.0	14	<b>33466</b>
screw M10	250 A	1	590.0	14	<b>33467</b>
screw M10	315 A	1	590.0	14	<b>33468</b>
screw M10	400 A	1	590.0	14	<b>33469</b>
screw M12	630 A	1	1370.0	14	<b>33470</b>
screw M12	800 A	1	1370.0	14	<b>33471</b>
screw M14	1000 A	1	2680.0	14	<b>33472</b>

rated current at 400 V AC

\* bridge cable required; 6 or 8 connections available

### Rotary handle

door coupling rotary handle, graphite grey, with shaft	LTSU-T 125,160,200	1	25.0	14	<b>33931</b>
	LTSU-T 250,400	1	50.0	14	<b>33932</b>
	LTSU-T 630,800	1	70.0	14	<b>33933</b>
	LTSU-T 1000	1	80.0	14	<b>33934</b>
direct rotary handle, graphite grey, with shaft	LTSU-T 125,160,200	1	5.0	14	<b>33935</b>
	LTSU-T 250,400	1	5.0	14	<b>33936</b>
	LTSU-T 630,800	1	30.0	14	<b>33937</b>
	LTSU-T 1000	1	30.0	14	<b>33938</b>

### Terminal cover

terminal cover, transparent, 3-pole, for incoming II	LTSU-T 200-400	1	10.0	14	<b>33963</b>
terminal cover, transparent, 3-pole, for incoming I		1	10.0	14	<b>33964</b>
terminal cover, transparent, 3-pole, for outgoing		1	10.0	14	<b>33968</b>
terminal cover, transparent, 4-pole, for incoming I and II	LTSU-T 250-400	1	10.0	14	<b>33967</b>
terminal cover, transparent, 4-pole, for outgoing		1	10.0	14	<b>33969</b>

### Pilot switch

1 n/c + 1 n/o, plug connectors 6.3 x 0.8	LTSU-T, LTSU-T	1	5.0	14	<b>33946</b>
2 n/c + 2 n/o, plug connectors 6.3 x 0.8		1	10.0	14	<b>33947</b>

## Accessories

for switch-disconnector LTS-T and changeover switch LTSU-T



### Extension shaft

Type	Usable with	Pack size	Weight kg/100 u.	PG	Part No.
extension shaft, 250 mm long	LTS-T 125-250, LTSU-T 125-200	1	10.0	14	<b>33954</b>
extension shaft, 376 mm long	LTS-T 315/400, LTSU-T 250-400	1	31.0	14	<b>33955</b>
extension shaft, 345 mm long	LTS-T 630/800	1	52.0	14	<b>33956</b>
extension shaft, 336 mm long	LTS-T 1250, LTSU-T 630-1000	1	52.0	14	<b>33957</b>
extension shaft, 485 mm long	LTS-T 1600/1800	1	75.0	14	<b>33958</b>
extension shaft, 387 mm long	LTS-T 125-250, LTSU-T 125-200	1	17.0	14	<b>33959</b>
extension shaft, 536 mm long	LTS-T 315/400	1	43.0	14	<b>33960</b>
extension shaft, 525 mm long	LTS-T 630/800	1	85.0	14	<b>33961</b>
extension shaft, 635 mm long	LTS-T 1600/1800	1	100.0	14	<b>33962</b>

# Accessories



## D0 fuses

in accordance with IEC / HD / DIN VDE 60269-3



### Fuse-link gG (gL)

Size	Rated voltage	Rated breaking capacity	Pack size	Weight kg/100 u.	PG	Part No.
D01 fuse link 2 A	400 V AC / 250 V DC	50 kA AC / 8 kA DC	10	0.6	22	<b>01685</b>
D01 fuse link 4 A			10	0.6	22	<b>01686</b>
D01 fuse link 6 A			10	0.6	22	<b>01687</b>
D01 fuse link 10 A			10	0.6	22	<b>01688</b>
D01 fuse link 16 A			10	0.7	22	<b>01689</b>
D02 fuse link 20 A			10	1.2	22	<b>01690</b>
D02 fuse link 32 A			10	1.3	22	<b>01697</b>
D02 fuse link 25 A			10	1.3	22	<b>01691</b>
D02 fuse link 40 A			10	1.3	22	<b>01698</b>
D02 fuse link 35 A			10	1.3	22	<b>01692</b>
D02 fuse link 50 A			10	1.5	22	<b>01693</b>
D02 fuse link 63 A			10	1.5	22	<b>01694</b>

### Ferrule gauge ring for E 14

Size	Rated current	Pack size	Weight kg/100 u.	PG	Part No.
D01 gauge ring 2 A	2 - 16 A	50	0.1	22	<b>01715</b>
D01 gauge ring 4 A		50	0.1	22	<b>01716</b>
D01 gauge ring 6 A		50	0.1	22	<b>01717</b>
D01 gauge ring 10 A		50	0.1	22	<b>01718</b>

### Ferrule gauge ring for E 18

special D01 gauge ring 2 A	2 - 16 A	50	0.1	22	<b>01724</b>
special D01 gauge ring 4 A		50	0.1	22	<b>01725</b>
special D01 gauge ring 6 A		50	0.1	22	<b>01726</b>
special D01 gauge ring 10 A		50	0.1	22	<b>01727</b>
special D01 gauge ring 16 A		50	0.1	22	<b>01728</b>
D02 gauge ring 20 A		50	0.1	22	<b>01719</b>
D02 gauge ring 25 A		50	0.1	22	<b>01720</b>
D02 gauge ring 32 A		50	0.1	22	<b>01723</b>
D02 gauge ring 35 A / 40 A		50	0.1	22	<b>01721</b>
D02 gauge ring 50 A		50	0.1	22	<b>01722</b>

## D0 fuses

in accordance with IEC / HD / DIN VDE 60269-3



### Screw cap, 400 V AC / 250 V DC

Size	Type	Pack size	Weight kg/100 u.	PG	Part No.
D01 screw cap, porcelain	E 14	20	1.9	22	<b>01103</b>
D01 screw cap, plastic		20	1.2	22	<b>31005</b>
D02 screw cap, porcelain	E 18	20	1.8	22	<b>01104</b>
D02 screw cap, plastic		20	1.3	22	<b>31006</b>
D02 screw cap, plastic, with reducer for D01		20	1.4	22	<b>31104</b>

### Retaining cap

locking cap D01 version "industry"	E 14	36	1.1	22	<b>31909</b>
locking cap D01 version "utility"		36	1.1	22	<b>31908</b>
locking cap D02 version "industry"	E 18	36	1.1	22	<b>31910</b>
locking cap D02 version "utility"		36	1.1	22	<b>31904</b>

### Special retaining spring

Size	Rated current	Pack size	Weight kg/100 u.	PG	Part No.
special-retaining spring for D01 - E 18	2 - 16 A	50	0.1	22	<b>01729</b>

### Gauge ring tool

D01 - D03	1	2.8	22	<b>01730</b>
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### Special key for retaining cap

"industry" version D and D0	1	3.6	22	<b>31913</b>
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## D fuses

in accordance with IEC / HD / DIN VDE 60269-3



### Fuse-link gG (gL)

Size	Rated voltage	Rated breaking capacity	Type	Pack size	Weight kg/100 u.	PG	Part No.
D-fuse link 2 A	500 V AC / 500 V DC	50 kA AC / 8 kA DC	E 27	5	2.7	22	<b>01670</b>
D-fuse link 4 A				5	2.8	22	<b>01671</b>
D-fuse link 6 A				5	2.8	22	<b>01672</b>
D-fuse link 10 A				5	2.8	22	<b>01673</b>
D-fuse link 16 A				5	2.9	22	<b>01674</b>
D-fuse link 20 A				5	3.1	22	<b>01675</b>
D-fuse link 25 A				5	3.2	22	<b>01676</b>
D-fuse link 35 A				E 33	5	4.8	22
D-fuse link 50 A			5		5.0	22	<b>01678</b>
D-fuse link 63 A			5		5.2	22	<b>01679</b>

### Screw-in gauge ring

Size	Type	Pack size	Weight kg/100 u.	PG	Part No.
screw-in gauge ring 2 A	E 27 / E 33	25	1.3	22	<b>01741</b>
screw-in gauge ring 4 A		25	1.2	22	<b>01701</b>
screw-in gauge ring 6 A		25	1.2	22	<b>01702</b>
screw-in gauge ring 10 A		25	1.2	22	<b>01703</b>
screw-in gauge ring 16 A		25	1.2	22	<b>01704</b>
screw-in gauge ring 20 A		25	1.2	22	<b>01705</b>
screw-in gauge ring 25 A		25	1.2	22	<b>01706</b>
screw-in gauge ring 35 A		E 33	25	2.0	22
screw-in gauge ring 50 A	25		2.0	22	<b>01708</b>
screw-in gauge ring 63 A	25		2.0	22	<b>01709</b>

### Gauge ring

Size	Type	Pack size	Weight kg/100 u.	PG	Part No.
gauge ring 2 A	E 27	50	0.4	22	<b>01541</b>
gauge ring 4 A		50	0.4	22	<b>01542</b>
gauge ring 6 A		50	0.4	22	<b>01543</b>
gauge ring 10 A		50	0.4	22	<b>01544</b>
gauge ring 16 A		50	0.4	22	<b>01545</b>
gauge ring 20 A		50	0.4	22	<b>01546</b>
gauge ring 25 A		50	0.4	22	<b>01547</b>
gauge ring 35 A		E 33	50	0.4	22
gauge ring 50 A	50		0.4	22	<b>01549</b>
gauge ring 63 A	50		0.4	22	<b>01550</b>

## D fuses

in accordance with IEC / HD / DIN VDE 60269-3



### Screw cap

Size	Type	Rated voltage	Pack size	Weight kg/100 u.	PG	Part No.
D-screw cap, porcelain	E 27	500 V	20	4.8	22	<b>01098</b>
D-screw cap, plastic			20	2.8	22	<b>31098</b>
D-screw cap, porcelain	E 33		20	7.9	22	<b>01100</b>
D-screw cap, plastic			20	4.8	22	<b>31100</b>

### Retaining cap

Size	Type	Rated voltage	Pack size	Weight kg/100 u.	PG	Part No.
locking cap DII version "industry"	E 27	500 V	20	1.7	22	<b>31911</b>
locking cap DII version "utility"			20	1.7	22	<b>31905</b>
locking cap DIII version "industry"	E 33		10	2.6	22	<b>31912</b>
locking cap DIII version "utility"			10	2.6	22	<b>31906</b>

### Gauge screw key

Type	Pack size	Weight kg/100 u.	PG	Part No.
E 27 / E 33	1	4.7	22	<b>01998</b>

### Gauge screw key

E 27 / E 33	1	3.7	22	<b>01059</b>
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### Special key for retaining cap

"industry" version D and D0	1	3.6	22	<b>31913</b>
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## NH fuses

in accordance with IEC / HD / DIN VDE 60269-2



### Fuse-link gG (gL)

Size	Rated current	Rated voltage, AC	Rated voltage, DC	Pack size	Weight kg/100 u.	PG	Part No.			
NH 000	125 A	400 V	250 V	3	12.2	22	<b>03243</b>			
	6 A	500 V		3	12.2	22	<b>03523</b>			
	10 A			3	12.2	22	<b>03524</b>			
	16 A			3	12.2	22	<b>03525</b>			
	20 A			3	12.2	22	<b>03526</b>			
	25 A			3	12.2	22	<b>03527</b>			
	32 A			3	12.2	22	<b>03535</b>			
	35 A			3	12.2	22	<b>03528</b>			
	40 A			3	12.2	22	<b>03536</b>			
	50 A			3	12.2	22	<b>03529</b>			
	63 A			3	12.2	22	<b>03530</b>			
	80 A			3	12.2	22	<b>03531</b>			
	100 A			3	12.2	22	<b>03532</b>			
	NH 00			125 A	690 V	440 V	3	18.3	22	<b>03533</b>
				160 A		3	18.3	22	<b>03534</b>	
				6 A	250 V	440 V	3	12.7	22	<b>03908</b>
10 A			3	12.7			22	<b>03909</b>		
16 A		3	12.7	22			<b>03910</b>			
20 A		3	12.7	22			<b>03911</b>			
25 A		3	12.7	22			<b>03912</b>			
32 A		3	12.7	22			<b>03913</b>			
35 A		3	12.7	22			<b>03914</b>			
40 A		3	12.7	22			<b>03915</b>			
50 A		3	12.7	22			<b>03916</b>			
63 A		3	12.7	22			<b>03917</b>			
80 A		3	19.0	22			<b>03918</b>			
100 A		3	20.5	22			<b>03919</b>			

NH fuses in accordance with size 000 can be used in NH fuse bases, fuse-switch disconnectors and NH fuse-switch units of size 00

### Knife link

Size	Rated current	Pack size	Weight kg/100 u.	PG	Part No.
NH 00	160 A	3	7.0	22	<b>03161</b>
NH 1	250 A	3	14.9	22	<b>03162</b>
NH 2	400 A	3	20.7	22	<b>03163</b>
NH 3	630 A	3	28.0	22	<b>03164</b>
NH 4a	1600 A	3	85.0	22	<b>03185</b>

### NH universal slip-on handle

Size	Type	Pack size	Weight kg/100 u.	PG	Part No.
000 - 3	without sleeve	1	28.4	10	<b>03502</b>

## NH fuses

in accordance with IEC / HD / DIN VDE 60269-2



### Fuse-link gG

Size	Rated voltage, AC	Rated voltage, DC	Rated current	Pack size	Weight kg/100 u.	PG	Part No.			
NH 1	500 V	440 V	20 A	3	26.3	22	<b>03550</b>			
			35 A	3	26.3	22	<b>03552</b>			
			50 A	3	26.3	22	<b>03553</b>			
			80 A	3	26.3	22	<b>03555</b>			
			100 A	3	26.3	22	<b>03556</b>			
			125 A	3	26.3	22	<b>03557</b>			
			160 A	3	26.3	22	<b>03558</b>			
			200 A	3	26.3	22	<b>03559</b>			
			224 A	3	26.3	22	<b>03560</b>			
			250 A	3	26.3	22	<b>03561</b>			
			160 A	3	35.0	22	<b>03929</b>			
			200 A	3	35.0	22	<b>03930</b>			
			250 A	3	35.0	22	<b>03924</b>			
			NH 2	500 V	440 V	100 A	3	47.8	22	<b>03566</b>
160 A	3	47.8				22	<b>03568</b>			
200 A	3	47.8				22	<b>03569</b>			
224 A	3	47.8				22	<b>03570</b>			
250 A	3	47.8				22	<b>03571</b>			
300 A	3	47.8				22	<b>03572</b>			
315 A	3	47.8				22	<b>03573</b>			
355 A	3	47.8				22	<b>03574</b>			
400 A	3	47.8				22	<b>03575</b>			
250 A	3	62.6				22	<b>03942</b>			
315 A	3	62.6				22	<b>03943</b>			
NH 3	500 V	250 V				315 A	3	65.4	22	<b>03577</b>
						400 A	3	65.4	22	<b>03579</b>
						500 A	3	65.4	22	<b>03581</b>
			630 A	3	65.4	22	<b>03582</b>			
			400 A	3	96.0	22	<b>03946</b>			
			500 A	3	105.0	22	<b>03947</b>			
NH 4a	500 V	440 V	800 A	1	260.0	22	<b>03181</b>			
			1000 A	1	260.0	22	<b>03182</b>			
			1250 A	1	266.0	22	<b>03183</b>			

## Cylindrical fuses gG

in accordance with IEC / HD 60269-2



### Fuse-link gG (gL)

Size	Rated current	Rated voltage	Rated breaking capacity	Power dissipation	Pack size	Weight kg/100 u.	PG	Part No.			
10x38	1 A	500 V	120 kA	0.5 W	10	0.6	22	<b>31008</b>			
	2 A			0.7 W	10	0.6	22	<b>31182</b>			
	4 A			0.8 W	10	0.6	22	<b>31183</b>			
	6 A			0.9 W	10	0.6	22	<b>31184</b>			
	8 A			0.9 W	10	0.6	22	<b>31009</b>			
	10 A			1.3 W	10	0.6	22	<b>31185</b>			
	12 A			1.3 W	10	0.6	22	<b>31010</b>			
	16 A			1.9 W	10	0.6	22	<b>31186</b>			
	20 A			2.3 W	10	0.6	22	<b>31187</b>			
	25 A			2.8 W	10	0.6	22	<b>31188</b>			
	32 A			3.0 W	10	0.6	22	<b>31189</b>			
	14x51			2 A	690 V	80 kA	0.8 W	10	1.9	22	<b>31011</b>
6 A		1.0 W	10	1.9			22	<b>31017</b>			
10 A		1.8 W	10	1.9			22	<b>31190</b>			
16 A		80 kA	2.5 W	10		1.9	22	<b>31191</b>			
20 A			3.0 W	10		1.9	22	<b>31192</b>			
25 A			3.5 W	10		1.9	22	<b>31193</b>			
32 A		500 V	120 kA	3.8 W	10	1.9	22	<b>31194</b>			
40 A				4.4 W	10	1.9	22	<b>31195</b>			
50 A				4.7 W	10	1.9	22	<b>31196</b>			
22x58				32 A	690 V	80 kA	4.3 W	10	5.0	22	<b>31198</b>
				40 A			5.1 W	10	5.0	22	<b>31199</b>
				50 A			5.5 W	10	5.0	22	<b>31200</b>
63 A	500 V	120 kA	6.7 W	10	5.0	22	<b>31201</b>				
80 A			8.0 W	10	5.0	22	<b>31202</b>				
100 A			9.0 W	10	5.0	22	<b>31203</b>				
125 A			12.5 W	10	5.0	22	<b>31204</b>				

### Fuse-link gG (gL), with striker

14x51	6 A	500 V	80 kA	1.1 W	10	2.0	22	<b>31366</b>			
14x51	10 A			1.3 W	10	2.0	22	<b>31368</b>			
14x51	16 A			2.0 W	10	2.0	22	<b>31370</b>			
14x51	20 A			2.5 W	10	2.0	22	<b>31371</b>			
14x51	25 A			3.3 W	10	2.0	22	<b>31372</b>			
14x51	32 A			120 kA	3.5 W	10	2.0	22	<b>31373</b>		
14x51	40 A		4.8 W		10	2.0	22	<b>31374</b>			
22x58	50 A		690 V		80 kA	5.2 W	10	5.2	22	<b>31385</b>	
22x58	63 A					500 V	6.9 W	10	5.2	22	<b>31386</b>
22x58	80 A						7.8 W	10	5.2	22	<b>31387</b>

## Cylindrical fuses gR and gPV

gR in accordance with IEC / EN 60269-4 and gPV in accordance with IEC / EN 60269-6



### Fuse-link gR

Size	Rated current	Rated voltage	Rated breaking capacity	Power dissipation	Pack size	Weight kg/100 u.	PG	Part No.			
10x38	1 A	690 V	200 kA	0.9 W	10	0.6	22	<b>31205</b>			
	2 A			1.0 W	10	0.6	22	<b>31206</b>			
	4 A			1.1 W	10	0.6	22	<b>31207</b>			
	6 A			1.6 W	10	0.6	22	<b>31208</b>			
	10 A			2.1 W	10	0.6	22	<b>31209</b>			
	12 A			3.1 W	10	0.6	22	<b>31210</b>			
	16 A			4.4 W	10	0.6	22	<b>31211</b>			
	20 A			5.8 W	10	0.6	22	<b>31212</b>			
	25 A			6.8 W	10	0.6	22	<b>31213</b>			
	30 A			8.2 W	10	0.6	22	<b>31214</b>			
	14x51			10 A	690 V	200 kA	2.6 W	10	1.9	22	<b>31215</b>
				16 A			4.7 W	10	1.9	22	<b>31216</b>
				20 A			6.0 W	10	1.9	22	<b>31217</b>
				32 A			9.5 W	10	1.9	22	<b>31219</b>
40 A		10.0 W	10	1.9			22	<b>31220</b>			
50 A		12.0 W	10	1.9			22	<b>31221</b>			
22x58	63 A	690 V	200 kA	15.0 W	10	5.0	22	<b>31226</b>			
	80 A			16.0 W	10	5.0	22	<b>31227</b>			
	100 A			18.0 W	10	5.0	22	<b>31228</b>			
	125 A			19.0 W	10	5.0	22	<b>31229</b>			

### Fuse-link gPV, for photovoltaic applications

10x38	8 A	1000 V	30 kA	1.6 W	10	0.6	22	<b>31543</b>
	10 A			2.0 W	10	0.6	22	<b>31544</b>
	12 A			2.4 W	10	0.6	22	<b>31545</b>
	16 A			2.1 W	10	0.6	22	<b>31546</b>
	20 A			2.5 W	10	0.6	22	<b>31547</b>
14x85	16 A	1100 V	30 kA	3.8 W	20	2.7	22	<b>31560</b>
	20 A			4.7 W	20	2.7	22	<b>31559</b>
	25 A			5.9 W	20	2.7	22	<b>31558</b>

## Cylindrical fuses Class CC

in accordance with UL 248-4



### Fuse-link, Class CC, time delay

Size	Rated current	Rated voltage	Rated breaking capacity	Pack size	Weight kg/100 u.	PG	Part No.
Class CC	0.5 A	600 V	200 kA	10	0.8	22	31394
	1 A			10	0.8	22	31244
	1.5 A			10	0.8	22	31395
	2 A			10	0.8	22	31245
	2.5 A			10	0.8	22	31396
	3 A			10	0.8	22	31397
	4 A			10	0.8	22	31246
	5 A			10	0.8	22	31398
	6 A			10	0.8	22	31247
	8 A			10	0.8	22	31399
	10 A			10	0.8	22	31248
	12 A			10	0.8	22	31400
	15 A			10	0.8	22	31249
	20 A			10	0.8	22	31250
	25 A			10	0.8	22	31251
	30 A			10	0.8	22	31252

### Fuse-link, Class CC, fast acting

Size	Rated current	Rated voltage	Rated breaking capacity	Pack size	Weight kg/100 u.	PG	Part No.
Class CC	0.5 A	600 V	200 kA	10	0.8	22	31401
	1 A			10	0.8	22	31235
	2 A			10	0.8	22	31236
	3 A			10	0.8	22	31404
	4 A			10	0.8	22	31237
	5 A			10	0.8	22	31405
	6 A			10	0.8	22	31238
	8 A			10	0.8	22	31406
	10 A			10	0.8	22	31239
	12 A			10	0.8	22	31407
	15 A			10	0.8	22	31240
	20 A			10	0.8	22	31241
	25 A			10	0.8	22	31242
	30 A			10	0.8	22	31243



## Cylindrical fuses Class J

in accordance with UL 248-8



### Fuse-link, Class J, time delay

Size	Rated current	Rated voltage	Rated breaking capacity	Pack size	Weight kg/100 u.	PG	Part No.	
Class J, 21x57	1 A	600 V	200 kA	10	5.0	22	31333	
	2 A			10	5.0	22	31338	
	3 A			10	5.0	22	31342	
	4 A			10	5.0	22	31345	
	6 A			10	5.0	22	31349	
	8 A			10	5.0	22	31351	
	10 A			10	5.0	22	31353	
	12 A			10	5.0	22	31354	
	15 A			10	5.0	22	31355	
	20 A			10	5.0	22	31357	
	25 A			10	5.0	22	31358	
	30 A			10	5.0	22	31359	
	Class J, 27x60			35 A	10	8.5	22	31360
				40 A	10	8.5	22	31361
				45 A	10	8.5	22	31362
				50 A	10	8.5	22	31363
60 A		10	8.5	22	31364			
Class J, 29x118	70 A	1	14.5	22	03228			
	80 A	1	14.5	22	03229			
	90 A	1	14.5	22	03230			
	100 A	1	14.5	22	03231			
Class J, 41x146	125 A	1	35.5	22	03233			
	150 A	1	35.5	22	03234			
	175 A	1	35.5	22	03235			
	200 A	1	35.5	22	03236			
Class J, 54x181	250 A	1	67.0	22	03238			
	300 A	1	67.0	22	03239			
	350 A	1	67.0	22	03240			
	400 A	1	67.0	22	03241			



## Cylindrical fuses Class J

in accordance with UL 248-8



### Fuse-link, Class J, fast acting

Size	Rated current	Rated voltage	Rated breaking capacity	Pack size	Weight kg/100 u.	PG	Part No.
Class J, 21x57	10 A	600 V	200 kA	10	5.0	22	31323
	15 A			10	5.0	22	31324
	20 A			10	5.0	22	31325
	25 A			10	5.0	22	31326
	30 A			10	5.0	22	31327
Class J, 27x60	35 A			10	8.5	22	31511
	40 A			10	8.5	22	31512
	50 A			10	8.5	22	31514
	60 A			10	8.5	22	31515
Class J, 29x118	70 A			1	14.5	22	03214
	80 A			1	14.5	22	03215
	100 A			1	14.5	22	03217
Class J, 41x146	125 A			1	35.0	22	03219
	150 A			1	35.5	22	03220
	175 A			1	38.2	22	03221
	200 A			1	35.5	22	03222
Class J, 54x181	250 A			1	67.0	22	03224
	300 A			1	67.0	22	03225
	350 A			1	67.0	22	03226
	400 A			1	67.0	22	03227

## Insulators



### Insulator, with female thread

Total height	Female thread, both sides	Width across flats	Rated voltage	Pack size	Weight kg/100 u.	PG	Part No.
20	M6	17	600 V	100	1.2	06	05779
25	M5	22	1000 V	20	3.5	06	05793
30	M6	30	1500 V	20	5.4	06	05780
30	M8	30	1500 V	20	5.3	06	05792
35	M6	32	1500 V	20	7.0	06	05781
35	M8	32	1500 V	20	7.2	06	05782
40	M8	40	2000 V	20	10.2	06	05783
40	M10	40	2000 V	20	10.8	06	05784
40	M12	40	2000 V	20	11.8	06	05791
45	M8	46	2000 V	20	14.8	06	05786
45	M10	46	2000 V	20	15.3	06	05787
50	M8	36	2000 V	20	10.9	06	05790
50	M10	36	2000 V	20	12.2	06	05788
60	M10	40	3000 V	20	16.2	06	05789

### Insulator, with threaded bolt and female thread

Total height	Female thread, both sides	Width across flats	Rated voltage	Pack size	Weight kg/100 u.	PG	Part No.
30	M6	30	1500 V	20	5.3	06	05800
35	M6	32	1500 V	20	6.0	06	05801
35	M8	32	1500 V	20	8.2	06	05802



UL certificate

## Laminated copper busbars



### Laminated copper busbar, plain, insulated (105°C), length 2 m

Dimensions (number of laminates x width x thickness)	Cross-section mm <sup>2</sup>	Rated current 30 K	Rated current 50 K	Pack size	Weight kg/100 u.	PG	Part No.
3 x 9 x 0.8	21.6	119 A	162 A	1	40.4	06	01054
6 x 9 x 0.8	43.2	176 A	240 A	1	80.6	06	01194
4 x 15.5 x 0.8	49.6	205 A	279 A	1	92.8	06	01196
6 x 15.5 x 0.8	74.4	257 A	350 A	1	139.2	06	01035
10 x 15.5 x 0.8	124	345 A	470 A	1	232.0	06	01583
3 x 20 x 1	60	240 A	326 A	1	112.4	06	01027
6 x 20 x 1	120	351 A	477 A	1	225.0	06	01028
10 x 20 x 1	200	470 A	640 A	1	375.0	06	01029
4 x 24 x 1	96	322 A	438 A	1	180.0	06	01253
5 x 24 x 1	120	363 A	494 A	1	225.0	06	01611
6 x 24 x 1	144	402 A	547 A	1	270.0	06	01255
8 x 24 x 1	192	471 A	641 A	1	360.0	06	01323
10 x 24 x 1	240	534 A	727 A	1	450.0	06	01184
5 x 32 x 1	160	453 A	617 A	1	299.0	06	01612
10 x 32 x 1	320	657 A	894 A	1	598.0	06	01613
5 x 40 x 1	200	541 A	736 A	1	373.0	06	01614
6 x 40 x 1	240	594 A	809 A	1	447.6	06	01256
10 x 40 x 1	400	774 A	1053 A	1	746.0	06	01615
5 x 50 x 1	250	646 A	880 A	1	466.0	06	01060
8 x 50 x 1	400	818 A	1114 A	1	746.0	06	01343
10 x 50 x 1	500	914 A	1244 A	1	932.0	06	01509
5 x 63 x 1	315	779 A	1061 A	1	590.0	06	01324
10 x 63 x 1	630	1088 A	1481 A	1	1180.0	06	01510
10 x 80 x 1	800	1305 A	1777 A	1	1490.0	06	01061
10 x 100 x 1	1000	1550 A	2110 A	1	1870.0	06	01273

the pure copper weight is given, this does not include the weight of the insulation.



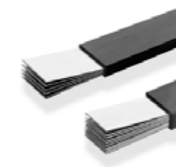
### Holder for laminated busbars

Type	Pack size	Weight kg/100 u.	PG	Part No.
for 1x lam. Cu of 6 x 15.5 x 0.8 to 10 x 63 x 1	3	11.3	06	01298
for multiple fastening for lam. Cu of 5 x 40 x 1 to 10 x 100 x 1	4	16.6	06	01299

for mounting on standard C-rail



## Laminated copper busbars



### Laminated copper busbar, tin-plated, insulated (105°C), length 2 m

Dimensions (number of laminates x width x thickness)	Cross-section mm <sup>2</sup>	Rated current 30 K	Rated current 50 K	Pack size	Weight kg/100 u.	PG	Part No.
4 x 15.5 x 0.8	49.6	205 A	279 A	1	92.8	06	01089
6 x 15.5 x 0.8	74.4	257 A	350 A	1	139.2	06	01090
10 x 15.5 x 0.8	124	345 A	470 A	1	232.0	06	01091
6 x 20 x 1	120	351 A	477 A	1	225.0	06	01063
10 x 20 x 1	200	470 A	640 A	1	375.0	06	01064
5 x 24 x 1	120	363 A	494 A	1	225.0	06	01075
10 x 24 x 1	240	534 A	727 A	1	450.0	06	01076
5 x 32 x 1	160	453 A	617 A	1	299.0	06	01095
10 x 32 x 1	320	657 A	894 A	1	598.0	06	01096
5 x 40 x 1	200	541 A	736 A	1	373.0	06	01097
10 x 40 x 1	400	774 A	1053 A	1	746.0	06	01099
5 x 50 x 1	250	646 A	880 A	1	466.0	06	01112
10 x 50 x 1	500	914 A	1244 A	1	932.0	06	01113
10 x 63 x 1	630	1088 A	1481 A	1	1180.0	06	01123

the pure copper weight is given, this does not include the weight of the insulation.



### Holder for laminated busbars

Type	Pack size	Weight kg/100 u.	PG	Part No.
for 1x lam. Cu of 6 x 15.5 x 0.8 to 10 x 63 x 1	3	11.3	06	01298
for multiple fastening for lam. Cu of 5 x 40 x 1 to 10 x 100 x 1	4	16.6	06	01299

for mounting on standard C-rail



## Connection bars for PE or N



### PE and N busbar, current capacity 63 A, with self-locking screws

Connection mm <sup>2</sup>	Number of contact positions	Dimensions L x W x D	Pack size	Weight kg/100 u.	PG	Part No.
10	8 terminal points	52 x 9 x 6.5	100	2.2	06	<b>01126</b>
	12 terminal points	78 x 9 x 6.5	100	3.2	06	<b>01127</b>
	16 terminal points	104 x 9 x 6.5	100	4.3	06	<b>01128</b>
	24 terminal points	156 x 9 x 6.5	50	6.7	06	<b>01129</b>
	151 terminal points	1000 x 9 x 6.5	1	43.0	06	<b>01130</b>

### Connection terminal

35	suitable for PE and N busbars 01126 - 01130		100	1.4	07	<b>01114</b>
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### PE and N busbar, with terminal clamp, current capacity 63 A, with self-locking screws

Connection	Type	Dimensions L x W x H	Pack size	Weight kg/100 u.	PG	Part No.
without terminal clamp	6 terminal points 10mm <sup>2</sup> , screw-on, 61.5 mm long	62 x 9 x 6.5	100	2.5	06	<b>01926</b>
1 terminal clamp 25 mm <sup>2</sup>	12 terminal points 10mm <sup>2</sup> , screw-on, 124.0 mm long	124 x 9 x 6.5	50	5.5	06	<b>01927</b>
2 terminal clamps 25 mm <sup>2</sup>	18 terminal points 10mm <sup>2</sup> , screw-on, 186.5 mm long	187 x 9 x 6.5	60	9.6	06	<b>01928</b>
3 terminal clamps 25 mm <sup>2</sup>	24 terminal points 10mm <sup>2</sup> , screw-on, 249.0 mm long	249 x 9 x 6.5	50	11.5	06	<b>01929</b>
4 terminal clamps 25 mm <sup>2</sup>	30 terminal points 10mm <sup>2</sup> , screw-on, 311.5 mm long	312 x 9 x 6.5	50	16.7	06	<b>01930</b>
5 terminal clamps 25 mm <sup>2</sup>	36 terminal points 10mm <sup>2</sup> , screw-on, 374.0 mm long	374 x 9 x 6.5	100	17.6	06	<b>01931</b>
15 terminal clamps 25 mm <sup>2</sup>	96 terminal points 10mm <sup>2</sup> , screw-on, 1000 mm long	1000 x 9 x 6.5	1	48.0	06	<b>01932</b>

for 10 mm<sup>2</sup> incoming connection the connection clamp must be reversed

### Connection clamp

25 mm <sup>2</sup>	for PE/N bars 01926 - 01932	100	0.3	06	<b>08824</b>
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### Clip-on mounting, for rail 35 mm to EN 60715

for mounting rail 35 x 7.5	for PE/N bars 01126 - 01129 and 01926 - 01932	100	0.2	06	<b>08825</b>
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### Terminal support, for PE and N busbars

screw-on		50	1.4	06	<b>01120</b>
snap-on to mounting rail TH 35		50	1.6	06	<b>01121</b>
screw-on		50	0.1	06	<b>01119</b>

## Connection and connecting terminals



### Insulated PE and N terminal

Rated current	Connection mm <sup>2</sup>	Type	Pack size	Weight kg/100 u.	PG	Part No.
63 A	7x 10 mm <sup>2</sup>	PE-terminal, green/yellow	50	2.7	06	<b>01144</b>
63 A		neutral terminal, blue	50	2.7	06	<b>01143</b>
63 A		PE-terminal, green/yellow	50	2.9	06	<b>01258</b>
63 A		neutral terminal, blue	50	2.9	06	<b>01257</b>

\* for mounting on flat busbars 12 x 2 mm

\*\* for clip-on mounting

### Connecting terminal

160 A	70	60 mm long, both sides clamp	10	9.1	10	<b>03193</b>
		125 mm long, both sides clamp	10	14.6	10	<b>03173</b>
250 A	120	100 mm long, both sides screw M10	10	16.8	10	<b>03195</b>
		200 mm long, both sides screw M10	10	30.6	10	<b>03196</b>
630 A	240	100 mm long, both sides screw M12	10	25.6	10	<b>03197</b>
		200 mm long, both sides screw M12	10	42.0	10	<b>03198</b>

### Label, self-adhesive, Ø 15 mm

PE green-yellow	200	0.1	06	<b>78442</b>
N blue	200	0.1	06	<b>78443</b>
PE/N green-yellow / blue	200	0.1	06	<b>78447</b>

# Appendix

## Terms of delivery and payment

The current terms of delivery and payment apply. Further information is available at [www.woehner.com](http://www.woehner.com) under the heading "Media/ Downloads".

## Wöhner worldwide

Information to the Wöhner subsidiaries and agencies are available at [www.woehner.com](http://www.woehner.com) under the heading "Contact".

## General technical information

Wöhner busbar systems and components are the result of expert development based on many years of experience. They have been exhaustively tested and hold many approvals. The correct selection of busbars and components is the responsibility of the system designer. For parts used in "low-voltage switching device assemblies" as defined by the IEC or EN 61439 standards, the planning, construction requirements and the required design verification are mandatory. In order to safely exclude risks to people and property when handling electrical power, expert handling of the equipment and compliance with the applicable regulations are fundamental requirements.

In particular, installation, maintenance, modifications and additions must only be carried out by qualified personnel in accordance with the general construction and safety regulations applicable to high-current electrical systems. Technical standards must be observed and the interaction

## Operating conditions

Unless special instructions are given, the information contained in the documentation applies for the recommended mounting position and the ambient conditions of indoor installation (contamination level 3; 2 in exceptional cases) according to IEC / EN 61439-1/-2/-3. The user must inform the manufacturer about any special operating conditions that deviate from this standard!

Plant-specific reduction factors must be considered, depending on the exact conditions of use. The rated loading factors listed below represent guide values and refer to a maximum +35 °C temperature of the air directly surrounding the products.

of the components must be taken into account. It is essential that all accessible parts are electrically isolated during installation and maintenance. All connections must be correctly tightened with the specified torque (Md), correct gauges must be used and components that provide protection against accidental contact with live parts must be fitted. After transportation, all connections must be checked and, if necessary, re-tightened.

Products are to be used and operated correctly in the manner intended.

The technical information contained in the Manual and the installation instructions should be observed and retained for future modifications, maintenance or additions to the installation. Wöhner reserves the right to make modifications to its components, as the result of developments and technical advances.

Number of main circuits	Rated diversity factor	
	to IEC / EN 61439-2	to IEC / EN 61439-3
2 and 3	0.9	0.8
4 and 5	0.8	0.7
6 to 9 inclusive	0.7	0.6
10 and more	0.6	0.5

IEC / EN 61439  
Part 2: Power switchgear and controlgear assemblies  
Part 3: Installation distributor for operation by lay people

In products intended to hold fuse-links, please observe the requirements governing connected cross-sections from the relevant product standards. Comply with the stated temperature specifications of all plastics used. Some of the material properties described here refers to several products. In isolated cases, values may exceed the levels stated.

Further information for each article are available at [www.woehner.com](http://www.woehner.com) under the heading "Products".

We recommend vertically mounting the device on a horizontal busbar system. The fixing handle must be placed on top for switchgears mounted vertically. For this mounting position, the rated load factors shown in Table 101 apply for the components with the worst-case permissible power dissipation and the ambient conditions as per IEC / EN 61439-2 / -3, section 7.1.1.1.

In case of deviating mounting positions and conditions, all influencing factors are on maximum temperature such as:

- power dissipation of the fuse-links and the devices in operation,
- simultaneous full and partial load cycles,
- arrangement in the system, mutual influence of the devices,

## Conductor connections

Specifications regarding conductor terminals are only valid for copper conductors. The maintenance-free resistance to ageing for selected connections has been verified by testing.

If the standards-compliant connection of aluminium conductors has been confirmed for connection terminals, this is stated expressly. Before connecting aluminium conductors, any oxide deposits must be removed from the conductor surfaces and further oxidation prevented. After removal of the oxide deposit, chips and abrasives cannot be permitted to damage the contacts. Multiwire conductors should be shortened and exposed to the bare metallic conductor section. The contact points are to be sealed (e.g. using acid-free contact grease) so that they are airtight to protect them against further oxidation.

The terminal points need to be checked, taking operating conditions into account. For normal ambient conditions and loads, we recommend inspections at 6-month intervals.

- busbar cross-section, conductor cross-section,
- ambient temperature, flow conditions, ventilation or cooling must be accounted for by applying additional correction factors.

Mounting positions are prohibited where gravity and direction of mounting are opposed.

Air and creepage distances must be calculated in compliance with IEC / EN 60664-1 (VDE 0110 part 1). For values of 12 mm and greater, these requirements are automatically satisfied up to 690 V AC in compliance with IEC. Additional specifications, such as the minimum distance to earthed parts, must be observed. This is especially relevant for applications in compliance with UL.

Detrimental effects from chemical substances during storage, processing and operation must be prevented.

In order to ease the locking of the busbar components and the insertion of the NH fuse units, the spring clips will be lubricated with special grease during manufacturing. On other parts, especially on screw threads, it must be ensured that no supplementary change of the friction coefficient takes place.

In case of unfavourable operating conditions or frequent temperature fluctuations at the terminal points, a shorter interval may be necessary. It is possible to place temperature measuring strips and a record of the maximum values in the immediate vicinity of the terminal points, which may be useful for an objective assessment during regular tests.

All contact positions are suitable for connecting one conductor, unless expressly otherwise indicated. Double-function terminals are characterised by 2 contact positions.

In principle, the tightening torques specified on the device, the installation instructions or on the Internet are to be applied. Where no limits are specified, the tolerance on the tightening torque Md of screw and clamp connections may be a maximum of +/-20 % of the nominal value. If no range is specified for terminal cross-sections, the terminal range is limited to two levels below the nominal cross-section.

The relationships between conductor cross-sections in mm<sup>2</sup> and AWG / MCM sizes are listed below:

0.75 mm <sup>2</sup>	18 AWG	(0.82 mm <sup>2</sup> )
1.5 mm <sup>2</sup>	16 AWG	(1.3 mm <sup>2</sup> )
2.5 mm <sup>2</sup>	14 AWG	(2.1 mm <sup>2</sup> )
4 mm <sup>2</sup>	12 AWG	(3.3 mm <sup>2</sup> )
6 mm <sup>2</sup>	10 AWG	(5.3 mm <sup>2</sup> )
10 mm <sup>2</sup>	8 AWG	(8.4 mm <sup>2</sup> )
16 mm <sup>2</sup>	6 AWG	(13.3 mm <sup>2</sup> )
25 mm <sup>2</sup>	4 AWG	(21.2 mm <sup>2</sup> )
35 mm <sup>2</sup>	2 AWG	(33.6 mm <sup>2</sup> )
50 mm <sup>2</sup>	0 AWG	(53.5 mm <sup>2</sup> )
70 mm <sup>2</sup>	2 / 0 AWG	(67.4 mm <sup>2</sup> )
95 mm <sup>2</sup>	3 / 0 AWG	(85.0 mm <sup>2</sup> )
120 mm <sup>2</sup>	250 MCM	(127 mm <sup>2</sup> )
150 mm <sup>2</sup>	300 MCM	(152 mm <sup>2</sup> )
185 mm <sup>2</sup>	350 MCM	(177 mm <sup>2</sup> )
240 mm <sup>2</sup>	500 MCM	(253 mm <sup>2</sup> )
300 mm <sup>2</sup>	600 MCM	(304 mm <sup>2</sup> )

Conductor types are designated as follows:

	Short name	Standard designation
Round single-wire	re	Class 1 (IEC / EN 60228)
Round multi-wire	rm	Class 2 (IEC / EN 60228)
Sector single-wire	se	Class 1 (IEC / EN 60228)
Sector multi-wire	sm	Class 2 (IEC / EN 60228)
Finely stranded	f	Class 5 (IEC / EN 60228)
Stranded	str	Class B (UL 486E)

The following abbreviations are also used:

Laminated copper busbar	lam. Cu
Wire-end ferrule	AE

Wire-end ferrules are only permitted for applications in compliance with IEC / EN standards. Wöhner has tested the use of wire end ferrules. This does not result in a general approval for different ferrules and crimping methods. The maximum conductor cross-sections may need to be reduced. Conductor connections are to be set up with consideration given to the requirements as per IEC / EN 60999-1 / -2. Conductor connection set-up is to be such that no load tension and – with respect to the application – no alternating bending load developed.

### Note on sizing AC string collectors

When AC string collectors are used, a few strings supply one inverter. The power of several string inverters is pooled on the alternating current side, e.g. via a 60 mm busbar system.

When dimensioning components for a busbar system of this kind, the direction of the energy – which is inverted to that of industrial applications – is unimportant. The same types of fuse (gG) are also used. It is the cables and leads going to the inverter that have to be protected from overload and short circuit. However, the rated diversity factor of the switch-gear and the simultaneity factor of this application (= 1) do not match.

If, for example, a SECUR®60Classic PowerLiner is equipped with 35 A - D02 fuses in a power distribution unit, the switch-gear device will be able to carry its nominal current of 35 A continuously on its own. However, this value must be reduced through thermal interaction with neighbouring devices.

The standard takes account of this situation by means of a switchgear assemblies rated diversity factor (RDF). This states the factor of the rated current to which all power circuits of a power distribution unit in a switchgear assembly can be permanently and simultaneously subjected. Here, the values from the table on page 8 / 1 apply, in accordance with IEC / EN 61439-2 / -3.

It must always be ensured that the rated load factor applies to the fuse being used and not the rated current of the switch-disconnector or fuse-holder. It is also advisable to use fuse-links with silver-plated contacts. The size of the copper conductors is determined on the basis of the applicable product standard, e.g. IEC / EN 60947-3 for SECUR®60Classic PowerLiner.

For the above example, this means that from 10 devices or more, the SECUR®60Classic PowerLiner (rated current 63 A) with side-mounted module and 35 A fuse-links may be operated at 21 A maximum. Here, the rated current of the fuse is reduced to 60 %. If the maximum current of the inverter does not exceed this value, and if fuse protection at 35 A is permitted by the wiring and the inverter datasheet, the dimensions are correct.

If higher power ratings with correspondingly higher currents need to be pooled, there are two choices for adaptation:

With the right conductor dimensions, the nominal current of the fuse-links can be increased. However, this must fit in with the requirements for inverter fuse protection. In this example the use of a 50 A fuse permits a maximum current of 30 A.

Alternatively, the thermal influence of the switchgear is reduced by modifying the layout. With the SECUR®60Classic PowerLiner fuse-switch-disconnector, in a test with 6 power circuits, a distance equal to the width of two devices (54 mm) between the switchgear devices increased the rated diversity factor from 0.7 to 0.9. This is only possible because the distance considerably reduces the thermal influence of the fuse-links. Based on the example with the 35 A fuse, the new arrangement would enable an inverter current of 31 A.

The rated diversity factors must always be selected in conformity with the application of the switch fuse unit, in accordance with IEC / EN 61439-2 / -3. See table on page 8 / 1. Non-compliance with these reduction factors leads to unacceptably high temperatures in switchgear assemblies. This may in turn result in damaged or incorrectly triggered switchgear devices. Both fuse-links and cable insulation age when exposed to high temperatures. In all cases, failures in photovoltaic systems can be expected.

For the correct design and layout of conductors, accumulation – as well as the ambient temperature – need to be taken into consideration. Here too, mutual thermal influence leads to raised temperatures and so to lower permitted currents. It is important to consider size and the corresponding factors. If the conductors to the inverters in the AC string collector are routed in a cable duct (routing method F), and ambient temperatures of 50 °C are anticipated there, when 6 conductors are used the permitted current capacity reduces to less than 50 % of the nominal current.

When cables and fuses have the correct dimensions, they also produce less dissipation, and therefore less waste heat. This in turn makes both cabinet selection and thermal management easier.

### NH (BUSBAR MOUNTED) fuse-switch-disconnectors and NH in-line fuse-switch-disconnectors

NH fuses are only intended for use by authorized electricians or trained electrical personnel, see IEC / EN 60269-2.

When switching devices observe the following instructions:

- Only electricians or personnel trained in electrical engineering are permitted to operate the equipment (disconnect, switch on, switch off or change fuses) in accordance with VDE 0105-100.

- Quick activation of fuse cover using the relevant operating handle.
- Before switching on, care must be taken that the fuse cover is located correctly in the open position.
- If the cover is only partially open, the fuse-links may still be energized. Only open and close the cover using the handle.

### Use of busbars

To ensure safe mounting and connection of the single and multi-pole busbar components, the busbars used must comply with the adjacent tolerances. The busbars supplied by Wöhner meet these requirements.

Tensile strength: min. 300 N / mm<sup>2</sup>  
 Permitted tolerances:  
 Radius R 0.3 ... 0.7  
 Width: + 0.1 / - 0.5  
 Thickness: + 0.1 / - 0.1  
 Centre distance:  
 + 0.5 / - 0.5 (60 mm system)  
 + 1.0 / - 1.0 (100 mm system, 185 mm system)  
 Deviation in the contact level: 0.4

## Use of comb-type busbars

A range of Wöhner fuse-holders and switches are suitable for use with comb-type busbars. We recommend the use of the comb-type busbars listed at the relevant places in the current Wöhner catalogue (pollution degree 2 in accordance with IEC / EN 61439-1 / -2). Ensure that the required air and creepage distances left in standard installation positions are

observed (comb-type busbars are angled towards the operator). Power must be supplied via the connection terminals sold separately by Wöhner. The additional connection terminal is not required for Wöhner products with double-function terminals. Connect terminals using the maximum torque stated on the fuse-holder.

## Machining and use of plastic sections

The sections listed in the Wöhner catalogue as covers for busbars or busbar systems and bottom troughs have been optimised with regard to their mechanical, thermal and electrical properties. Take particular care when mechanically cutting the profiles to avoid the formation of cracks (narrow saw blade, high speed of cutting, low tooth advance and strong saw guiding).

D = 300 mm, B = 2.2 mm, Z = 120 W  
with 5° negative tooth change (w),  
cutting speed of 50-65 m/s,  
tooth feed 0.05-0.1 mm.

The plastic parts must be clamped in order to exclude vibrations.

The cutting of profiles with a circular saw and an AKE circular saw blade for plastics is reliable with the following specific values:

When processing and using plastic profiles, contact with oil, grease and other chemicals must be avoided.

## Dimensions

All specified length dimensions are always in mm unless otherwise indicated. Mounting rails of adapters and clip-on fixings generally comply with IEC / EN 60715.

## CE marking

In association with the 2006/95/EG low voltage directive, Wöhner products are subject to the CE marking commitment. The CE mark is applied via the label on the packaging and on the products themselves in compliance with the provisions of the Low Voltage Directive. Wöhner thus confirms its compliance with the directive.

The corresponding EU Declarations of Conformity for each article are available at [www.woehner.com](http://www.woehner.com) under the heading "Products".

## Additional requirements in accordance with UL



Components that have also been tested for feeder circuits up to 600 V AC in compliance with UL 508 A are labelled in the approval overview.

## Directives

### RoHS Directive

Currently, Wöhner products do not come under the scope of RoHS Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment, or WEEE Directive 2012/19/EU governing waste electrical and electronic equipment. Irrespective of these directives, measures have been initiated, which ensure that the use of pollutant-free plastics complies with the RoHS Directive. The metallic surface coatings shall correspond to the substance ban in accordance with the RoHS Directive. Fuse-links may contain function-specific components which do not comply with the RoHS Directive.

### REACH Regulation

Our products are "products" within the meaning of the REACH Regulation (EC) No. 1907/2006. The information requirements under Article 33 regarding substances in products applies only to so-called substances of very high concern which meet the criteria listed Article 57. Wöhner reviews and updates the REACH Regulation in accordance with Annex VII of the Candidate List (SVHC list).

### WEEE Directive / ElektroG 2015

The ElektroG regulates the implementation of the WEEE (Waste of Electrical and Electronic Equipment, DIRECTIVE 2012/19/EU) into national German law. The products from Wöhner are marked accordingly with the crossed-out dustbin symbol and, if necessary, registered with the EAR.

Certificates are available at [www.woehner.com](http://www.woehner.com) under the heading "Media/Downloads".

## Insulation coordination

All specifications apply for overvoltage category III in accordance with IEC / EN 61439-1. The usability for other overvoltage categories can be derived based on the rated impulse withstand voltage  $U_{imp}$ .

The following clearances must be maintained:

Rated impulse withstand voltage $U_{imp}$	Minimum clearance
4 kV	3.0 mm
6 kV	5.5 mm
8 kV	8.0 mm
12 kV	14 mm

All specifications apply for level of soiling 3 in accordance with IEC / EN 61439-1 (Wöhner uses insulating parts made from materials in material class IIIa).

The following creepage distances must be maintained:

Rated insulation impulse withstand voltage $U_i$	Creepage distance
400 V AC/DC	6.3 mm
500 V AC/DC	8.0 mm
690 V AC/DC	10.0 mm
800 V AC/DC	12.5 mm
1000 V AC/DC	16.0 mm
1250 V DC	20.0 mm
1500 V DC	25.0 mm

The user is responsible for maintaining the proper clearances and creepage distances, taking the installation conditions into account. The maximum permitted power dissipation of the fuse-links must be taken into account with components having fuses. Short circuit data for DC applications is available upon request.

You can find an overview of the applicability of Wöhner products in terms of the operation voltage (according to IEC standards) at [www.woehner.com/en/insulation\\_coordination](http://www.woehner.com/en/insulation_coordination)

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03293	6.11	3	03760	6.11	12	31011	7.7	10
03294	6.11	3	03761	6.11	4	31012	6.2, 6.3, 6.4, 6.8	10
03299	3.22	1	03762	6.11	3	31014	6.2, 6.3, 6.4, 6.8	25
03300	3.22	1	03763	6.11	1	31017	7.7	10
03301	3.22	1	03765	6.11	1	31024	6.3	25
03350	6.11	10	03766	6.11	3	31026	6.3	10
03351	6.11	4	03767	6.11	1	31027	6.2, 6.3, 6.4, 6.5, 6.8	50
03354	6.11	10	03768	6.11	3	31028	6.2, 6.3, 6.4, 6.5, 6.8	25
03355	6.11	4	03769	6.11	1	31029	6.2, 6.3, 6.4, 6.5, 6.8	25
03359	6.12	10	03849	3.24, 6.16	10	31039	6.8, 6.9	10
03377	6.12	100	03908	7.5	3	31042	6.8, 6.9	20
03502	7.5	1	03909	7.5	3	31056	6.2, 6.3, 6.4, 6.8	4
03519	6.12	10	03910	7.5	3	31057	6.2, 6.4, 6.8	10
03523	7.5	3	03911	7.5	3	31070	3.17	10
03524	7.5	3	03912	7.5	3	31071	3.17	10
03525	7.5	3	03913	7.5	3	31072	3.17	5
03526	7.5	3	03914	7.5	3	31073	3.17	5
03527	7.5	3	03915	7.5	3	31084	6.2, 6.3, 6.4, 6.8	10
03528	7.5	3	03916	7.5	3	31085	6.2, 6.3, 6.4, 6.5, 6.8	25
03529	7.5	3	03917	7.5	3	31086	6.3, 6.5	100
03530	7.5	3	03918	7.5	3	31098	7.4	20
03531	7.5	3	03919	7.5	3	31100	7.4	20
03532	7.5	3	03924	7.6	3	31101	6.8	25
03533	7.5	3	03929	7.6	3	31102	6.8	10
03534	7.5	3	03930	7.6	3	31103	6.8	50
03535	7.5	3	03942	7.6	3	31104	7.2	20
03536	7.5	3	03943	7.6	3	31110	6.6	12
03550	7.6	3	03946	7.6	3	31111	6.6	6
03552	7.6	3	03947	7.6	3	31112	6.6	6
03553	7.6	3	05188	6.12	50	31113	6.6	4
03555	7.6	3	05779	7.12	100	31114	6.6	3
03556	7.6	3	05780	7.12	20	31115	6.6	6
03557	7.6	3	05781	7.12	20	31116	6.6	3
03558	7.6	3	05782	7.12	20	31117	6.6	3
03559	7.6	3	05783	7.12	20	31118	6.6	2
03560	7.6	3	05784	7.12	20	31119	6.6	1
03561	7.6	3	05786	7.12	20	31120	6.6	6
03566	7.6	3	05787	7.12	20	31121	6.6	3
03568	7.6	3	05788	7.12	20	31122	6.6	3
03569	7.6	3	05789	7.12	20	31123	6.6	2
03570	7.6	3	05790	7.12	20	31124	6.6	1
03571	7.6	3	05791	7.12	20	31130	6.6	12
03572	7.6	3	05792	7.12	20	31132	6.6	6
03573	7.6	3	05793	7.12	20	31133	6.6	4
03574	7.6	3	05800	7.12	20	31135	6.6	6

Part no.	Chapter.Page	Pack size	Part no.	Chapter.Page	Pack size	Part no.	Chapter.Page	Pack size	Part no.	Chapter.Page	Pack size
31138	6.6	2	31241	7.9	10	31345	7.10	10			
31140	6.6	6	31242	7.9	10	31349	7.10	10			
31143	6.6	2	31243	7.9	10	31351	7.10	10			
31157	6.8	50	31244	7.9	10	31353	7.10	10			
31158	3.18	1	31245	7.9	10	31354	7.10	10			
31168	6.6	1	31246	7.9	10	31355	7.10	10			
31171	6.6	1	31247	7.9	10	31357	7.10	10			
31173	6.5	9	31248	7.9	10	31358	7.10	10			
31174	6.5	3	31249	7.9	10	31359	7.10	10			
31175	6.5	9	31250	7.9	10	31360	7.10	10			
31176	6.5	3	31251	7.9	10	31361	7.10	10			
31182	7.7	10	31252	1.2, 2.3, 3.16, 7.9	10	31362	7.10	10			
31183	7.7	10	31258	6.6	12	31363	7.10	10			
31184	7.7	10	31269	6.8	1	31364	7.10	10			
31185	7.7	10	31273	6.6	12	31366	7.7	10			
31186	7.7	10	31274	6.6	4	31368	7.7	10			
31187	7.7	10	31275	6.7	12	31370	7.7	10			
31188	7.7	10	31276	6.7	6	31371	7.7	10			
31189	1.2, 2.3, 3.16, 7.7	10	31277	6.7	4	31372	7.7	10			
31190	7.7	10	31278	6.7	6	31373	7.7	10			
31191	7.7	10	31279	6.7	3	31374	7.7	10			
31192	7.7	10	31280	6.7	2	31385	7.7	10			
31193	7.7	10	31281	6.7	6	31386	7.7	10			
31194	7.7	10	31282	6.7	3	31387	7.7	10			
31195	7.7	10	31283	6.7	2	31390	2.6	1			
31196	7.7	10	31284	6.10	6	31394	7.9	10			
31198	7.7	10	31285	6.10	3	31395	7.9	10			
31199	7.7	10	31286	6.3	9	31396	7.9	10			
31200	7.7	10	31287	6.10	2	31397	7.9	10			
31201	7.7	10	31288	6.3	3	31398	7.9	10			
31202	7.7	10	31291	6.3	9	31399	7.9	10			
31203	7.7	10	31293	6.3	3	31400	7.9	10			
31204	7.7	10	31295	6.9	12	31401	7.9	10			
31205	7.8	10	31296	6.9	6	31404	7.9	10			
31206	7.8	10	31297	6.9	4	31405	7.9	10			
31207	7.8	10	31298	6.9	12	31406	7.9	10			
31208	7.8	10	31299	6.9	6	31407	7.9	10			
31209	7.8	10	31300	6.9	4	31441	3.17	10			
31210	7.8	10	31301	6.2	9	31442	3.17	10			
31211	7.8	10	31302	6.2	3	31511	7.11	10			
31212	7.8	10	31303	6.2	9	31512	7.11	10			
31213	7.8	10	31306	6.2	3	31514	7.11	10			
31214	7.8	10	31307	6.4	3	31515	7.11	10			
31215	7.8	10	31308	6.4	2	31525	3.18	1			
31216	7.8	10	31309	6.5	25	31543	7.8	10			
31217	7.8	10	31310	6.5	10	31544	7.8	10			
31219	7.8	10	31311	6.5	25	31545	7.8	10			
31220	7.8	10	31312	6.5	10	31546	7.8	10			
31221	7.8	10	31313	6.4	2	31547	7.8	10			
31226	7.8	10	31314	6.4	1	31548	6.8, 6.9	10			
31227	7.8	10	31315	6.4	1	31549	6.8, 6.9	10			
31228	7.8	10	31316	6.4	1	31550	6.8, 6.9	10			
31229	7.8	10	31323	7.11	10	31552	6.8, 6.9	20			
31232	3.20	1	31324	7.11	10	31554	2.4	6			
31235	7.9	10	31325	7.11	10	31555	6.7	5			
31236	7.9	10	31326	7.11	10	31556	6.4	3			
31237	7.9	10	31327	7.11	10	31557	6.4	1			
31238	7.9	10	31333	7.10	10	31558	7.8	20			
31239	7.9	10	31338	7.10	10	31559	7.8	20			
31240	7.9	10	31342	7.10	10	31560	7.8	20			

Part no.	Chapter.Page	Pack size	Part no.	Chapter.Page	Pack size	Part no.	Chapter.Page	Pack size
31561	6.8, 6.9	10	31968	3.21	1	32442	3.11	4
31563	6.8	1	31970	3.21	1	32443	3.11	4
31564	6.8	1	31971	6.7	12	32444	3.11	4
31565	6.8	1	31972	6.7	3	32445	3.13	4
31567	1.2, 2.3, 3.16, 6.1	3	31973	6.7	12	32446	3.11	4
31568	1.2, 2.3, 3.16, 6.1	3	31974	6.7	6	32448	3.13	2
31569	1.2, 2.3, 3.16, 6.1	3	31976	3.19	1	32449	3.11	4
31570	3.20	12	32004	3.15	1	32450	3.13	4
31571	3.20	12	32017	3.14	1	32451	3.13	4
31572	3.20	12	32018	3.14	1	32452	3.13	2
31574	3.19	1	32020	3.14	1	32453	3.13	2
31575	3.19	1	32023	3.14	1	32454	3.11	4
31578	3.19	1	32028	3.14	1	32455	3.11	4
31579	3.19	1	32029	3.13	2	32456	3.11	4
31588	3.19	1	32030	3.14	1	32457	3.11	4
31901	3.18	5	32031	3.15	1	32459	3.11	4
31902	3.18, 3.19, 6.4	20	32033	3.15	1	32460	3.13	4
31903	3.18	1	32064	3.15	1	32461	3.11	4
31904	7.2	36	32067	3.14	1	32463	3.13	2
31905	7.4	20	32137	3.14	1	32464	3.12	4
31906	7.4	10	32138	3.15	1	32465	3.12	4
31908	7.2	36	32140	3.14	1	32466	3.11	4
31909	7.2	36	32146	3.12	4	32467	3.11	4
31910	7.2	36	32156	3.14	1	32469	3.11	4
31911	7.4	20	32157	3.15	1	32472	3.11	4
31912	7.4	10	32168	3.15	1	32477	3.12	4
31913	7.2, 7.4	1	32214	3.15	1	32478	3.12	4
31914	3.19	5	32215	3.15	1	32484	3.12	4
31915	3.19	5	32216	3.15	1	32485	3.12	4
31918	3.17	10	32300	1.3	6	32486	3.12	4
31919	3.17	10	32301	1.3	6	32487	3.12	4
31920	6.10	6	32302	1.3	6	32498	3.13	4
31921	6.10	3	32307	1.3	6	32511	3.10, 3.12	10
31922	6.10	2	32308	1.3	6	32513	3.10, 3.12	10
31923	6.10	6	32309	1.3	6	32533	3.13	4
31924	6.10	3	32311	1.3	6	32534	3.13	4
31925	6.10	2	32400	3.10	4	32535	3.13	4
31929	6.9	12	32401	3.10	4	32570	3.14	1
31930	6.6	12	32402	3.10	4	32575	3.14	1
31932	6.10	6	32404	3.10	4	32577	3.14	1
31933	6.10	3	32408	3.10	4	32578	3.14	1
31934	6.10	2	32412	3.10	4	32579	3.15	1
31935	3.18	8	32416	3.10	4	32580	3.14	1
31936	3.18	6	32420	3.10	4	32581	3.15	1
31940	6.7	6	32421	3.10	4	32584	3.14	1
31941	6.7	2	32425	3.10	4	32585	3.15	1
31942	6.7	6	32426	3.10	4	32586	3.14	1
31943	6.7	2	32427	3.13	4	32588	3.13	4
31946	3.17	8	32428	3.13	4	32590	2.3	4
31947	3.17	6	32429	3.13	4	32591	2.3	4
31950	3.17	8	32430	3.11	4	32592	3.14	1
31951	3.17	6	32431	3.11	4	32593	3.15	1
31954	3.20	4	32432	3.11	2	32594	3.23	2
31955	3.20	4	32433	3.11	4	32595	3.23	2
31957	6.7	3	32434	3.13	4	32601	3.14	1
31958	3.21	4	32436	3.11	4	32619	2.4	2
31959	3.21	4	32438	3.13	4	32620	3.23	2
31961	3.20	6	32439	3.11	4	32628	2.6	12
31963	3.20	4	32440	3.13	2	32629	2.6	12
31964	3.20	4	32441	3.11	4	32630	2.6	12

Part no.	Chapter.Page	Pack size	Part no.	Chapter.Page	Pack size	Part no.	Chapter.Page	Pack size	Part no.	Chapter.Page	Pack size
32631	2.6	6	32745	4.3	1	32956	3.10	10			
32632	2.6	12	32746	4.3	1	32963	3.12	10			
32633	2.6	12	32747	4.5	1	32964	3.10	10			
32634	2.6	12	32748	4.8	1	32969	3.10, 3.12	50			
32635	3.12	4	32749	4.8	1	32973	3.11	4			
32636	3.12	4	32752	4.4	1	32974	3.11	4			
32637	3.13	4	32753	4.4	1	32975	3.15	1			
32638	3.13	4	32754	4.4	1	32976	3.14	1			
32639	3.13	4	32755	4.4	1	32977	3.14	1			
32640	2.5	1	32756	4.4	1	32978	3.15	1			
32641	3.15	1	32757	4.4	1	32979	1.4	10			
32642	3.14	1	32758	4.4	1	32980	3.15	1			
32643	3.15	1	32761	4.4	1	32981	3.13	1			
32645	3.13	4	32762	4.4	1	32982	3.15	1			
32651	3.14	1	32763	4.4	1	32983	4.8	1			
32655	3.11	4	32764	4.5	1	32984	4.8	1			
32659	3.13	4	32765	4.4	1	32985	4.8	1			
32660	3.14	1	32766	4.4	1	32986	4.8	1			
32661	2.3	1	32767	4.4	1	32987	4.8	1			
32662	3.13	1	32769	4.4	1	32988	4.3	1			
32663	3.13	1	32770	4.6	1	32989	4.3	1			
32664	3.13	1	32771	4.5	1	32990	4.3	1			
32665	1.4	9	32772	4.6	1	33027	6.18	1			
32666	1.4	1	32773	4.6	1	33028	6.19	1			
32668	1.4	1	32774	4.6	1	33031	6.18	1			
32669	1.4	1	32775	4.6	1	33032	6.19	1			
32676	1.4	1	32776	4.6	1	33035	6.18	1			
32682	1.4	1	32777	4.6	1	33037	6.19	1			
32684	1.4	1	32779	4.6	1	33040	6.18	1			
32686	1.4	1	32780	4.6	1	33041	6.19	1			
32690	1.4	1	32781	4.6	1	33051	3.24, 6.16	10			
32691	1.4	1	32783	4.5	1	33075	3.19, 3.30	1			
32692	1.4	1	32784	4.6	1	33079	3.19, 3.30	1			
32700	4.8	1	32785	4.6	1	33113	4.13, 4.14, 4.19	4			
32701	4.8	1	32786	4.6	1	33142	3.25, 3.28, 6.15, 6.17	2			
32702	4.8	1	32787	4.7	1	33143	3.25, 6.15	2			
32703	4.8	1	32788	4.7	1	33144	3.25, 6.15	2			
32704	4.8	1	32789	4.8	1	33145	3.24, 3.28, 6.14, 6.17	1			
32706	4.8	1	32790	4.8	1	33146	3.24, 6.14	1			
32718	4.7	1	32795	4.5	1	33147	3.24, 6.14	1			
32719	4.7	1	32796	4.5	1	33148	3.24	1			
32720	4.8	1	32797	4.5	1	33149	6.13	1			
32721	4.8	1	32807	4.4	1	33150	6.13	1			
32722	4.7	1	32808	4.6	1	33151	6.13	1			
32723	4.7	1	32809	4.6	1	33152	6.15	1			
32724	4.8	1	32907	3.12	24	33153	6.15	1			
32725	4.8	1	32912	2.3	10	33154	6.15	1			
32726	4.5	1	32914	3.12	24	33155	3.24, 6.15	10			
32729	4.5	1	32915	3.12	24	33156	2.4, 3.24, 3.29, 4.13, 4.14, 6.16	1			
32730	4.5	1	32921	3.12	24	33157	3.24, 6.16	10			
32731	4.5	1	32933	1.4	8	33158	6.16	1			
32732	4.5	1	32934	1.4	4	33160	3.23	1			
32733	4.5	1	32937	3.15	4	33161	3.23	1			
32734	4.5	1	32947	1.4, 3.10, 3.12	10	33162	3.23	1			
32737	4.5	1	32948	3.10, 3.12	10	33163	3.24, 3.28, 6.14, 6.21, 6.22	1			
32738	4.7	1	32949	3.10, 3.12	10	33164	3.24, 6.14, 6.21, 6.22	1			
32739	4.7	1	32950	3.10, 3.12	10	33165	3.24, 6.14, 6.21, 6.22	1			
32741	4.3	1	32951	3.10, 3.12	10	33166	3.24, 3.28, 6.14, 6.17	1			
32742	4.3	1	32952	1.4	10	33167	3.24, 6.14	1			
32743	4.3	1	32954	3.10, 3.12	50						

Part no.	Chapter.Page	Pack size	Part no.	Chapter.Page	Pack size	Part no.	Chapter.Page	Pack size
33168	3.24, 6.14	1	33347	6.21, 6.22	1	33445	6.23	1
33177	6.24	1	33348	6.21, 6.22	1	33446	6.23	1
33193	6.16	1	33349	6.21, 6.22	1	33447	6.23	1
33198	3.23	1	33350	6.21, 6.22	2	33448	6.23	1
33199	6.13	1	33351	6.21, 6.22	2	33449	6.23	1
33200	6.13	1	33352	6.21, 6.22	2	33450	6.23	1
33201	6.13	1	33355	6.22	1	33451	6.23	1
33202	6.13	1	33356	6.22	1	33452	6.23	1
33203	6.13	1	33357	6.22	1	33453	6.23	1
33204	6.13	1	33358	6.22	1	33454	6.23	1
33206	3.23	1	33359	6.21	1	33455	6.25	1
33207	6.13	1	33360	6.21	1	33456	6.25	1
33208	6.13	1	33361	6.21	1	33457	6.25	1
33216	3.23	1	33362	6.21	1	33458	6.25	1
33217	6.13	1	33363	6.21	3	33459	6.25	1
33219	6.15	10	33364	6.22	3	33460	6.25	1
33220	6.15	10	33365	6.22	3	33461	6.25	1
33221	6.13	1	33366	6.21, 6.22	3	33462	6.25	1
33222	6.13	1	33367	6.21, 6.22	3	33463	6.25	1
33223	6.15	2	33376	6.14	4	33464	6.25	1
33224	3.22, 3.24, 3.29, 6.14	3	33377	6.14	4	33465	6.25	1
33225	6.15	10	33378	6.14	3	33466	6.25	1
33226	6.15	10	33380	6.21, 6.22	1	33467	6.25	1
33234	3.29	1	33381	6.21, 6.22	1	33468	6.25	1
33246	6.21, 6.22	1	33385	3.24, 6.14	1	33469	6.25	1
33247	6.16	1	33392	6.14	4	33470	6.25	1
33280	3.29	2	33393	6.13	1	33471	6.25	1
33283	6.21, 6.22	1	33394	3.23	1	33472	6.25	1
33285	3.29	1	33398	3.23	1	33500	3.26	1
33292	4.14	1	33402	3.21	1	33501	3.26	1
33293	4.14	1	33403	3.21	1	33502	6.17	1
33294	4.14	1	33408	6.10	1	33503	3.26	1
33295	4.14	1	33409	6.10	1	33504	3.26	1
33298	4.14	1	33416	2.4	1	33505	6.17	1
33299	4.14	1	33418	3.25, 6.15	2	33506	3.26	1
33308	6.10	1	33419	3.25, 6.15	2	33507	6.17	1
33311	3.21	1	33420	3.23	1	33510	3.27	1
33315	3.25	1	33421	3.21	1	33511	3.27	1
33316	3.25	1	33422	3.21	1	33512	6.17	1
33317	3.25	2	33424	6.23	1	33513	3.27	1
33324	3.23	1	33425	6.23	1	33514	3.27	1
33325	3.23	1	33426	6.23	1	33515	6.17	1
33326	3.23	1	33427	6.23	1	33516	3.27	1
33327	3.23	1	33428	6.23	1	33540	3.26	1
33328	6.13	1	33429	6.23	1	33541	3.26	1
33329	6.13	1	33430	6.23	1	33542	6.17	1
33330	6.13	1	33431	6.23	1	33543	3.26	1
33331	6.13	1	33432	6.23	1	33544	3.26	1
33332	6.13	1	33433	6.23	1	33545	6.17	1
33333	6.22	1	33434	6.23	1	33550	3.27	1
33334	6.22	1	33435	6.23	1	33551	3.27	1
33335	6.22	1	33436	6.23	1	33552	6.17	1
33336	6.22	1	33437	6.23	1	33553	3.27	1
33337	6.21	1	33438	6.23	1	33554	3.27	1
33338	6.21	1	33439	6.23	1	33555	6.17	1
33339	6.21	1	33440	6.23	1	33600	3.23	1
33340	6.21	1	33441	6.23	1	33601	3.23	1
33342	6.21, 6.22	1	33442	6.23	1	33602	3.23	1
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33346	6.21, 6.22	1	33444	6.23	1	33610	4.15	1

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33612	4.15	1	33720	4.10, 4.9	1	33801	2.4	1	33802	3.23	1
33613	4.16	1	33721	4.11, 4.12	1	33805	2.4	10	33806	3.23	10
33614	4.15	1	33722	4.11, 4.12	1	33808	6.18	1	33809	6.19	1
33615	4.16	1	33723	4.11, 4.12	1	33812	6.18	1	33813	6.19	1
33616	4.15	1	33724	4.10, 4.9	1	33816	6.18	1	33817	6.19	1
33617	4.16	1	33725	4.13	1	33820	6.18	1	33821	6.19	1
33620	4.15	1	33726	4.13	1	33824	6.18	1	33825	6.19	1
33621	4.16	1	33727	4.13	1	33838	6.18, 6.19	1	33839	6.19	1
33622	4.15	1	33728	4.13, 4.19	1	33842	6.18	1	33843	6.19	1
33623	4.16	1	33731	4.11, 4.12	1	33846	6.18	1	33847	6.19	1
33624	4.15	1	33732	4.13, 4.19	1	33850	6.18	1	33851	6.19	1
33625	4.16	1	33733	4.14	1	33854	6.18	1	33855	6.19	1
33626	4.16	1	33734	4.13, 4.19	3	33868	6.18	1	33869	6.19	1
33627	4.16	1	33735	4.14	3	33872	6.18	1	33873	6.19	1
33630	4.17, 4.18	1	33736	4.14	3	33876	6.18	1	33877	6.19	1
33631	4.17, 4.18	1	33737	4.9	3	33884	6.18	1	33885	6.19	1
33632	4.17, 4.18	1	33738	4.11, 4.2	3	33888	6.18	1	33892	6.18	1
33633	4.17, 4.18	1	33739	4.10	3	33893	6.19	1	33899	3.24, 3.28, 6.14, 6.17	3
33634	4.17, 4.18	1	33740	4.12, 4.2	3	33910	3.28, 6.17	1	33911	3.28, 6.17	1
33635	4.17, 4.18	1	33741	4.13, 4.19	1	33912	3.28, 6.17	1	33913	3.28, 6.17	1
33636	4.17, 4.18	1	33742	4.13, 4.19	1	33914	3.28, 6.17	3	33915	3.22, 3.24, 3.28, 6.17	3
33637	4.17, 4.18	1	33744	4.13, 4.14, 4.19	1	33916	3.22	3	33917	3.24, 6.16	1
33638	4.17, 4.18	1	33745	4.14	1	33918	3.24, 6.16	3	33919	6.24	1
33639	4.17, 4.18	1	33746	4.14	1	33922	6.24	1	33923	6.24	1
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33650	4.18	1	33751	4.13, 4.19	1						
33651	4.17	1	33752	4.13, 4.19	1						
33652	4.17	3	33753	4.13, 4.14, 4.19	1						
33653	4.19	1	33754	4.13, 4.14, 4.19	1						
33665	6.20	1	33755	4.13, 4.19	3						
33666	6.20	1	33758	4.13, 4.14, 4.19	2						
33669	6.20	1	33759	4.14	6						
33670	6.20	1	33761	4.14	10						
33680	6.20	1	33762	4.14, 4.2, 4.20	1						
33681	6.20	1	33765	4.9	3						
33682	6.20	1	33766	4.13	1						
33692	6.20	1	33767	4.13	1						
33694	6.20	1	33768	4.14	1						
33695	6.20	1	33769	4.14	1						
33696	6.20	1	33770	4.10, 4.9	1						
33697	6.20	1	33771	4.10, 4.9	1						
33698	6.20	1	33772	4.10, 4.9	1						
33699	6.20	1	33773	4.10, 4.9	1						
33700	4.10, 4.9	1	33774	4.10, 4.9	1						
33701	4.11, 4.12	1	33775	4.10, 4.9	1						
33702	4.11, 4.12	1	33780	4.20	1						
33703	4.11, 4.12	1	33781	4.20	1						
33704	4.10, 4.9	1	33782	4.20	1						
33705	4.10, 4.9	1	33783	4.20	1						
33706	4.11, 4.12	1	33784	4.20	1						
33707	4.11, 4.12	1	33785	4.20	1						
33708	4.11, 4.12	1	33786	4.20	1						
33715	4.10, 4.9	1	33787	4.20	1						
33716	4.11, 4.12	1	33788	4.20	1						
33717	4.11, 4.12	1	33789	4.20	1						
33718	4.11, 4.12	1	33790	4.20	1						

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33933	6.25	1	36113	2.3	1
33934	6.25	1	36114	3.16	1
33935	6.25	1	36152	2.3	1
33936	6.25	1	36153	3.16	1
33937	6.25	1	36154	1.2, 2.3, 3.16	1
33938	6.25	1	36155	2.3	1
33939	6.24	1	36156	3.16	1
33940	6.24	1	36157	2.3	1
33941	6.24	1	36158	3.16	1
33942	6.24	1	36159	1.2, 2.3, 3.16	1
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33947	6.24, 6.25	1	36903	6.1	1
33954	6.26	1	36904	6.1	1
33955	6.26	1	36916	1.2, 2.3, 3.16	1
33956	6.26	1	36917	1.2, 2.3, 3.16	1
33957	6.26	1	36918	1.2, 2.3, 3.16	1
33958	6.26	1	78105	6.15	10
33959	6.26	1	78139	6.15	10
33960	6.26	1	78442	7.16	200
33961	6.26	1	78443	7.16	200
33962	6.26	1	78447	7.16	200
33963	6.25	1	78463	2.1, 3.4	10
33964	6.25	1	78893	6.15	10
33967	6.25	2	79448	3.22, 4.13, 6.12	30
33968	6.25	1	79449	3.22, 6.11, 6.12	30
33969	6.25	1	79663	3.17, 3.18	10
33970	6.24	1	79738	3.30	10
33971	6.24	1	79811	3.22, 3.25, 6.15	1
33972	6.24	1	79859	3.30	10
33973	6.24	1			
33974	6.24	1			
35001	5.2	1			
35004	5.1	1			
35005	5.1	1			
35006	5.1	1			
35007	5.1	1			
35008	5.2	2			
35009	5.2	1			
35015	5.1	1			
35016	5.1	1			
35017	5.2	4			
36001	2.3	1			
36003	3.10	1			
36009	1.3	1			
36100	6.1	1			
36101	2.3	1			
36102	3.16	1			
36103	6.1	1			
36104	2.3	1			
36105	3.16	1			
36106	6.1	1			
36107	2.3	1			
36108	3.16	1			
36109	1.2, 2.3, 3.16, 6.1	1			
36110	1.2, 2.3, 3.16, 6.1	1			



## General notes

Wöhner busbar systems and components are the result of expert development based on many years of experience. They have been exhaustively tested and hold many approvals. The correct selection of busbars and components is the responsibility of a system's planner.

Planning, construction requirements and the required test certifications are prescribed in the parts of the IEC or DIN EN 61439 standard "Low-voltage switchgear and control-gear assemblies".

To avoid hazards to people and materials which can arise when working with electricity, these systems and components should only be used by suitably trained personnel, and relevant regulations must be observed.

In particular, installation, maintenance, modifications and additions must only be carried out by qualified personnel in accordance with the general construction and safety regulations applicable to high-current electrical systems. Modern technological developments and the way in which

Provide further separation of this line from the paragraph above.

Detailed technical information is available on the internet at: [www.woehner.com](http://www.woehner.com)

the components of the system interact must be taken into account. It is essential that all accessible parts are electrically isolated during installation and maintenance.

All connections must be correctly tightened with the specified torque (Md), correct gauges must be used and components that provide protection against accidental contact with live parts must be fitted. After transportation, all connections must be checked and, if necessary, re-tightened.

Products are to be used and operated correctly in the manner intended.

The technical information contained in the product manual and the installation instructions should be observed and retained for future modifications, maintenance or additions to the installation. Wöhner reserves the right to make modifications to its components, as the result of developments and technical advances.

## Operating conditions

Unless special instructions are given, the information contained in the documentation applies for the recommended mounting position and the ambient conditions of indoor installation (contamination level 3; 2 in exceptional cases) according to IEC 61439-1/2/3.

Plant-specific reduction factors must be considered, depending on the exact conditions of use.

The rated loading factors listed below represent guide values and refer to a maximum +35°C temperature of the air directly surrounding the products.

Number of main circuits	Rated diversity factor	
	to IEC/EN 61439-2	to IEC/EN 61439-2
2 and 3	0.9	0.8
4 and 5	0.8	0.7
6 to 9 inclusive	0.7	0.6
10 and more	0.6	0.5

IEC 61439

Part 2: Power switchgear and controlgear assemblies

Part 3: Installation distributor for operation by lay people

In products intended to hold fuse links, please observe the requirements governing connected cross-sections from the relevant product standards. Comply with the stated temperature specifications of all plastics used. Some of the material properties described here refers to several products.

In isolated cases, values may exceed the levels stated.

See [www.woehner.com](http://www.woehner.com) for further information.

We recommend vertically mounting the device on a horizontal busbar system. The fixing handle must be placed on top for switchgears mounted vertically. For this mounting position, the rated diversity factors contained in Table 1 or Table 101 apply to components with permitted dissipation in the worst-case scenario and with ambient conditions in conformity with IEC/EN 61439-2/3, section 7.1.1.1.

In case of deviating mounting positions and conditions, all influencing factors are on maximum temperature such as:

- Power output per fuse and the device in operation,
  - Simultaneous full and partial load cycles,
  - Alignment in the system, devices affecting each other,
  - Busbar cross-section, conductor cross-section,
  - Ambient temperature, current conditions, require the observation of additional correction factors
- by additional correction factors.

Mounting positions are prohibited where gravity and the contact direction of motion are opposed.

Air and creepage distances must be calculated in compliance with EN 60664-1 (VDE 0110 part 1). For values of 12mm and greater, these requirements are automatically satisfied up to 690V AC in compliance with IEC. Additional specifications, such as the minimum distance to earthed parts, must be observed. This is especially relevant for applications in compliance with UL.

Detrimental effects from chemical substances during storage, processing and operation must be prevented.

In order to ease the locking of the busbar components and the insertion of the NH fuse units, the spring clips will be lubricated with special grease during manufacturing.

On other parts, especially on screw threads, it must be ensured that no supplementary change of the friction coefficient takes place.

### Conductor connections

Specifications regarding conductor terminals are only valid for copper conductors. The maintenance-free resistance to ageing for selected connections has been verified by testing.

If the standards-compliant connection of aluminium conductors has been confirmed for connection terminals, this is stated expressly.

Before connecting aluminium conductors, any oxide deposits must be removed from the conductor surfaces and further oxidation prevented.

After removal of the oxide deposit, chips and abrasives cannot be permitted to damage the contacting.

Multiwire conductors should be shortened and exposed to the bare metallic conductor section.

The contact points are to be sealed (e.g. using acid-free contact grease) so that they airtight to protect them against further oxidation.

The terminal points need to be checked, taking operating conditions into account.

For normal ambient conditions and loads, we recommend inspections at 6-month intervals. In case of unfavourable operating conditions or frequent temperature fluctuations at the terminal points, a shorter interval may be necessary. It is possible to place temperature measuring strips and a record of the maximum values in the immediate vicinity of the terminal points, which may be useful for an objective assessment during regular tests.

All contact positions are suitable for connecting one conductor, unless expressly otherwise indicated. Double-function terminals are characterised by 2 contact positions.

In principle, the tightening torques specified on the device, the installation instructions or on the Internet are to be applied. Where no limits are specified, the tolerance on the tightening torque  $M_d$  of screw and clamp connections may be a maximum of +/-20% of the nominal value.

The relationship between conductor cross-sections in mm<sup>2</sup> and AWG / MCM sizes are subsequently listed:

0.75mm <sup>2</sup>	18 AWG	(0.82mm <sup>2</sup> )
1.5mm <sup>2</sup>	16 AWG	(1.3mm <sup>2</sup> )
2.5mm <sup>2</sup>	14 AWG	(2.1mm <sup>2</sup> )
4mm <sup>2</sup>	12 AWG	(3.3mm <sup>2</sup> )
6mm <sup>2</sup>	10 AWG	(5.3mm <sup>2</sup> )
10mm <sup>2</sup>	8 AWG	(8.4mm <sup>2</sup> )
16mm <sup>2</sup>	6 AWG	(13.3mm <sup>2</sup> )
25mm <sup>2</sup>	4 AWG	(21.2mm <sup>2</sup> )
35mm <sup>2</sup>	2 AWG	(33.6mm <sup>2</sup> )
50mm <sup>2</sup>	0 AWG	(53.5mm <sup>2</sup> )
70mm <sup>2</sup>	2/0 AWG	(67.4mm <sup>2</sup> )
95mm <sup>2</sup>	3/0 AWG	(85.0mm <sup>2</sup> )
120mm <sup>2</sup>	250 MCM	(127mm <sup>2</sup> )
150mm <sup>2</sup>	300 MCM	(152mm <sup>2</sup> )
185mm <sup>2</sup>	350 MCM	(177mm <sup>2</sup> )
240mm <sup>2</sup>	500 MCM	(253mm <sup>2</sup> )
300mm <sup>2</sup>	600 MCM	(304mm <sup>2</sup> )

Conductor types are designated as follows:

	Abbreviation	Standard name
solid round	sol(r)	Class 1 (IEC/EN 60228)
stranded round	s(r)	Class 2 (IEC/EN 60228)
solid sectored	sol(s)	Class 1 (IEC/EN 60228)
stranded sectored	s(s)	Class 2 (IEC/EN 60228)
flexible	f	Class 5 (IEC/EN 60228)
stranded	str	Class B (UL 486E)

The following abbreviations are also used:

laminated flexible	
copper busbar	fl. Cu
wire-end ferrules	AE

Wire-end ferrules are only permitted for applications in compliance with IEC/EN standards. Wöhner has tested the use of wire end ferrules. This does not result in a general approval for different ferrules and crimping methods. The maximum conductor cross-sections may need to be reduced.

Lead connections are to be set up with consideration given to the requirements as per IEC/EN 60999-1 or -2.

Lead connections set-up is to be such that no tension load and – with respect to the application – no alternating bending load develop.

## Notes for the dimensioning of AC string collectors

When AC string collectors are used, a few strings supply one inverter. The power of several string inverters is pooled on the alternating current side, e.g. via a 60mm busbar system.

When dimensioning components for a busbar system of this kind, the direction of the energy – which is inverted to that of industrial applications – is unimportant. The same types of fuse (gG) are also used. It is the cables and leads going to the inverter that have to be protected from overload and short circuit. However, the rated diversity factor of the switchgear and the simultaneity factor of this application (= 1) do not match.

If, for example, a SECUR® 60Classic, PowerLiner is equipped with 35A-D02 fuses in a power distribution unit, the switchgear device will be able to carry its nominal current of 35A continuously on its own. However, this value must be reduced through thermal interaction with neighbouring devices.

The standard takes account of this situation by means of a switchgear assembly's rated diversity factor (RDF). This states the factor of the rated current to which all power circuits of a power distribution unit in a switchgear assembly can be permanently and simultaneously subjected. Here, the values from the table on page 8/1 apply, in accordance with IEC 61439-2:2011 and IEC 61439-3:2011.

At any rate, care must be taken to ensure that the rated diversity factor is always based on the fuse that is used, not the rated current of the switch disconnecter or fuse holder. Furthermore, the use of fuse links with silver-plated contacts is recommended. The size of the copper conductors is determined on the basis of the applicable product standard, e.g. IEC/EN 60947-3 for SECUR® 60Classic, PowerLiner.

For the above example, this means that from 10 devices or more, the SECUR® 60Classic, PowerLiner (rated current 63A) with side-mounted module and 35A fuse links may be operated at 21A maximum. Here, the rated current of the fuse is reduced to 60%. If the maximum current of the inverter does not exceed this value, and if fuse protection at 35A is permitted by the wiring and the inverter datasheet, the dimensions are correct.

If higher power ratings with correspondingly higher currents need to be pooled, there are two choices for adaptation:

With the right lead dimensions, the nominal current of the fuse links can be increased. However, this must fit in with the requirements for inverter fuse protection. Thus, in this example the use of a 50A fuse permits a maximum current of 30A.

Alternatively, the thermal influence of the switchgear is reduced by modifying the layout. With the SECUR® 60Classic, PowerLiner fuse switch disconnecter, in a test with 6 power circuits, a distance equal to the width of two devices (54mm) between the switchgear devices increased the rated diversity factor from 0.7 to 0.9. This is only possible because the distance considerably reduces the thermal influence of the fuse links. Based on the example with the 35A fuse, the new arrangement would enable an inverter current of 31A.

The rated diversity factors must always be selected in conformity with the application of the switch fuse unit, in accordance with IEC 61439-2 or IEC 61439-3. See table on page 8/1. Non-compliance with these reduction factors leads to unacceptably high temperatures in switchgear assemblies. This may in turn result in damaged or incorrectly triggered switchgear devices. Both fuse links and cable insulation age when exposed to high temperatures. In all cases, failures in photovoltaic systems can be expected.

For the correct design and layout of cables and leads, accumulation – as well as the ambient temperature – need to be taken into consideration. Here too, mutual thermal influence leads to raised temperatures and so to lower permitted currents. It is important to consider size and the corresponding factors. If the leads to the inverters in the AC string collector are routed in a cable duct (routing method F), and ambient temperatures of 50°C are anticipated there, when 6 conductors are used the permitted current capacity slashed to less than 50% of the nominal current.

When cables and fuses have the correct dimensions, they also produce less dissipation, and therefore less waste heat. This in turn facilitates cabinet selection or thermal management.

**Note on operating NH fuse switch disconnectors and NH in-line fuse switch disconnectors**

NH fuses are only intended for use by authorized electricians or trained electrical personnel, see IEC 60269-2. When switching devices observe the following instructions:

- Operation (release, switching on, switching off and fuse replacement) only permitted for authorized electricians or trained electrical personnel in accordance with VDE 0105-100.

- Quick activation of fuse cover using the relevant operating handle.
- Before switching on, care must be taken that the fuse cover is mounted or guided exactly into the open position.
- If the cover is only partially open, the fuse links may still be energized. Only open and close the cover using the handle.

**Using busbars**

To ensure that single and multi-pole busbar components are securely mounted and contacts are firmly connected, the busbars in question must comply with the required tolerances shown here.

- Tensile strength: min. 300N/mm<sup>2</sup>
- Permitted tolerances:
- Radius R 0.3 ... 0.7
- Width: + 0.1 / - 0.5
- Thickness: + 0.1 / - 0.1
- Centre distance:
- + 0.5 / - 0.5 (60mm system)
- + 1.0 / - 1.0 (100mm system, 185mm system)
- Deviation in the contact level: 0.4

**Using comb-type busbars**

A range of Wöhner fuse holders and switches are suitable for use with comb-type busbars. We recommend that you used the comb-type busbars listed on the corresponding pages in the current Wöhner catalogue (IEC/EN 61439-1/2, level of soiling: 2).

Ensure that the required air and creepage distances left in standard installation positions are observed (comb-type busbars are angled towards the operator). Power must be supplied via the connection terminals sold separately by Wöhner. The additional connection terminal is not required for Wöhner products with double-function terminals. Connect terminals using the maximum torque stated on the fuse holder.

**Processing and using plastic profiles**

The mechanical, thermal and electric properties of the profiles, which are listed in the Wöhner catalogue, are optimised for covering busbars or busbar systems and bottom troughs. Take particular care when mechanically processing the profiles to avoid the formation of cracks (narrow saw blade, high speed of cutting, low tooth advance and strong saw guiding).

The cutting of profiles with a cap circular saw and an AKE circular saw blade for plastics is reliable with the following specific values:  
D = 300mm, B = 2.2mm, Z = 120W  
with 5° negative tooth change (w),  
cutting speed of 50 - 65m/s,  
tooth feed 0.05 - 0.1mm.  
The plastic parts must be fixed in order to exclude vibrations.

When processing and using plastic profiles, contact with oil, grease and other chemicals must be avoided.

## Dimensions

All lengths are given in millimetres, unless otherwise stated.

Mounting rails of adapters and clip-on fixings generally comply with EN 60715.

## CE marking

In association with the 2006/95/EG low voltage directive, Wöhner products are subject to the CE marking commitment.

The CE mark is applied to the individual packing units. Even some of the products are marked accordingly. In doing so, Wöhner confirms that the products comply with the valid regulations.

Wöhner holds the corresponding conformity declarations.

## Additional requirements for compliance with UL



Components that have also been tested for feeder circuits up to 600V AC in compliance with UL 508A are labelled in the approval overview.

## ROHS, WEEE and REACH

Currently, Wöhner products do not come under the scope of ROHS Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment, or WEEE Directive 2002/96/EG governing waste electrical and electronic equipment.

Irrespective of these directives, measures have been initiated, which ensure that the use of pollutant-free plastics complies with the ROHS Directive.

The metallic surface coatings shall correspond to the substance ban in accordance with the ROHS Directive.

Fuse links may contain function-specific components which do not comply with the ROHS Directive.

According to current knowledge, there are no substances in our products or their packaging with a concentration above 0.1 percent by mass, in accordance with the candidate list (as of 16.06.2014), article 59 (1, 10) of Regulation (EC) no. 1907/2006 ("REACH").

We are in constant contact with our suppliers as regards substances subject to registration and information relevant to REACH is forwarded without delay to our customers.

You will find further information in the download area under Service at [www.woehner.com](http://www.woehner.com)

## Busbar supports

### System 30Compact

for 60mm busbar systems in acc. with IEC and UL

3-pole for busbars 12x5 and 12x10 as per IEC/UL  
 4-pole, 5-pole for busbars 12x5 as per IEC  
 With end cover, can also be used as a centre support



### System 60Classic

for 60mm busbar systems in acc. with IEC

1-pole for busbars 12x5 - 30x10, double-T busbars  
 2-pole for busbars 12x5 - 30x10  
 3-pole for busbars 12x5 - 30x10 and 12/20/30x5/10  
 4-pole for busbars 12x5 - 30x10  
 3-pole for double-T and triple-T busbars



### System 60Classic

for 60mm busbar systems in acc. with UL

3-pole for busbars 12/20/30x5/10  
 3-pole for double-T and triple-T busbars



### System 100Energy

for 100mm busbar systems in acc. with IEC

3-pole for busbars 30x10 - 60x10



### System 185Power

for 185mm busbar systems in acc. with IEC

3-pole for flat busbars up to 120mm wide  
 3-pole for undrilled flat busbars 30-120 x 10,  
 double-T and triple-T section busbars



Typical arrangements of busbars have been tested in recognised laboratories for short-circuit strength.

The results are summarised on page 8/43 and 8/44.

## Busbars, in compliance with EN 13601

### Flat busbars

Tin-plated copper busbars make contact position preparation much easier.

Cu busbars are effectively protected against corrosive substances.

The current capacities of flat busbars with components fitted in the table below were calculated by testing at an ambient temperature of 35°C under optimal conditions (IEC and UL).

Current carrying capacities higher than those specified in DIN 43 671 were obtained under operating conditions. The busbar temperature is normally positively influenced by mounting components on the busbar and by air circulation within the installation.

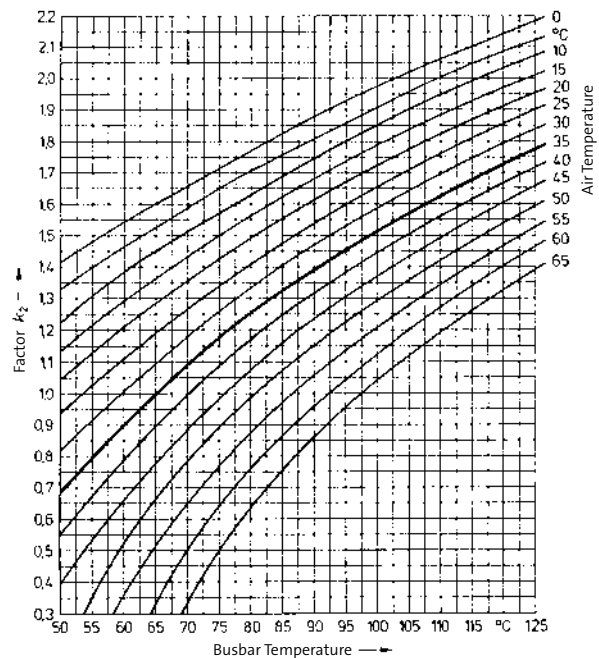
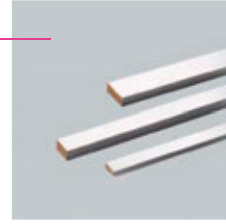
A correction factor  $k_2$  that complies with DIN 43 671 can be determined for flat busbars using the diagram on the right. The factor is dependent on the relevant ambient temperature. This correction factor should be taken into account when conditions change and loading is continuous.

Alternatively a higher load can be applied if the components have a higher thermal endurance level.

A 30x10 galvanised busbar can, under normal operating conditions, be loaded with 630A. A correction factor  $k_2$  of 1.3, for example, is required if a load of 800A is applied. This diagram demonstrates that the busbar heats up to approx. 85°C if this correction factor and an air temperature of 35°C apply.

Dimensions	Cross sections	Current carrying capacities at busbar temperature of	
		65°C	85°C
12x5	60mm <sup>2</sup>	200A	250A
15x5	75mm <sup>2</sup>	250A	320A
20x5	100mm <sup>2</sup>	320A	400A
25x5	125mm <sup>2</sup>	400A	500A
30x5	150mm <sup>2</sup>	450A	550A
12x10	120mm <sup>2</sup>	360A	450A
20x10	200mm <sup>2</sup>	520A	630A
30x10	300mm <sup>2</sup>	630A	800A
40x10	400mm <sup>2</sup>	850A	1000A
50x10	500mm <sup>2</sup>	1000A	1200A
60x10	600mm <sup>2</sup>	1250A	1500A
80x10	800mm <sup>2</sup>	1500A	1800A
100x10	1000mm <sup>2</sup>	1800A	2100A
120x10	1200mm <sup>2</sup>	2100A	2500A

Tensile strength: min. 300N/mm<sup>2</sup>  
 Permissible tolerance:  
 Radius R 0.3 ... 0.7  
 Width: +0.1 / - 0.5  
 Thickness: +0.1 / - 0.1  
 Centre spacing:  
 + 0.5 / - 0.5 (60mm system)  
 + 1.0 / - 1.0 (100mm system / 185mm system)  
 Deviation in the contact levels: 0.4



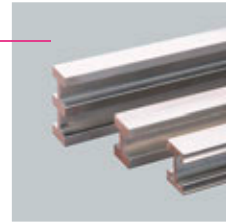
## Busbars, in compliance with EN 13601

### Section busbars

Tin-plated copper busbars make contact position preparation far easier.  
Cu busbars are effectively protected against corrosive substances.

The following current capacities of flat busbars with components fitted were calculated by testing at an ambient temperature of 30°C under optimal conditions (IEC).

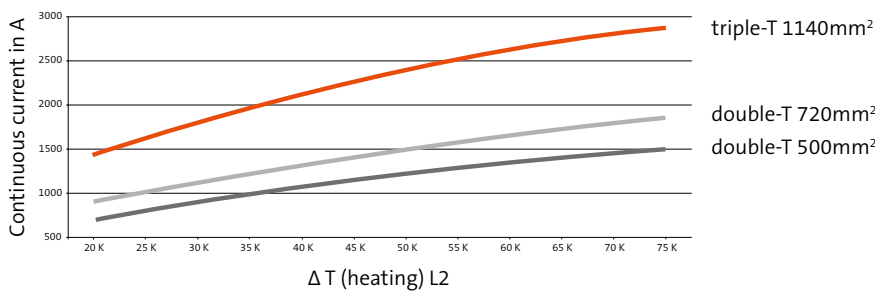
Tensile strength: min. 300N/mm<sup>2</sup>  
Permissible tolerance:  
Radius R 0.3 ... 0.7  
Width: + 0.1 / - 0.5  
Thickness: + 0.1 / - 0.1  
Centre spacing:  
+ 0.5 / - 0.5 (60mm system)  
+ 1.0 / - 1.0 (100mm system / 185mm system)  
Deviation in the contact levels: 0.4



Dimensions	Cross sections	Current carrying capacities at busbar temperature of 85°C in compliance with IEC	Current carrying in compliance with UL508 (UL-File E123577)
double-T	500mm <sup>2</sup>	1250A	1200A
double-T	720mm <sup>2</sup>	1600A	1400A
triple-T	1140mm <sup>2</sup>	2500A	1800A/2000A*

\* staggered load

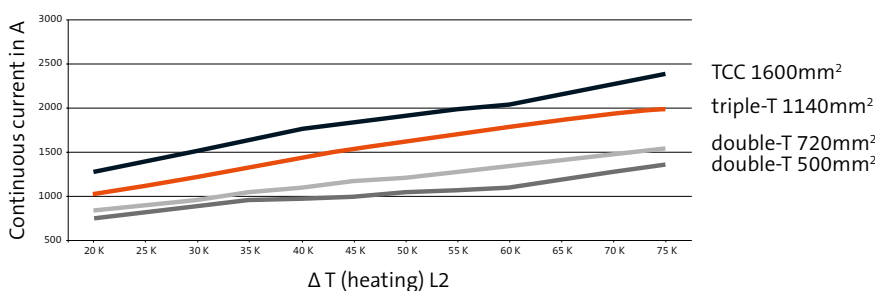
### Current capacities of section busbars with components fitted



For the type verification corresponding to IEC/EN 61439-1, the maximum heating of the busbars must be taken into account.

### Current capacities of section busbars without components fitted

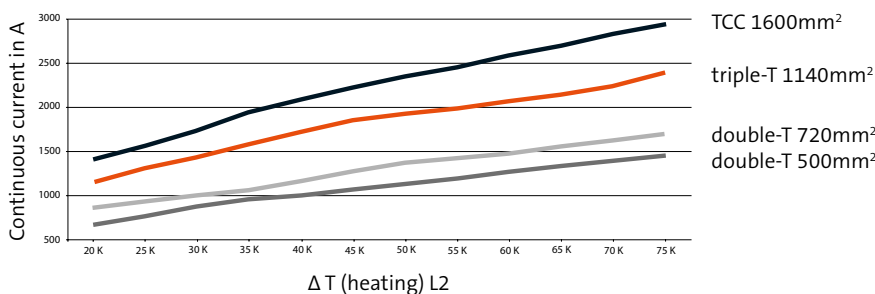
Under unfavourable conditions with constant continuous current over the entire length and with self-convection only, the heating of busbars without components fitted is as follows:



Busbar arrangement in 60mm-system:



one above the other



side by side

## CRITO® Universal conductor connection terminals, brace terminals

Universal conductor terminals are used to connect conductors with cross-sections extending from 1.5 - 120mm<sup>2</sup> to busbars with a thickness of 5 or 10mm. Installation is simplified by integrated retaining springs, open terminals and captive screws.

Brace terminals for connecting 95 - 300mm<sup>2</sup> round conductors and lamellated flexible copper busbars. The jaw-type clamping method allows the busbar to be encompassed on both sides and for the conductors to be connected without drilling.



Conductors used	Current carrying capacity of contacts*	Terminal space WxH	Busbars WxH	Part no.
1.5 - 16mm <sup>2</sup> Cu, sol(r), s(r), f, f+AE**, fl. Cu 8x6x0.5	180A	7.5 x 7.5	... x 5	01 284
			... x 10	01 289
4 - 35mm <sup>2</sup> Cu, sol(r), s(r), f, f+AE**, fl. Cu 3/6x9x0.8	270A	10.5 x 11	... x 5	01 285
			... x 10	01 290
16 - 70mm <sup>2</sup> Cu, s(r), f, f+AE**, 2xla. Cu 3/6x9x0.8, 6x13x0.5	400A	14 x 14	... x 5	01 287
			... x 10	01 292
			TT, TTT	
16 - 120mm <sup>2</sup> Cu, s(r), f, f+AE**, fl. Cu 4/6/10x15.5x0.8	440A	17 x 15	... x 5	01 068
			... x 10	01 203
			TT, TTT	
35 - 150mm <sup>2</sup> Cu, Al*** s(r), f, f+AE**	480A		12 - 20x5 - 10	01 135
95 - 185mm <sup>2</sup> Cu, Al*** s(r), s(s), f	500A		20x5 - 30 x 10 TT, TTT	01 318
120 - 300mm <sup>2</sup> Cu, Al*** s(r), s(s), f	600A		20 x 5 - 30 x 10 TT, TTT	01 760
fl. Cu 3 x 20 x 1 up to 10 x 24 x 1	750A	30 x 25	20 x 5 - 30 x 10 TT, TTT	01 319
fl. Cu 3 x 20 x 1 up to 10 x 32 x 1	800A	32 x 25	20 x 5 - 30 x 10 TT, TTT	01 759
95 - 300mm <sup>2</sup> Cu, Al***, sol(r), sol(s), s(r), s(s), f, f+AE**	630A		30x10 TT, TTT	01 094
fl. Cu 5 x 32 x 1 up to 10 x 40 x 1	1250A	41 x 25	30 x 10 TT, TTT	01 092

\* The specified ratings reflect the thermal capacity of the terminals under optimal conditions (with the largest connectable conductors).

The allocation of conductor cross-sections and current carrying capacities by national or international specifications does not affect the terminal's thermal capacity.

\*\* Reducing the maximum conductor cross-sections may be required.

\*\*\* Connections with aluminium conductors are not maintenance-free (see page 8/2).

Explanation of abbreviations on page 8/2.

Additional terminal space details on page 9/1, 9/8 and 9/19.

**CRITO®30Compact**  
**CRITO®60Classic**  
**Connecting terminal plates**  
**incl. cover**  
**Connection module, shock-protected**



60mm distance between busbar centres  
 3-pole, 690V~

Conductors used	Current carrying capacity of contacts*	Terminal space W x H	Busbars W x H	Part no.
1.5 - 16mm <sup>2</sup> Cu, re, rm, f, f+AE*	80A		12 x 5, 12 x 10	01 562
1.5 - 16mm <sup>2</sup> Cu, re, rm, f, f+AE**	80A		... x 5 - 10 TT, TTT	01 563
1.5 - 16mm <sup>2</sup> Cu, re, rm, f+AE*	80A		... x 5 - 10	01 484
6 - 50 (70)mm <sup>2</sup> Cu, rm, f, f+AE**, la. Cu 6 x 9 x 0.8	300A	10 x 15	... x 5 - 10 TT, TTT	01 240
6 - 50 (70)mm <sup>2</sup> Cu, rm, f, f+AE**, la. Cu 6 x 9 x 0.8	300A	10 x 15	12 x 5 - 10	01 401
95 - 185mm <sup>2</sup> Cu, Al***, rm, sm, f	460A		20 x 5 - 30 x 10 TT, TTT	01 199
35 - 120mm <sup>2</sup> Cu, rm, f, f+AE**, se la. Cu 6/10 x 13/15.5 x 0.5/0.8	440A	15 x 15	... x 5 - 10 TT, TTT	01 243
35 - 150mm <sup>2</sup> Cu, rm, f, f+AE**	480A		12 x 5 - 10	01 165
120 - 300mm <sup>2</sup> Cu, Al***, rm, sm, f	560A		20 x 5 - 30 x 10 TT, TTT	01 754
la. Cu 3 x 20 x 1 up to 10 x 32 x 1	800A	32 x 25	20 x 5 - 30 x 10 TT, TTT	01 753

**CRITO®60Classic**  
**Connection set, 3-pole and 4-pole**  
**without cover**

1-pole, 690V~



Conductors used	Current carrying capacity of contacts*	Terminal space W x H	Busbars W x H	Part no.
10 - 120mm <sup>2</sup> Cu, rm, f	300A	15 x 15	12 x 5 - 10	01 370 01 426
120 - 300mm <sup>2</sup> Cu, Al***, rm, sm, f	560A		20 x 5 - 30 x 10 TT, TTT	01 537 01 147
la. Cu 3 x 20 x 1 up to 10 x 32 x 1	800A	32 x 25	20 x 5 - 30 x 10 TT, TTT	01 538 01 162

\* The specified ratings reflect the thermal capacity of the terminals under optimal conditions (with the largest connectable conductors).

The allocation of conductor cross-sections and current carrying capacities by national or international specifications does not affect the terminal's thermal capacity.

\*\* Reducing the maximum conductor cross-sections may be required.

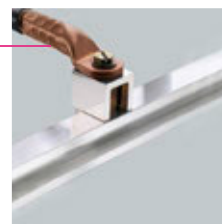
\*\*\* Connections with aluminium conductors are not maintenance-free (see page 8/2).

Explanation of abbreviations on page 8/2.

Additional terminal space details on page 9/8.

## CRITO® Clip-on screw clamp connection

The clip-on screw connector is used to connect cables fitted with cable lugs as per DIN 46 234 and DIN 46 235 to busbars with a thickness of 5 or 10mm without the need for drilling.



Connection	Current carrying capacity of terminals*	Terminal space	Busbars W x H	Part no.
Cable lug, fl. Cu	360A	M5 x 8	... x 5	01 747
			... x 10	01 512
Cable lug, fl. Cu	490A	M8 x 8	... x 5	01 748
			... x 10 TT, TTT	01 514
Cable lug, fl. Cu	630A	M10 x 10	... x 5	01 749
			... x 10 TT, TTT	01 047

\* The specified ratings reflect the thermal capacity of the terminals under optimum conditions. Allocating conductor cross-sections and current carrying capacities by national or international specifications does not affect the terminal's thermal capacity.

## Busbar connectors

For the connection of identical busbars without drilling.

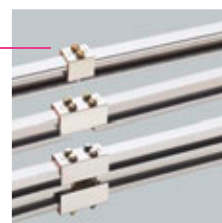
Current carrying capacity of terminals	Overall length	Permissible displacement busbar	Clamp screws	Spacing between systems	Part no.
630A	40	2mm	1xM12	13 - 20	01 823
630A	40	2mm	2xM8	9 - 20	01 990
630A	55	1mm	2xM8	5 - 10	01 166
630A	95	5mm	2xM10	50 - 60	01 141
630A	150	1mm	2xM8	100 - 110	01 193
630A	150	5mm	2xM12	100 - 110	01 886
1600A	50	2mm	2xM8	9 - 20	01 827
1600A	70	0mm	2xM16	5 - 10	01 905
1600A	95	5mm	4xM8	50 - 60	01 145
1600A	150	5mm	2xM16	5 - 30	30 322
1600A	150	5mm	4xM8	100 - 110	01 829
2500A	95	2mm	4xM8	50 - 60	01 274
2500A	150	2mm	4xM8	100 - 110	01 275
2500A	200	5mm	2xM16	5 - 30	01 295
750A	47	0mm	1 x M10	11 - 14	01 480
1000A	47	0mm	2 x M10	11 - 14	01 481

The separating bar set (part no. 01 360/01 361/01 362) is needed to comply with the air distances required by UL 508A.

At typical ambient conditions the use of flexible connectors after 5m system length has been proven.

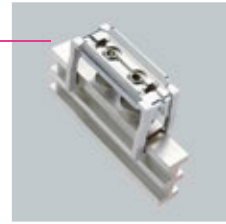
In each case the distance of flexible connectors depends on the actual conditions,

e.g. arrangement and equipment of the system, value, and speed of temperature fluctuations.



**CRITO®**  
**Brace terminals for connecting flat busbars and laminated copper**

The jaw-type clamping method allows the busbar to be encompassed on both sides and for the conductors to be connected without drilling.



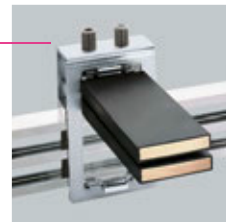
Current carrying capacity of terminals	Section	Terminal space W x H	Part no.
1600A/2000A*	30 x 10, TT, TTT, TCC	55 x 10 - 28	01 069
1600A/2000A*	30 x 10, TT, TTT, TCC	68 x 10 - 28	01 070
1600A/2800A*	30 x 10, TT, TTT, TCC	105 x 10 - 28	01 071

\* current capacity for centre feeding

Use spacers provided when two flexible busbars are connected in parallel.

**CRITO®**  
**Profiles terminals for double T and triple T bars**

For the connection of laminated copper busbars.



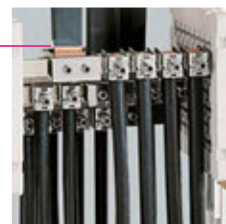
Current carrying capacity of terminals	Section	Terminal space W x H	Part no.
1600A	double-T	51 x 5 - 28	01 906
1600A	double-T	64 x 5 - 28	01 907
1600A	double-T	41 x 20 - 42	01 185
1600A (2000A)*	double-T	51 x 20 - 42	01 936
1600A (2000A)*	double-T	64 x 20 - 42	01 911
1600A (2500A)*	double-T	81 x 20 - 42	01 934
1600A (2800A)*	double-T	101 x 20 - 42	01 935
2000A (2500A)*	triple-T	64 x 23 - 45	01 008
2500A (3200A)*	triple-T	101 x 23 - 45	01 186

\* centre feeding

Use spacers provided when two flexible busbars are connected in parallel.

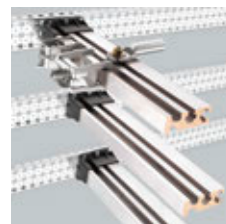
**Busbar system for centre-feed unit**

- Rated operating voltage 690V-
- Rated insulation voltage 1000V-
- Double-T section busbars up to 2000A, 3 and 4-pole
- Triple-T section busbars up to 3200A, 3-pole
- Special profile up to 4000A, 3-pole



The incoming conductors should be arranged in such a way that the maximum current only flows through short busbar lengths to ensure the lowest possible temperature increases.

The centre-feed unit (part no. 35 004) was tested with the following components mounted: 12 terminals (part no. 01 318) for the incoming conductors and 3 profile terminals (part no. 01 911) – each with two flexible copper busbars 10 x 63 x 1 – for the outgoing conductors to the circuit breaker.



The centre feed unit with special TCC profiles enables connection with brace terminals and special connection screws. Connection screw M10 x 45 (01 379) is suitable for retrofitting; version M12 x 60 (01 380) cannot be retrofitted! The use of Wöhner's special connection screws is absolutely necessary!

**EQUES®30Compact**  
**Busbar adapter, 1-pole up to 63A**

1-pole, 690V

For 3, 4, 5-pole 60mm busbar system

Attachable on 12 x 5mm bars.

Mounting rail firmly fixed, for snapping on automatic fuse devices.

Ultra-sonic welded copper conductor.

Current limitation of the assigned automatic devices for short-circuit protection.

Maintain contact-free conductor routing.

**EQUES®30Compact**  
**Busbar adapter, 3-pole up to 63A**

3-pole, 690V~

Attachable on 12 x 5mm and 12 x 10 bars in the 60mm system.

Combined foot ensures suitability for 5 and 10mm bar thickness.

Mounting rail EN 60715, plastic, movable in the 1.25-mm grid.

Ultra-sonic welded copper conductors.

32A: AWG 10 2.9mm x 2.9mm

63A: AWG 8 3.2mm x 3.6mm

Current limitation of the assigned switchgear ensures short-circuit protection.

Maintain contact-free conductor routing.



**EQUES®60Classic**  
**Busbar adapter, 3-pole up to 80A**



3-pole, 690V~  
Can be fitted on all busbars in the 60mm system.  
Combined foot ensures suitability for 5 and 10mm busbar thickness.  
Mounting rail EN 60715, plastic, movable in the 1.25mm grid.  
Ultra-sonic welded copper conductors.

- 12/16A: AWG 14 1.8mm x 1.8mm
- 25A: AWG 12 2.3mm x 2.3mm
- 25A: Connection terminal (Cu 0.75 - 6mm<sup>2</sup>, re, f, f+AE)
- 32A: Spring terminals (1.5 - 6mm<sup>2</sup>, re, f, f+AE)
- 32A: AWG 10 2.9mm x 2.9mm
- 45A: AWG 8 3.2mm x 3.6mm
- 63A: AWG 8 3.2mm x 3.6mm
- 80A: Connection terminals (Cu 1.5 - 16mm<sup>2</sup>, re, rm, f, f+AE)

Current limitation of the assigned switchgear for short-circuit protection.  
Maintain contact-free conductor routing.

**EQUES®60Classic**  
**Busbar adapter, 3-pole up to 45A, with removable upper section**



3-pole, 690V~  
Can be fitted to all busbars in the 60mm system.  
Combined foot ensures suitability for 5 and 10mm busbar thickness.  
Mounting rail EN 60715, plastic, movable in the 1.25mm grid.  
Ultra-sonic welded copper conductors.

- 16A: AWG 14 1.8mm x 1.8mm
- 25A: AWG 12 2.3mm x 2.3mm
- 32A: AWG 10 2.9mm x 2.9mm
- 45A: AWG 8 3.2mm x 3.6mm

Current limitation of the assigned switchgear ensures short-circuit protection.  
Maintain contact-free conductor routing.

Up to 45A with upper section which can be removed and locked in the disconnect position.  
Lower section stays contact-protected on busbar system.  
Micro-switch (change-over contact) for fusing load shedding.  
Rated operating voltage (rated operating current) 250V AC (5A).

### EQUES®60Classic Universal busbar adapters 200A/250A, special adapters 100A, busbar adapters 200A

for sharp-edged and rounded busbars (EN 12167/EN 13601).



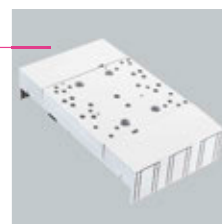
Parameter	Universal adapter 200A	Universal adapter 250A	Adapter 250A
Type	3-pole, 690V~	3-pole, 690V~	3-pole, 690V~
Busbar system	60mm	60mm	100mm
Busbar connection	claw terminals	claw terminals	claw terminals
Connecting switchgear	top or bottom	top or bottom	top
	box terminals Md 8 - 10Nm	box terminals Md 10 - 12Nm	clamps Md 3Nm
	Cu 6 - 70mm <sup>2</sup> s(r), f, f + AE, fl. Cu 10 x 16 x 0.8	Cu 35 - 120mm <sup>2</sup> s(r), f, f + AE, fl. Cu 10 x 20 x 0.8	Cu 6 - 70mm <sup>2</sup> s(r), f + AE

### EQUES®60Classic Universal busbar adapter 630A

3-pole, 690V~

For busbars 12 - 30mm and double-T and triple-T profiles  
with screw connection M10 at bottom and top.

You can find the mounting options for the associated switchgear on the Internet at  
[www.woehner.com](http://www.woehner.com)



### EQUES®185Power Busbar adapter up to 1600A

3-pole, 690V~

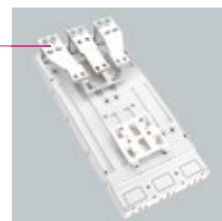
For adaptation of compact circuit-breakers up to 1600A.

For 30 – 120 x 10mm bars.

Terminal connection design for assembly without drilling and mounting on the CrossLink system  
covering system.

Screw-connection design for mounting on drilled busbars.

The assigned circuit-breakers ensure short-circuit protection and current limitation.



**MOTUS®30Compact**  
**MOTUS®60Classic**  
**MOTUS®Panel**  
**Hybrid motor starter with reversing function**



For 3-pole symmetrical loads up to 4kW.  
 22.5mm wide, for 60mm busbar systems and EN 60715 mounting rail, integrated overload, short-circuit protection and safety function

EN 60947-1 / EN 60947-4, IEC 61508, ISO 13849  
 ATEX approval to EX II (2) G [Exe] [Exd] [Exp] and EX II (2) D [Ext] [Exp]  
 cULus-listed to UL 60947-1 and UL 60947-4-1A

The amount of wiring required is reduced to a minimum by the internal locking circuit and the load wiring.

Types	max. 0.6A	max. 2.4A	max. 9A
<b>Main circuit</b>			
Switching principle	Safety output stage with bypass, three-phase electrically isolated switch-off		
Rated operating voltage (U <sub>e</sub> ) to IEC 60947-1	500V AC (50/60Hz)	500V AC (50/60Hz)	500V AC (50/60Hz)
Operating voltage range to IEC 60947-1 Operating voltage range to UL 508	42 - 500V AC	42 - 500V AC	42 - 500V AC
Operating range of current monitoring at 20° C	0.075 - 0.6A	0.18 - 2.4A	1.2 - 9A
Rated operating current (I <sub>e</sub> ) to IEC 60947-1 AC-51 to IEC 60947-4-3 AC-53a to IEC 60947-4-2 To UL 508	0.6A 0.6A 0.6A	2.4A 2.4A 2.4A	9A 9A 6.5A
Nominal switching power to UL 508 Full Load (Power Factor = 0.4) Full Load (Power Factor = 0.8)	0.3kW (0.4HP) 0.5kW (0.6HP)	0.9kW (1.2HP) 1.7kW (2.2HP)	2.3kW (3.0HP) 4.6kW (6.1HP)
Short-circuit current rating SCCR to UL 508a	With Class CC fuse 30A CCMR30 suitable for use in circuits that do not supply more than 100kA <sub>eff</sub> symmetrical current, max. 500V. For other values see product description.		
Leakage current (input, output)	0mA	0mA	0mA
Residual voltage at I <sub>e</sub>	< 300mV	< 400mV	< 500mV
Surge current	100A (t = 10ms)	100A (t = 10ms)	100A (t = 10ms)
Input protective circuit	Varistors, fuses		
Assignment types to IEC60947-4	with fuse 10 x 38 16 A FR10GR69V16		with fuse 10 x 38 20 A FR10GR69V20
1	50kA (500V)	50kA (500V)	50kA (500V)
2	10kA (500V)	10kA (500V)	5kA (400V)
Assignment types to IEC60947-4	with Class CC fuse 30A CCMR30		
1	30kA (500V)	30kA (500V)	30kA (500V)
<b>Control circuit</b>			
Rated control supply voltage U <sub>e</sub> to IEC 60 947-1/ UL 508	24V DC	24V DC	24V DC
Control supply voltage range	19.2 - 30V DC (32V DC, max. 1 min.)		
Control supply voltage range switching level "Safe Off"	< 5V DC	< 5V DC	< 5V DC
Rated control supply current to IEC 60974-1	≤ 40mA	≤ 40mA	≤ 40mA
Control input L, R Switching level "Low" Switching level "Safe Off" Switching level "High" Input current	3 - 9.6V DC < 0.5V DC 19.2 - 30V DC ≤ 3mA	3 - 9.6V DC < 0.5V DC 19.2 - 30V DC ≤ 3mA	3 - 9.6V DC < 0.5V DC 19.2 - 30V DC ≤ 3mA
Motor overload protection to IEC / CEI 60947	Class 10A		
Safety level to IEC/CEI 61508-1 ISO 13849-1	SIL 3 Cat. 3PLe		

## SmartWire-DT® Communication system

SmartWire-DT® replaces the control wiring.

Wiring system for higher-level bus via gateways for Profibus, Profinet, CANopen and Ethernet IP/MODBUS.

SmartWire-DT-Assist project planning software is available to download at [www.woehner.com](http://www.woehner.com).

Automatic address management.

Diagnostic LED on participants.

8-pole ribbon cable for device communication.

15V +/- for supplying the electronics.

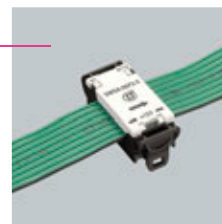
24V +/- for activating the switchgear.

3 data cables.

1 address cable.

Direction unmistakably indicated by black arrow.

Special pliers for adapting the cable connectors.



## Module for connection to SmartWire-DT® for all MOTUS®

Plug-in module for the control circuit connections.

Replaces all control wiring via SmartWire-DT®.

Enable inputs 24V +/- for functional reliability.



## Module for connection to SmartWire-DT® For all EQUES®60Classic

For all EQUES®60Classic adapters up to 80A.

Enables communication with switchgear devices (motor circuit breakers and contactors) via SmartWire-DT®.

3 inputs for signalling switches.

2 outputs for activating contactors.

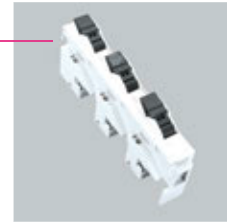
24V, 0.5A continuous current, with freewheeling diode.



**AMBUS®60Classic**  
**Holder for cylindrical fuse 10 x 38**

VDE 0660 part 107/EN 60947-3/IEC 60947-3/IEC 60269-2/UL 4248-1, -18  
1, 2 and 3-pole, 3-pole optionally as + N  
For IEC 60269-2 cylindrical fuses.  
LED: 110 - 700V AC/DC resp. 400 - 1000V DC  
Suitable for mounting on 60mm systems with undrilled busbars.  
Combination base accommodates busbars 5 and 10mm thick.

Screwless conductor connections  
Complies with IEC: Cu 1.5 - 6mm<sup>2</sup> (f)  
Complies with UL/CSA: AWG 16 - AWG 10 (str)



Size		10 x 38***	10 x 38	10 x 38***	10 x 38
Poles		1-pole	2-pole	2-pole	3-pole (3-pole + N)
Type of current		DC	AC (50/60Hz)	DC	AC (50/60Hz)
Max. rated operating voltage (U <sub>e</sub> )	IEC/EN	1000V DC	690V AC	1000V DC	690V AC
	UL/CSA	1000V DC	-	-	600V AC
Rated insulation voltage (U <sub>i</sub> )	IEC/EN	1000V	1000V	1000V	800V
Rated surge withstand capacity (U <sub>imp</sub> )	IEC/EN	6kV	6kV	6kV	6kV
Max. rated operating current (I <sub>e</sub> )*	IEC/EN	30A	32A	20A	32A
	UL/CSA	30A	-	-	30A
Utilisation categories	IEC/EN	DC-20B	DC-20B	DC-20B	AC-22B (500V) AC-21B (690V) AC-20B (690V) 3-pole + N
	UL/CSA	only for use as a fuse holder	-	-	only for use as fuse holder
Conditional rated short circuit current	IEC/EN	-	-	-	100kA (400V, 500V, 690V)**
	UL/CSA	33kA	-	-	50kA (600V)
For fuses with power dissipation per phase up to		4W	3W	3W	3W

\* When several devices are used side-by-side, the rated load factor specified according to IEC/EN 61439-2, table 101, should be observed.

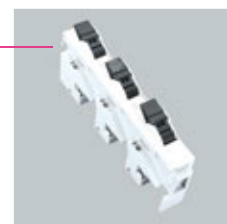
\*\* Type tested with fuses of characteristic gL/gG.

\*\*\* Special model for photovoltaic applications

**AMBUS®60Classic**  
**Holder for Class CC fuse links**

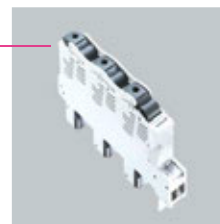
UL 4248-4  
3-pole  
For Class CC fuse links, in acc. with UL 248-4.  
LED: 110 - 600V AC  
Suitable for mounting on 60mm systems with undrilled busbars.  
Combination base accommodates busbars 5 and 10mm thick.

Screwless conductor connections  
Complies with IEC: Cu 1.5 - 6mm<sup>2</sup> (f)  
Complies with UL/CSA: AWG 16 - AWG 10 (str)



Size	Class CC
Rated voltage	600V AC
Rated current	30A
Conditional rated short circuit current	200kA

**SECUR®60Classic**  
**PowerLiner**  
**Bus-mounting in-line fuse switch disconnectors for**  
**D0 and cylindrical fuse links**



VDE 0660 part 107 / EN 60947-3 / IEC 60947-3

1/3-pole switching

For D0 fuse links in acc. with IEC 60269-3 and cylindrical fuse links in acc. with IEC 60269-2.

LED: 110 - 400V AC or 55 - 250V DC

Suitable for mounting on 60mm systems with undrilled busbars.

Cable connections at bottom.

Reversible combination base accommodates busbars 5 and 10mm thick.

Fuses can be inserted into associated sockets; the fuses can be fitted with gauge rings if D0 fuses are used.

Captive fuse carrier.

Fuse may only be changed if the circuit has been fully interrupted by opening the switch lever.

Operator-independent busbar, fuse and switch mechanism contact.

Safe from finger-touch even when the switch lever is open.

Box terminals for conductor connection:

Cu 1.5 - 6mm<sup>2</sup> (sol(r))

Cu 1.5 - 16mm<sup>2</sup> (f)

Cu 1.5 - 16mm<sup>2</sup> (f+AE)

Pilot switch to indicate the switch position:

1 changeover switch

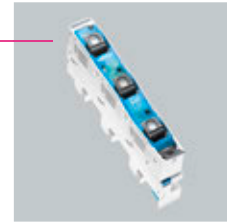
Rated operating voltage (rated operating current) 250V AC (5A).

Type	for D0 fuses	for cylindrical fuses
		10 x 38
Type of current	AC (50Hz), DC	AC (50/60Hz)
Rated operating voltage (U <sub>e</sub> )	400V AC 110V DC (2-pole) 48V DC (1-pole)	up to 660/690V AC
Rated insulation voltage (U <sub>i</sub> )	800V	800V
Rated surge withstand capacity (U <sub>imp</sub> )	6kV	6kV
Rated operating current (I <sub>e</sub> )*	63A	up to 32A
Conditional rated short-circuit current**	50kA (AC) 8kA (DC)	50kA
Permissible power dissipation per phase for individual fuses without side modules in operation or for fuse groupings with side modules.	5.5W	3W

\* When several devices are used side-by-side, the rated load factor specified according to IEC/EN 61439-2, table 101, should be observed. The distance to earthed parts must be at least 9mm.

\*\* Type tested with fuses of characteristic gL/gG.

**SECUR®60Classic**  
**EasyLiner**  
**Bus-mounting switch disconnecter with fuses for**  
**D0 fuse links**



VDE 0660 Part 107 / EN 60947-3 / IEC 60947-3

3-pole switching

For D0 fuse links in acc. with IEC 60269-3.

LED: 110 - 400V AC or 55 - 250V DC

For mounting on a 60mm system with undrilled busbars.

Outgoing connection at top or bottom

Combination base accommodates busbars 5 and 10mm thick.

Fuses can be inserted in the appropriate holders. D0 fuses can be equipped with adapter sleeves.

Captive fuse carrier.

Fuse replacement is only possible after the circuit has been completely disconnected.

User-independent contacting of busbars, fuses and switching mechanisms.

Shock protection assured even when drawer is open

Easy mounting thanks to spring-loaded terminals

Pilot switch for indicating the switch setting:

1 changeover switch

Rated operating voltage (rated operating current) 250V AC (5 A).

Cu 1.5 - 16mm<sup>2</sup> (rm, f)

Cu 1.5 - 10mm<sup>2</sup> (f+AE)

Cu 1.5 - 16mm<sup>2</sup> (re)

Type	for D0 fuse links
Type of current	AC (50 Hz)
Max. rated operating voltage (U <sub>e</sub> )	400V AC
Rated insulation voltage (U <sub>i</sub> )	500V
Rated surge withstand capacity (U <sub>imp</sub> )	6kV
Rated operating current (I <sub>e</sub> )*	63A
Conditional rated short-circuit current**	50kA (AC)
Permitted power dissipation per phase for individually operating fuses without side modules, or for groups of fuses with side modules	5.5W
* When several devices are used side-by-side, the rated load factor specified in IEC/EN 61439-2, table 101, must be observed. The distance from earthed parts must be at least 9mm.	
** Type tested with fuse links of operating class gL/gG	

### CUSTO®60Classic D0 bus-mounting fuse base

3-pole

60mm distance between busbar centres

Can be used with combination base for busbars 5 and 10mm thick in the 60mm system.

For D0 fuse links and sleeve fitting inserts in acc. with IEC 60269-3.

When used with special retaining springs and special gauge rings, also suitable for D01.

Box terminals:

Cu 1.5 - 2mm<sup>2</sup> (f, f+AE), Cu 1.5 - 10mm<sup>2</sup> (sol(r))

With 36mm wide version, offers enhanced lead placement and heat dissipation.



### TRITON®Panel D0 mounted fuse base

1/3-pole

For D0 fuse links and sleeve fitting inserts in acc. with IEC 60269-3.

Box terminals:

Cu 1.5 - 35mm<sup>2</sup> (f, f+AE), Cu 1.5 - 10mm<sup>2</sup> (sol(r))



### CUSTO®Panel D0 mounted fuse base

1/3-pole

For D0 fuse links and sleeve fitting inserts in acc. with IEC 60269-3.

Clip-on mounting for EN 60715 mounting rails

Dual-function terminal:

Cu 1.5 - 35mm<sup>2</sup> (f, f+AE)



### Rated values according to IEC 60269-3

Size	D01	D02
Type of current	AC (50Hz) / DC	AC (50Hz) / DC
Rated voltage	400V AC / 250V DC	400V AC / 250V DC
Rated current	16A	63A
Conditional rated short circuit current	50kA (AC) 8kA (DC)	50kA (AC) 8kA (DC)
For fuses with power dissipation per phase up to	2.5W	5.5W

**CUSTO®60Classic  
D bus-mounting fuse base**

3-pole

60mm distance between busbar centres

Can be used with combination base for 5 and 10mm thick busbars in the 60mm system.

For D fuse links, ring fitting inserts and/or screw fitting inserts in acc. with IEC 60269-3.

Both types have same external shape.

Box terminals:

DII Cu 1.5 - 25mm<sup>2</sup> (f, f+AE), Cu 1.5 - 10mm<sup>2</sup> (sol(r))

DIII Cu 1.5 - 35mm<sup>2</sup> (f, f+AE), Cu 1.5 - 10mm<sup>2</sup> (sol(r))



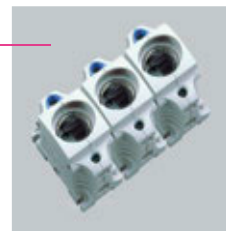
**TRITON®Panel  
D0 mounted fuse base**

1-/3-pole

For D fuse links, ring fitting inserts and/or screw fitting inserts in acc. with IEC 60269-3.

Box terminals:

Cu 1.5 - 35mm<sup>2</sup> (f, f+AE), Cu 1.5 - 10mm<sup>2</sup> (sol(r))



**Rated values according to IEC 60269-3**

Size	DII	DIII
Type of current	AC (50Hz) / DC	AC (50Hz) / DC
Rated voltage	500V AC / DC	500V AC / DC*
Rated current	25A	63A
Conditional rated short circuit current	50kA (AC) 8kA (DC)	50kA (AC) 8kA (DC)
For fuses with power dissipation per phase up to	4.0W	7.0W
* in acc. with VDE 0636-3011 in acc. with IEC 60269-3 also 690V AC / 600V DC		

## SECUR®Panel Switch disconnectors for D0 fuse links



VDE 0660 part 107/EN 60947-3/IEC 60947-3

VDE 0638

1, 2- and 3-pole / 1 and 3-pole + N as required

N-conductor leads at switch-on, trails at switch-off.

LED: 110 - 400V AC or 55 - 250V DC

Shock protection in acc. with EN 50274/BGV A3.

For D0 fuse links in acc. with IEC 60269-3.

Reducer for D01 fuses.

Clip-on mounting for EN 60715 mounting rails.

Captive fuse carrier.

Fuse may only be changed if the circuit has been fully interrupted by opening the switch lever.

Operator-independent fuse contact.

Safe from finger-touch even when switch levers are open.

Dual-function terminal:

Cu 1.5 - 35mm<sup>2</sup> (f, f+AE)

Pilot switch to indicate the switch position:

1 N/O, 1 N/C

400V AC (2A), 24V DC (6A)

Type	Standard
Size	D02
Type of current	AC (50Hz) DC
Max. rated operating voltage (U <sub>e</sub> )	400V AC / 460V AC 130V DC
Rated insulation voltage (U <sub>i</sub> )	500V
Rated surge withstand capacity (U <sub>imp</sub> )	6kV
Rated operating current (I <sub>e</sub> )	63A / 35A 63A
Utilisation category IEC 60947-3 all pole models 1 pole, 1 pole + N 3 pole, 3 pole + N 1 pole 2 pole	AC-22B 400V 63A AC-23B 266V 35A AC-23B 460V 35A DC-22B 65V 63A DC-22B 130V 63A
Utilisation category VDE 0638	AC-22 400V 63A
Conditional rated short circuit current*	50kA (AC) 8kA (DC)
For fuses with power dissipation per phase up to	5.5W
* Type tested with fuses of characteristic gL/gG. 400V AC / 250V DC - 63A or 440V AC - 35A.	

**AMBUS®Panel  
Holder for cylindrical fuses 10 x 38, 14 x 51, 22 x 58**



1, 2- and 3-pole, 1 and 3-pole + N as required  
LED: 12 - 72V AC/DC resp. 110 - 690V AC/DC resp. 400 - 1000V DC

Pilot switch:  
1 changeover switch 250V AC (5A), 30V DC (4A)  
Flat lug 2.8x0.5mm (e.g. DIN 46 245)

Clip-on mounting on EN 60715 mounting rail

Conductor terminals:

Size	Conductor terminals according to IEC		Conductor terminals according to IEC UL / CSA	
10x38	1x Cu 0.75 - 25mm <sup>2</sup>	f, f+AE	1x AWG 18 - AWG 4	str
	2x Cu 0.75 - 10mm <sup>2</sup> *	f, f+AE	2x AWG 18 - AWG 6 *	str
Integrated N-pole	1x Cu 1.5 - 10mm <sup>2</sup>	f, f+AE		
14x51	1x Cu 1.5 - 35mm <sup>2</sup>	f, f+AE	1x AWG 14 - AWG 2	str
22x58	1x Cu 4 - 50mm <sup>2</sup>	f, f+AE	1x AWG 10 - AWG 1/0	str

\* 2 identical conductors next to each other in the contact position

Overall size		10 x 38 PV	10 x 38	14 x 51	22 x 58
According to standard	IEC/EN	IEC 60269-2	IEC 60947-3, EN 60947-3, VDE 0660 part 107		
	UL/CSA	UL 4248-1, 4248-18	UL 4248-1		
Current type		DC	AC (50/60Hz)/DC	AC (50/60Hz)/DC	AC (50/60Hz)/DC
Maximum rated operating voltage (U <sub>e</sub> )	IEC/EN	1000V DC	690V AC	690V AC	690V AC
	UL/CSA	1000V DC	600V AC / DC	600V AC / DC	600V AC / DC
Rated insulation voltage (U <sub>i</sub> )	IEC/EN	1000V DC	800V	800V	800V
Rated surge withstand capacity (U <sub>imp</sub> )	IEC/EN	6kV	6kV	6kV	6kV
Rated operating current (I <sub>e</sub> )	IEC/EN	30A	32A	50A	100A /
	UL/CSA	30A	30A	50A / 40A	80A
Application category, version 1P, 1P+N, 2P	IEC/EN	-	AC-22B (400V)	AC-22B (400V)	AC-20B (690V)
	UL/CSA	only applicable as fuse holder			
Application category, version 3P, 3P+N	IEC/EN	-	AC-22B (690V)	AC-21B (690V)	AC-20B (690V)
	UL/CSA	only applicable as fuse holder			
Conditional rated short-circuit current (AC) version 1P, 1P+N, 2P	IEC/EN	20kA**	100kA (500V)*	100kA (400V)*	100kA (500V)*
	UL/CSA	33kA	100kA (600V)	100kA (600V)	100kA (600V)
Conditional rated short-circuit current (AC) version 3P, 3P+N	IEC/EN	-	100kA (500V)*	100kA (400V)*	100kA (500V)*
	UL/CSA	-	100kA (600V)	100kA (600V)	100kA (600V)
Allowable power dissipation for each fuse, standard version		-	3W (gG)	5W (gG)	9.5W (gG)
Allowable power dissipation for each fuse, semi-conductor protection version		4.0W (gPV)	4.3W (aR/gR) (10mm <sup>2</sup> , 25A)	6.5W (aR/gR) (25mm <sup>2</sup> , 40A)	11W (aR/gR) (50mm <sup>2</sup> , 80A)

\* Type tested with fuses of characteristic gL/gG (IEC 60269-2)

\*\* Type tested with fuses of characteristic gPV (IEC 60269-6)

### AMBUS®Panel Holder for Class CC fuse links

UL 4248-4  
1, 2- and 3-pole  
LED: 12 - 72V AC resp. 110 - 600V AC  
Clip-on mounting for EN 60715 mounting rails



Conductor terminals:

Conductor terminals according to IEC		Conductor terminals according to UL / CSA	
1x Cu 0.75 - 25mm <sup>2</sup>	f, f+AE	1x AWG 18 - AWG 4	str
2x Cu 0.75 - 10mm <sup>2</sup> *	f, f+AE	2x AWG 18 - AWG 6*	str

\* 2 identical conductors next to each other in the contact position

Size	Class CC
Rated voltage	600V AC / DC
Rated current	30A
Conditional rated short circuit current AC	200kA

### AMBUS®Panel Holder for Class J fuse links

UL 4248-4  
1-, 2- and 3-pole  
LED: 110 - 600V AC  
Clip-on mounting for EN 60715 mounting rails



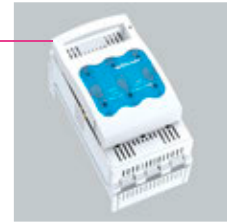
Conductor terminals:

Size	Conductor terminals according to IEC		Conductor terminals according to UL / CSA	
0 - 30A (21x57)	1x Cu 0.75 - 1mm <sup>2</sup>	f, f+AE	1x AWG 18 - AWG 1	str
	1x Cu 1.5 - 50mm <sup>2</sup>	f, f+AE		
	2x Cu 0.75 - 1mm <sup>2</sup> *	f, f+AE	2x AWG 18 - AWG 6*	str
	2x Cu 1.5 - 10mm <sup>2</sup> *	f, f+AE		
31 - 60A (27x60)	1x Cu 2.5 - 50mm <sup>2</sup>	f, f+AE	1x AWG 14 - AWG 1	str
	2x Cu 2.5 - 16mm <sup>2</sup> *	f, f+AE	2x AWG 14 - AWG 6*	str

\* 2 identical conductors next to each other in the contact position

Size	0 - 30A	31 - 60A
Rated voltage	600V AC / DC	600V AC / DC
Rated current	30A	60A
Conditional rated short circuit current AC	200kA	200kA

**QUADRON®60Classic  
Holder for Class J fuses**



UL 4248-8  
Busbar-mounting  
3-pole  
Shock-protected  
For Class J fuse links in acc. with U L248-8.

Busbar-mounting version:  
For mounting on 60mm system to busbars with a thickness of 5 or 10mm, TT and TTT section bars  
Screwless busbar contacting; Gentle snapping onto busbar systems.  
Conversion from outgoing connection top to bottom by changing connection modules.

Panel-mounting version:  
For screwing to mounting plate and fitting to 2 mounting rails EN 60715 at a distance of 125 or 150mm.

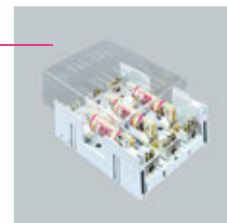
Conductor connections:

Size	Conductor connections according to IEC	Conductor connections according to UL /CSA
1 - 30A (21 x 75)	Cu 4 - 35mm <sup>2</sup> (re/rm, f, f+AE*)	Cu AWG 12-AWG 2/0, str
31 - 60A (27 x 60)	Cu 4 - 35mm <sup>2</sup> (re/rm, f, f+AE*)	Cu AWG 12-AWG 2/0, str
61 - 100A (29 x 117)	Cu 4 - 35mm <sup>2</sup> (re/rm, f, f+AE*)	Cu AWG 12-AWG 2/0, str
101 - 200A (41 x 146)	Cu 35 - 150mm <sup>2</sup> (re/rm, f, f+AE*)	Cu AWG 2-MCM 300, str

\* possible reduction of the maximum conductor cross-sections necessary

Size	1 - 30A	31 - 60A	61 - 100A	101 - 200A
Rated voltage	30A	60A	100A	200A
Rated current	600V	600V	600V	600V
Conditional rated short circuit current AC	200kA	200kA	200kA	200kA

**QUADRON®60Classic  
Holder for Class J fuses**



UL 4248-8  
Panel-mounting and busbar-mounting  
3-pole  
Shock protected by clip-on covers  
For Class J fuse links in acc. with U L248-8.

Panel-mounting version:  
100A, 200A: mounting on 2 EN 60715 mounting rails with a spacing of 125 or 150mm using the mounting set.

Busbar-mounting version:  
For mounting on 60mm system to busbars with a thickness of 10mm, TT and TTT section bars.  
Screwless busbar contacting; Gentle snapping onto busbar systems.  
Conversion from outgoing connection top to bottom by changing connection modules.

Conductor connections:

Size	Conductor connections according to IEC	Conductor connections according to UL /CSA
210 - 400A (54x181)	Cu 16 - 300mm <sup>2</sup> (s(r), f, f+AE*)	Cu AWG 4-MCM 600, str

\* possible reduction of the maximum conductor cross-sections necessary

Size	201 - 400A	
Rated voltage	600V AC / DC	
Rated current	400A	
Conditional rated short circuit current AC	Panel-mounting version	200kA
	Busbar-mounting version	65kA

## SECUR®Panel Holder for cylindrical fuses 10 x 85

1-pole  
1500V DC / 1000V AC  
For fuse links IEC 60269-2 and -6, max. 6.0W.  
Snap fastening onto mounting rail EN 60715.



## QUADRON®60Classic NH bus-mounting fuse base

3-pole  
Suitable for mounting on a 60mm system with undrilled busbars by locking it into place.  
Refitting a connection for top or bottom.



Conductor connections:

Size	Screw connection	Clamp connection	Clamp space terminal box	Prism connection	Other connections
00	M8 70mm <sup>2**</sup>	Cu 1.5 - 70mm <sup>2</sup> rm, f+AE, la. Cu 12x (1 - 10) mm	Cu 1.5 - 70mm <sup>2</sup> f, f+AE Cu 1.5 - 70mm <sup>2</sup> re, rm 2x10 - 25mm <sup>2</sup> f+AE, Identical conductors, side by side, square crimping 2x10 - 35mm <sup>2</sup> f, identical conductors, side by side la. Cu 10 - 13mm wide Clamp space 13 x 13mm	Cu, Al* 1 - 70mm <sup>2</sup> rm, sm, f, f + AE	Tunnel terminal 3 x Cu 1.5 - 16mm <sup>2</sup> rm, f+AE Md 3 Nm
1	M10 120mm <sup>2**</sup>	Cu 70 - 150mm <sup>2</sup> rm, f, f+AE, la. Cu 18 x (2 - 14) mm	Cu 35 - 185mm <sup>2</sup> f Cu 35 - 15mm <sup>2</sup> rm Cu 35 - 120mm <sup>2</sup> f+AE la. Cu 15.5 - 24mm wide Clamp space 24.5 x 21mm	Cu, Al* 70 - 150mm <sup>2</sup> rm, sm, f, f + AE	Double prism Cu, 2 x 35 - 70mm <sup>2</sup> rm, sm, f+AE 2 x 70mm <sup>2</sup> f

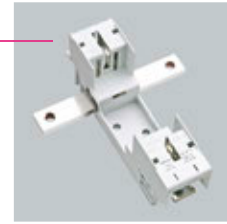
\* Connections with aluminium conductors are not maintenance-free (see page 8/2).

\*\* Copper conductor for corresponding rated currents according to IEC/EN 60947-1.

Size	00	1
Type of current	AC (50 - 60Hz) / DC	AC (50 - 60Hz) / DC
Rated operating voltage	690V AC / 440V DC	690V AC / 440V DC
Rated current*	160A	250A
For NH fuses in acc. with IEC 60269-2 with power losses per phase up to	12W	32W

\* When continuously operating a number of devices next to each other, pay attention to the rated loading factor in acc. with IEC/EN 61439-2, Table 101.

**QUADRON® Panel  
NH fuse bases for photovoltaic applications, 1-pole**



Design  
Version with screw on both sides  
Version with internal busbar connection  
For NH fuse links in acc. with IEC 60269-6.

Conductor connections:

Size	Busbar outgoing connection	Screw connector
1XL	1/2 x 30 x 10	M 10
2XL/3L	1/2 x 40 x 10	M 12

Installed size	1XL	2XL/3L
Type of current	AC (50 - 60 Hz) / DC	AC (50 - 60Hz) / DC
Rated voltage	1000V AC / 1500V DC	1000V AC / 1500V DC
Rated current	250A	600A
Max. power dissipation of fuse	50W	100W

Information on current capacity and rated diversity factors is available on request or at [www.woehner.com](http://www.woehner.com)

**QUADRON®  
NH bus-mounting fuse bases**



For NH fuse links in acc. with IEC 60269-2.  
1/3-pole  
Size 00 to 160A / size 1 to 250A / size 2 to 400A / size 3 to 630A  
690V~/440V-  
Max. power dissipation:  
Size 00: 12W / size 1: 32W / size 2: 45W / size 3: 60W

Outgoing contacts:

- size 00 screw M8
- size 00 clamp Cu 1.5 - 70mm<sup>2</sup>, s(r), f+AE, fl. Cu max. 12x10mm
- size 00 tunnel terminal 3 x Cu 16mm<sup>2</sup>, each 2x M5
- size 1 screw M10
- size 2 screw M10
- size 3 screw M12

**QUADRON®  
NH fuse bases**



For NH fuse links in acc. with IEC 60269-2.  
1/3-pole  
Size 00 to 160A / size 1 to 250A / size 2 to 400A / size 3 to 630A  
690V~/440V-  
Max. power dissipation:  
Size 00: 12W / size 1: 32W / size 2: 45W / size 3: 60W

Outgoing contacts:

- size 00 screw M8, Md 12 - 14Nm
- size 00 clamp Cu 1.5 - 70mm<sup>2</sup>, s(r), f+AE, fl. Cu max. 12x10mm, Md 3Nm
- size 1 screw M10, Md 18 - 22Nm
- size 1 clamp 2xM6, Md 8 - 10Nm, internal width 17mm
- size 2 screw M10, Md 18 - 22Nm
- size 3 screw M12, Md 28 - 32Nm

## QUADRON®60Classic NH fuse switch disconnecter



### Panel- and busbar-mounting

3-pole switching

VDE 0660 part 107/EN 60947-3/IEC 60947-3

Shock protection with integrated positive action closure and arc chambers.

Fuses with mechanical retention in disconnecter lid.

For NH fuse links in acc. with IEC 60269-2 Size 000 – 00 – 1 – 2 – 3 – 4A.

Front-side degree of protection IP30 as per EN 60529, degree of protection near terminal depends on installation.

Test openings in disconnecter lid self-closing.

Recommended mounting position: handle at top.

Busbar-mounting version:

60mm system (sizes 000, 00, 1, 2, 3)

Screwless busbar contacting.

Locks on and makes contact easily and securely.

Refitting a connection for top or bottom is easy.

Panel-mounting version:

– size 000: Fixing on 1 EN 60715 mounting rail with 112.5 or 125mm spacing using fast fixing plate.

– size 00, 1, 2: Fixing on 2 EN 60715 mounting rails with 125 or 150mm spacing using fixing kit.

Size	000	00
Type of current	AC (50 - 60Hz)	AC (50 - 60Hz)
	DC	DC
Rated operating voltage (U <sub>e</sub> )**	690V AC	690V AC
	440V DC	440V DC
Rated insulation voltage (U <sub>i</sub> )**	800V	800V
Rated surge withstand capacity (U <sub>imp</sub> )**	6kV	6kV
Max. rated operating current (I <sub>e</sub> )*	125A	160A
Conditional rated short-circuit current***	50kA	50kA
For NH fuse links in acc. with IEC 60269-2 with power losses per phase up to	9W	12W
* When continuously operating a number of devices next to each other, pay attention to the rated loading factor in acc. with IEC/EN 61439-2, Table 101.		
** Electromechanical fuse monitoring AC 24 - 690V, DC 24 - 250V (mains connections). DC specifications: 2 current paths (L1, L3) in series.		
*** Type tested with fuses of characteristic gL/gG.		

**QUADRON®60Classic  
NH fuse switch disconnecter**



Size	1	2	3	4 a
Type of current	AC (50 - 60Hz)	AC (50 - 60Hz)	AC (50 - 60Hz)	AC (50 - 60Hz)
	DC	DC	DC	DC
Rated operating voltage (U <sub>e</sub> )**	690V AC	690V AC	690V AC	690V AC
	440V DC	440V DC	440V DC	440V DC
Rated insulation voltage (U <sub>i</sub> )**	800V	800V	800V	800V
Rated surge withstand capacity (U <sub>imp</sub> )**	6kV	6kV	6kV	8kV
Rated operating current (I <sub>e</sub> )*	250A	400A	630A	1600A
Conditional rated short-circuit current***	80kA	50kA	50kA	50kA
For NH fuse links in acc. with IEC 60269-2 with power losses per phase up to	23W	34W	48W	140W
* When continuously operating a number of devices next to each other, pay attention to the rated loading factor in acc. with IEC/EN 61439-2, Table 101.				
** Electro-mechanical fuse monitoring AC 24 - 690V, DC 24 - 250V (mains connections). DC specifications: 2 current paths (L1, L3) in series.				
*** Type tested with fuses of characteristic gL/gG.				

NH switch disconnecter, size NH 1, arc chamber retrofit package for higher utilisation category as an accessory.

Pilot switch for lid position indicator:

Size 00: 1 (changeover) switch can be used.

Size 000, 1, 2, 3: 2 (changeover) switches can be used.

Connections by means of lugs for tabs 2.8 x 0.5mm (e.g. DIN 46245)

Rated operating voltage (rated operating current):

250V AC (5A), 30V DC (4A).

Fuse monitor (size 00, 1, 2, 3):

Use fuses with live grip lugs.

For electronic fuse monitoring see [www.woehner.com](http://www.woehner.com)

Electro-mechanical fuse monitoring:

Integrated auxiliary switch: 1 N/O + 1 N/C

Rated operating voltage (rated operating current):

Outgoing auxiliary contacts, conductor connection 4-pole plug 1.5mm<sup>2</sup> re / f/AE

Rated operating voltage (rated operating current):

24V AC (2A), 230V\* AC (0.5A)

24V DC (1A), 48V DC (0.3A), 60V DC (0.15A)

Circuit diagram on page 9/49.

\* Level of soiling 2, excess voltage category II

## QUADRON® 60Classic NH fuse switch disconnecter



Conductor connections:

Size	Screw connection	Clamp connection	Clamp space for flat conductor	Prism connection	Other connections
000	–	–	2.5 - 50mm <sup>2</sup> f 1.5 - 50mm <sup>2</sup> f+AE, sol(r)/s(r) fl. Cu 6 - 9mm wide terminal space 10 x 10mm	–	
00	M8 70mm <sup>2</sup> **	Cu 1.5 - 70mm <sup>2</sup> s(r), f+AE, fl. Cu 12 x (1 - 10)mm	Cu 1.5 - 70mm <sup>2</sup> , f, f+AE Cu 1.5 - 70mm <sup>2</sup> , sol(r), s(r) 2x10 - 25mm <sup>2</sup> f+AE, identical conductors, aligned side by side, square crimping 2x6 - 50mm <sup>2</sup> f, identical conductors, aligned side by side, fl. Cu 10 - 13mm wide terminal space 13 x 13mm	Cu, Al* 16 - 70mm <sup>2</sup> s(r), s(s), f, f + AE	tunnel terminal 3 x Cu 1.5 - 16mm <sup>2</sup> s(r), f+AE Md 3 Nm
1	M10 120mm <sup>2</sup> **	Cu 70 - 150mm <sup>2</sup> s(r), f, f+AE, fl. Cu 18 x (2 - 14)mm	Cu 70 - 185mm <sup>2</sup> f Cu 35 - 150mm <sup>2</sup> rm Cu 35 - 120mm <sup>2</sup> f+AE la. Cu 15.5 - 24mm wide Clamp space 24.5 x 12mm min. clamp space height 3mm	Cu, Al* 35 - 150mm <sup>2</sup> rm, sm, f, f + AE	double prism Cu, 2 x 35 - 70mm <sup>2</sup> s(r), s(s), f+AE 2 x 70mm <sup>2</sup> f
2	M10 240mm <sup>2</sup> **	Cu 120 - 240mm <sup>2</sup> s(r), f+AE, fl. Cu 21 x (1 - 14)mm	–	Cu, Al* 50 - 150/ 120 - 240mm <sup>2</sup> s(r), s(s), f, f + AE	double prism Cu, 2 x 70 - 120mm <sup>2</sup> s(r), s(s), f+AE
3	M12 2x 185mm <sup>2</sup> **	Cu 150 - 300mm <sup>2</sup> s(r), f+AE, fl. Cu 25 x (1 - 13)mm	–	Cu, Al* 150 - 300mm <sup>2</sup> s(r), s(s), f, f + AE	double prism Cu, 2x150/185mm <sup>2</sup> s(r), s(s), f+AE
4a	2xM12	–	–	–	–

\* Connections with aluminium conductors are not maintenance-free (see page 8/2).

\*\* Copper conductor for appropriate rated currents according to IEC/EN 60947-1.

Comb-type busbars and connection terminals for QUADRON®60Classic NH, size 000/00:



Recommended assembly situation: Feed with the comb-type busbar in case of NH-LTS from below:

In case of differing fitting positions, reductions must be regarded.

Protection type: IP 20 frontally in connection with NH-LTS, comb-type busbars and connections terminals possible.

Protection type depends on assembly in the connection area.

Shock protection: According to EN 50274/BGV A3.

Rated operating voltage: 690V AC /440V DC.

Rated insulation voltage: 800V at contamination level 2; 690V at contamination level 3.

Rated surge withstand capacity: 6kV.

Rated surge withstand capacity: 25kA/400V.

Rated short-time withstand capacity: 12.5kA - 100ms/400V.

Size 000: connection terminal: Cu 6 - 35mm<sup>2</sup> sol(r), s(r); Cu 4 - 25 f, f+AE (max. connection diameter 11mm).

Comb-type busbar cross-section: 35mm<sup>2</sup>.

Size 00: Connection terminal: Cu 25 - 95mm<sup>2</sup> sol(r), s(r); Cu 35 - 95mm<sup>2</sup> s(s) ; Cu 25 - 70mm<sup>2</sup> f+AE (quadratic or trapezoid pressed, max. connection diameter 14mm).

Rated current: supply centre 1 x 260A / 2 x 260A; supply side 1 x 130A (see table).

Rated current according to test assembly EN 60947-3 at an environment temperature of 25°C:

Assembly	Position	Ingoing feeder Comb-type busbar	Operating current	NH-fuse gL/gG	Outgoing feeder NH-LTS
Double centre feed with 95mm <sup>2</sup> , 4 NH-LTS size 00, 2 x 260A with connection terminals	Exterior	–	140A	160A	70mm <sup>2</sup>
	Interior	95mm <sup>2</sup>	120A	125A/160A	70mm <sup>2</sup>
	Interior	95mm <sup>2</sup>	120A	125A/160A	70mm <sup>2</sup>
	Exterior	–	140A	160A	70mm <sup>2</sup>
Centre feed with 95mm <sup>2</sup> , 3 NH-LTS size 00, 1 x 260A with connection terminals	Exterior	–	50A	63A	16mm <sup>2</sup>
	Interior	95mm <sup>2</sup>	160A	160A	70mm <sup>2</sup>
	Exterior	–	50A	63A	16mm <sup>2</sup>

The allocation of conductor cross-sections and current capacities according to national and international specifications as well as installation conditions must be regarded.

## QUADRON® 60Classic NH bus-mounting switch disconnecter with fuses



### Panel-mounting and busbar-mounting

VDE 0660 part 107 / EN 60947-3 / IEC 60947-3

3-pole switching, double-breaking main contacts.

For NH fuse links in acc. with IEC 60269-2.

Safe, operator-independent switching, lockable in neutral position, with up to 3 padlocks.

Can be used as a mains disconnecter as per IEC/EN 60204-1 (main switch).

Also as an emergency switch in combination with the red-yellow door coupling twist handle.

Additional air gap can be seen by removing the lid, including fuses.

Shock protection complies with EN 50274.

Fuse links are mechanically locked in the lid.

Front-side degree of protection IP20 as per EN 60529, degree of protection near terminal depends on installation.

Test openings in lid are self-closing.

Recommended mounting position: handle at top.

Busbar-mounting version:

Mounting on a 60mm system (size 00/1).

Screwless busbar contacting.

Gentle snapping onto busbar systems.

Panel-mounting version:

– size 00/1: to be screwed on to mounting plate

Conductor connections:

Size	Screw connection	Clamp connection	Clamp space for flat conductor	Prism connection	other connections
NH00	–	–	Cu 1.5 - 70mm <sup>2</sup> , f, f+AE Cu 1.5 - 70mm <sup>2</sup> , sol(r), s(r) 2 x (10 - 25)mm <sup>2</sup> f+AE, identical conductors, aligned side by side, square crimping, 2 x (6 - 50) mm <sup>2</sup> f, identical conductors, aligned side by side, fl. Cu 10 - 13mm wide terminal space 13 x 13mm	–	connection terminal Cu, 35 - 95mm <sup>2</sup> sm Cu, 25 - 70mm <sup>2</sup> f+AE Cu, 25 - 120mm <sup>2</sup> s(r)
NH1	M10 120mm <sup>2</sup> **	Cu 70 - 150mm <sup>2</sup> s(r), f, f+AE, fl. Cu 18 x (2 - 14) mm	Cu 70 - 185mm <sup>2</sup> , s(r), Cu 35 - 150mm <sup>2</sup> rm Cu 35 - 120mm <sup>2</sup> f+AE la. Cu 15.5 - 24mm wide terminal space 24.5 x 21mm min. clamp space height 3mm	Cu, Al* 35 - 150mm <sup>2</sup> rm, sm, f, f+AE	double prism Cu, 2 x 35 - 70mm <sup>2</sup> rm, sm, f+AE 2 x 70mm <sup>2</sup> f

\* Connections with aluminium conductors are not maintenance-free (see page 8/2).

\*\* Copper conductor for appropriate rated currents according to IEC/EN 60947-1

**QUADRON® 60Classic  
NH bus-mounting switch disconnecter with fuses**



Size	00	1
Type of current	AC (50 - 60Hz)	AC (50 - 60Hz)
	DC	
Max. rated operating voltage (U <sub>e</sub> ) **	690V AC, 440V DC	690V AC
Rated insulation voltage (U <sub>i</sub> ) **	800V	800V
Rated surge withstand capacity (U <sub>imp</sub> ) **	6kV	6kV
Max. rated operating current (I <sub>e</sub> )*	125A	250A
Conditional rated short-circuit current with fuses gG	50kA size 00; 125A - 690V	50kA size 1; 250A - 690V
For NH fuse links in acc. with IEC 60269-2 with power losses per phase up to	10W	23W
* When continuously operating a number of devices next to each other, pay attention to the rated loading factor in acc. with IEC/EN 61439-2, Table 101.		
** Electronic fuse monitoring 2/3 x AC 65 - 690V, DC 65 - 250V (L1, L3) (mains connections, U <sub>imp</sub> 6 kV, level of soiling 3).		

Pilot switch for lid position indication  
 1 (changeover) switch can be used  
 Connections by means of receptacles for tabs 2.8 x 0.5mm (e.g. DIN 46245)  
 Rated operating voltage (rated operating current)  
 250V AC (5A), 30V DC (4A)

Electronic fuse monitoring:  
 – No auxiliary power required, mains voltage (L1 and L3) must be present  
 – Test button to simulate fuse failure  
 – Automatic reset after fuse replacement  
 Green LED on: ready  
 Red LED on: Fuse has blown in at least one phase, no display if mains voltage not present  
 Output (auxiliary contacts):  
 – N/O / N/C, isolated, a.c. 3A/250V\*, d.c. 5A/30V, d.c. 0.2A/250V\*  
 – Conductor connection 4-pole plug up to 1.5mm<sup>2</sup> sol(r)/f/AE  
 Circuit diagram on page 9/25  
 \* Level of soiling 2, excess voltage category II

Door coupling twist handle IP 66, lockable in off position, with up to 3 padlocks, with door interlock that can be defeated.

## QUADRON®60Classic Bus-mounting switch disconnecter



### Panel-mounting and busbar-mounting

VDE 0660 part 107 / EN 60947-3 / IEC 60947-3

3-pole switching, double-breaking main contacts.

Operator-independent, Safe switching, lockable with 3 padlocks in OFF position.

Shock protection complies with EN 50274.

Can be used as a mains disconnecter as per IEC/EN 60204-1 (main switch).

Also as an emergency switch in combination with the red-yellow door coupling twist handle.

As main switch or emergency stop switch only with the following maximum operating currents:

Design 160A: 125A/690V AC; design 320A: 280A/400 AC, 250A/690V AC.

Front-side degree of protection IP20 as per EN 60529, degree of protection near terminal depends on installation.

Recommended mounting position: handle at top.

Busbar-mounting version:

Mounting on a 60mm system (160A, 320A).

Screwless busbar contacting.

Gentle snapping onto busbar systems.

Panel-mounting version:

– (160A, 320A): to be screwed on to mounting plate.

Size	160A	320A
Type of current	AC (50 - 60Hz)	AC (50 - 60Hz)
Max. rated operating voltage ( $U_e$ )	690V AC	690V AC
Rated insulation voltage ( $U_i$ )	800V	800V
Rated surge withstand capacity ( $U_{imp}$ )	8kV	8kV
Max. rated operating current ( $I_e$ )*	200A	320A
Rated short-circuit making capacity ( $I_{cm}$ )	7kA (690V AC)	12kA (690V AC)
Short-circuit withstand capacity	4.5kA-1s (690V AC)	7kA (690V AC)
Conditional rated short-circuit current with series fuses gG	50kA size 00; 125A - 690V	50kA size 1; 250A - 690V

\* When continuously operating a number of devices next to each other, pay attention to the rated loading factor in acc. with IEC/EN 61439-2, Table 101.

Pilot switch for lid position indication

1 (changeover) switch can be used

Connections by means of receptacles for tabs 2.8 x 0.5mm (e.g. DIN 46245)

Rated operating voltage (rated operating current)

250V AC (5A), 30V DC (4A)

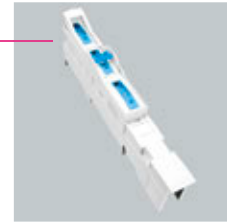
Door coupling twist handle IP 66, lockable in off position, with up to 3 padlocks, with door interlock that can be defeated.

Conductor connections:

Size	Screw connection	Clamp connection	Clamp space for flat conductor	Prism connection	Other connections
160A	–	–	Cu 1.5 - 70mm <sup>2</sup> , f, f+AE Cu 1.5 - 70mm <sup>2</sup> , sol(r), s(r) 2 x (10 - 25)mm <sup>2</sup> f+AE, identical conductors, side by side, square crimping, 2 x (6 - 50)mm <sup>2</sup> f, identical conductors, side by side fl. Cu 10 - 13mm wide terminal space 13 x 13mm	–	connection terminal Cu, 35 - 95mm <sup>2</sup> s(s) Cu, 25 - 70mm <sup>2</sup> f+AE Cu, 25 - 120mm <sup>2</sup> s(r)
320A	M10 185mm <sup>2</sup> 320A	Cu 70 - 150mm <sup>2</sup> s(r), f, f+AE, fl. Cu 18 x (2 - 14)mm 250A	Cu 70 - 185mm <sup>2</sup> f / 300A Cu 35 - 150mm <sup>2</sup> rm / 275A Cu 35 - 120mm <sup>2</sup> f+AE / 250A la. Cu 15.5 - 24mm wide / 300A Clamp space 24.5 x 21mm min. clamp space height 3mm	Cu, Al* 70 - 150mm <sup>2</sup> rm, sm, f, f+AE 250A	double prism Cu, 2 x 35 - 70mm <sup>2</sup> rm, sm, f+AE 2 x 70mm <sup>2</sup> f 250A

\* Connections with aluminium conductors are not maintenance-free (see page 8/2).

**QUADRON®60Classic**  
**QUADRON®100Energy**  
**NH in-line fuse switch disconnecter**



VDE 0660 part 107 / EN 60 947-3 / IEC 60 947-3

3-pole switching

Outgoing connection top and bottom.

Arc chamber.

For NH fuse links in acc. with IEC 60269-2 Size NH00.

Shock-protected even with lid open and in park position.

Mechanical fuse retention.

Degree of protection IP30 (front side), degree of protection near terminal depends on installation.

Connection contacts:

- M8 screw; 2x M5 clamp, 12mm clear width
- Prism clamp terminal Cu, Al\* 16 - 70mm<sup>2</sup> s(r), s(s), f +AE

(\* Connections with aluminium conductors are not maintenance-free (see page 8/2)

For 60mm distance between busbar centres:

- screwless busbar connection

For 100mm distance between busbar centres:

- screw-on connection to drilled busbars, screw M8
- mounting without drilling using a terminal clamp

Type	3-pole switching
Type of current	AC (50 - 60Hz)
Rated operating voltage (U <sub>e</sub> )**	690V AC
Rated insulation voltage (U <sub>i</sub> )**	1000V
Rated surge withstand capacity (U <sub>imp</sub> ) without fuse monitoring**	8kV
Rated operating current (I <sub>e</sub> )*	160A
Utilisation categories without fuse monitoring**	AC-22B (690V) AC-23B (400V) AC-23B (500V 125A)
Conditional rated short-circuit current***	50kA
For NH fuse links in acc. with IEC 60269-2 with power losses per phase up to	12W
* When continuously operating a number of devices next to each other, pay attention to the rated loading factor in acc. with IEC/EN 61439-2, Table 101.	
** Fuse monitoring U <sub>e</sub> , U <sub>i</sub> 400V AC, U <sub>imp</sub> 4kV, level of soiling: 2 (mains connections)	
*** Type tested with fuses of characteristic gL/gG.	

for screwing onto drilled busbars, screw M12

Pilot switch for lid position indication:

2 (changeover) switches can be used

Rated operating voltage (rated operating current) 250V AC (5A), 30V DC (4A)

Electronic fuse monitoring:

2 LEDs

with latching properties or remote reset, programmable using

2 changeover switches

2 x Cu 2.5mm<sup>2</sup> solid conductors, DIN 46 288 or

2 x Cu 1.5mm<sup>2</sup> stranded conductors with sleeves, DIN 46 228-1/-2/-3

The internal resistance of the measuring needle lies above the MOhm level and thereby meets

VDE requirements regarding contact voltage (>1000 Ohm/V)

To release turn off the upstream main switch.

Circuit diagram on page 9/25

## QUADRON®100Energy NH fuse block

### 100mm-System

3-pole

Up to 160A

Connection below and above.

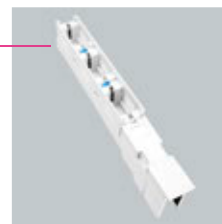
Busbar contact:

- for fixing to drilled busbars, M8 screw
- undrilled assembly clamp locks

Connection contacts:

- prism connection terminals Cu, Al\* 16 - 70mm<sup>2</sup> s(r), s(s), f +AE

\* Connections with aluminium conductors are not maintenance-free (see page 8/2).



## QUADRON®185Power NH fuse block

### 185mm-System power

3-pole

For NH fuse links in acc. with IEC 60269-2 Size NH 00, 1,2,3.

For screwing onto drilled busbars.

Optional mounting on undrilled busbars.

Cable connections at bottom.

Shock protection.

Connection space covers.

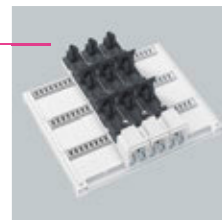
Busbar contact with screws:

Screw M12.

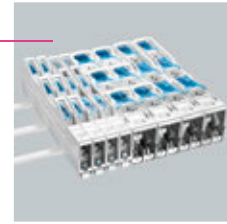
drill – less contact with clamp bracket.

busbars (10mm thick), profile bars.

Short-circuit capability up to 50kA with fuse links gL/gG.



**QUADRON®185Power  
NH in-line fuse disconnectors**



VDE 0660 Part 107 / EN 60947-3 / IEC 60947-3

1 and 3-pole switching

For NH fuse links in acc. with IEC 60269-2 Size NH 00, 1, 2, 3.

Mounting onto a 185mm system by screwing down onto drilled busbars, M 8 screw with Size 00 or M12 screw Sizes 1 - 3.

Optionally drill-free with clamp for busbars (10mm thick) and section busbars.

Turning the strip base for top or bottom cable connections.

Touch safe covers with fuse insertion guide.

Touch-safe protection even with the switch covers opened and in the parking position.

Fuse links mechanically locked in switch covers.

Degree of protection (front) IP 20, the fitting determines the protection degree at the connection.

Inspection openings in the switch covers of the self-closing type.

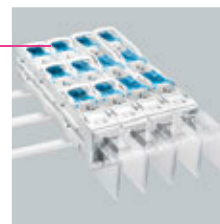
Terminal space cover (accessory) for additional shock protection.

Conductor terminals:

Size	Screw terminal	Direct connection terminals Cu and Al*	V-direct connection terminals Cu and Al*	Box terminal	Clamp resp. prism connection	Clamp/prism clamping space for flat copper conductor Cu
00	M8 70mm <sup>2</sup> **	–	–	1 x 1.5 - 70mm <sup>2</sup>	1 x 10 - 70mm <sup>2</sup> rm, sm, f, f+AE 1 x 95mm <sup>2</sup> rm, sm, f	12 x (1 - 10)mm
1	M12 2 x 185mm <sup>2</sup> - 240mm <sup>2</sup> **	1 x 35 - 150mm <sup>2</sup> sm 1 x 50 - 185mm <sup>2</sup> se 1 x 35 - 70mm <sup>2</sup> rm 1 x 50mm <sup>2</sup> re Md 32 - 40Nm 2 x 35 - 150mm <sup>2</sup> sm 2 x 50 - 185mm <sup>2</sup> se 2 x 35 - 70mm <sup>2</sup> rm 2 x 35 - 50mm <sup>2</sup> re Md 18 - 24Nm	1 x 70 - 240mm <sup>2</sup> sm 1 x 95 - 240mm <sup>2</sup> se	–	–	–
2	M12 2 x 185mm <sup>2</sup> - 240mm <sup>2</sup> **	1 x 35 - 150mm <sup>2</sup> sm 1 x 50 - 185mm <sup>2</sup> se 1 x 35 - 70mm <sup>2</sup> rm 1 x 50mm <sup>2</sup> re Md 32 - 40Nm 2 x 35 - 150mm <sup>2</sup> sm 2 x 50 - 185mm <sup>2</sup> se 2 x 35 - 70mm <sup>2</sup> rm 2 x 35 - 50mm <sup>2</sup> re Md 18 - 24Nm	1 x 70 - 240mm <sup>2</sup> sm 1 x 95 - 240mm <sup>2</sup> se	–	–	–
3	M12 2 x 185mm <sup>2</sup> - 240mm <sup>2</sup> **	1 x 35 - 150mm <sup>2</sup> sm 1 x 50 - 185mm <sup>2</sup> se 1 x 35 - 70mm <sup>2</sup> rm 1 x 50mm <sup>2</sup> re Md 32 - 40Nm 2 x 35 - 150mm <sup>2</sup> sm 2 x 50 - 185mm <sup>2</sup> se 2 x 35 - 70mm <sup>2</sup> rm 2 x 35 - 50mm <sup>2</sup> re Md 18 - 24Nm	1 x 120 - 400mm <sup>2</sup> rm 1 x 185 - 240mm <sup>2</sup> sm 1 x 185 - 300mm <sup>2</sup> se	–	–	–

\* not maintenance-free when aluminium conductors are used (see page 8/2)

\*\* copper conductor for associated rated currents in compliance with IEC/EN 60947-1

**QUADRON®185Power**  
**NH in-line fuse switch disconnectors**


Size	00	1	2	3
Type of current	AC (50Hz)	AC (50Hz)	AC (50Hz)	AC (50Hz)
Rated operating voltage (U <sub>e</sub> )**	690V AC	690V AC	690V AC	690V AC
Rated insulation voltage (U <sub>i</sub> )**	1000V	1000V	1000V	1000V
Rated surge withstand capacity (U <sub>imp</sub> ) without fuse monitoring**	8kV	8kV	8kV	8kV
Rated operating current (I <sub>e</sub> )*	160A	250A	400A	630A
Utilisation categories without fuse monitoring**	AC-22B (160A/500V)  AC-21B (125A/690V)	AC-23B (250A/400V)  AC-22B (250A/690V)  AC-21B (250A/690V)	AC-23B (400A/400V)  AC-22B (400A/690V)  AC-21B (400A/690V)	AC-23B (630A/400V)  AC-22B (630A/400V)  AC-21B (630A/400V)
Conditional rated short-circuit current, 3-pole switching***	100kA/500V 100kA/690V	120kA/500V 100kA/690V	120kA/500V 100kA/690V	80kA/500V 80kA/690V
Conditional rated short-circuit current, 1-pole switching***	100kA/500V 100kA/690V	120kA/500V 100kA/690V	120kA/500V 100kA/690V	80kA/500V 80kA/690V
For NH fuse links VDE 0636-2**** with power losses per phase up to	12W	23W	34 W	48W

\* When continuously operating a number of devices next to each other, pay attention to the rated loading factor in acc. with IEC/EN 61439-2, Table 101.  
Keep 50mm away from the earthed parts at the top and 25mm at the side.

\*\* Fuse monitoring U<sub>e</sub>, U<sub>i</sub> 400V AC, U<sub>imp</sub> 4kV, VG 2 (grid connections)

\*\*\* Type verification test with fuse links Operating Class gL/gG

\*\*\*\* Size 1 NH fuse links deployable in Size 2 QUADRON®185Power

Size 3 as double NH-fuse breaker 1250A.

3-pole, 690V AC, 2 x 630A, 3-pole switching, rated conditional short-circuit current up to 80kA.

With fuses gL/gG, Utilisation Categories AC20B (690V).

Conductor connections: four M12 screw clamp connections each up to 240mm<sup>2</sup>.

Electronic fuse monitoring:

2 LED displays

Storage property and remote reset, programmable.

2 change-over contacts.

2 x Cu 2.5mm<sup>2</sup> solid, DIN 46288 or 2 x Cu 1.5mm<sup>2</sup> flexes with sleeve, DIN 46228-1/-2/-3.

Internal resistance of the measurement paths in the MOhm range, VDE provisions in respect of contact voltage (>1000 Ohm/V) are complied with.

To isolate, switch off upstream mains switch!

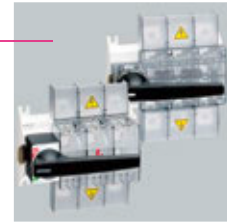
Circuit diagram on page 9/25.

Signalling switch for lid positioning indication:

3 switches (change-over contacts) can be used with sizes 00, 1, 2, 3.

Rated operating voltage (rated operating current) 250V AC (5A), 30V DC (4A).

**CAPUS® Panel**  
**Switch disconnecter up to 800A**  
**Switch disconnecter for NH fuse up to 630A**



VDE 0660 part 107 / EN 60947-3 / IEC 60947-3  
 screwing onto mounting plate  
 For NH fuse links in acc. with IEC 60269-2 Size NH 00, 1,2,3.  
 3-pole switching, double-breaking main contacts  
 operator-independent switching; visible air gap  
 Front shock protection with terminal cover

Switch disconnecter up to 800A IP40 degree of protection (front).  
 Switch disconnecter for NH fuse 630A IP20 degree of protection (front).  
 Degree of protection near terminal depends on installation  
 voltage-free fuse replacement

Conductor terminals:

Size	Screw terminal	Clamp-type terminal	Terminal space	Wedge-type terminal Cu and Al*
LTS-250	M10	fl. Cu	14 x 1 - 9	70 - 120mm <sup>2</sup> s(r), f, f + AE**
LTS-400	M10	fl. Cu	18 x 1 - 10	70 - 150mm <sup>2</sup> s(r), f, f + AE** Md 6 - 8Nm
LTS-630	M10	fl. Cu	21 x 1 - 13	120 - 240mm <sup>2</sup> s(r), f, f + AE**
LTS-800	M12	fl. Cu	25 x 1 - 13	
LTS-F160	M8 Md 14Nm +/- 10%	Cu 2.5 - 70mm <sup>2</sup> s(r), f, fl. Cu Md 3Nm	12 x 1 - 10	
LTS-F250	M10	fl. Cu	18 x 1 - 10	70 - 150mm <sup>2</sup> s(r), f, f + AE**
LTS-F400	M10	fl. Cu	21 x 1 - 13	120 - 240mm <sup>2</sup> s(r), f, f + AE**
LTS-F630	M12	fl. Cu	25 x 1 - 13	

\* Not maintenance-free when aluminium conductors are used (see page 8/2).  
 \*\* Reducing the maximum conductor cross-sections may be required

Covers for door and permanent mounting  
 not lockable, IP 64 degree of protection.  
 Triple lockable, degree of protection IP54.

Pilot switch for switch position indicator  
 Rated operating voltage (rated operating current) 250V AC (4A), 400V AC (3A)

<b>CAPUS®Panel</b> <b>Switch disconnecter up to 800A</b>				
Size	250A	400A	630A	800A
Type of current	AC (50 - 60Hz)	AC (50 - 60Hz)	AC (50 - 60Hz)	AC (50 - 60Hz)
Max. rated voltage ( $U_e$ )	500V AC	500V AC	500V AC	500V AC
Rated insulation voltage ( $U_i$ )	1000V	1000V	1000V	1000V
Rated surge withstand capacity ( $U_{imp}$ )	12kV	12kV	12kV	12kV
Conv. therm. current in the case ( $I_{the}$ ) horizontal installation (side-by-side pole)* vertical installation (vertical pole)**	250A 250A	400A 400A	630A 630A	800A 800A
Max. rated operating current ( $I_e$ )*	250A	400A	630A	800A
Utilisation categories	AC-23B (250A/415V) AC-23A (200A/500V) AC-22B (250A/500V)	AC-23B (400A/500V)	AC-23B (630A/500V)	AC-23B (800A/500V)
Mechanical durability (switch clearance)	7000	7000	7000	2500
Rated short circuit making capacity ( $I_{cm}$ )	20kA	30kA	30kA	40kA
Short-circuit withstand capacity ( $I_{cw}$ )	7kA - 1s	15kA - 1s	15kA - 1s	20kA - 1s
Conditional rated short-circuit current with gG fuses	80/50kA size 1 - 200/250A - 500V	80kA size 3 - 630A - 500V	80kA size 3 - 630A - 500V	50kA size 4 - 800A - 500V
* Metal casing, interior dimensions HxWxD [mm]: LTS-250 (encapsulated) 252 x 378 x 302, LTS-400 (encapsulated) 504 x 378 x 302, LTS-630 (ventilated) 504 x 378 x 302, LTS-800 (ventilated) 756 x 378 x 428				
** Metal casing, dimensions [mm]: LTS-250 (encapsulated) 300 x 400 x 200, LTS-400 (encapsulated) 500 x 500 x 300, LTS-630 (encapsulated) 500 x 500 x 300, LTS-800 (encapsulated) 600 x 600 x 400				
*** When continuously operating a number of devices, pay attention to the rated loading factor in acc. with IEC/EN 61439-2, Table 101.				
<b>CAPUS®Panel</b> <b>Switch disconnecter for NH fuse up to 630A</b>				
Size	160A	250A	400A	630A
Fuse size	NH 00	NH 1	NH 2	NH 3
Type of current	AC (50 - 60Hz)	AC (50 - 60Hz)	AC (50 - 60Hz)	AC (50 - 60Hz)
Max. rated voltage ( $U_e$ )	690V AC	690V AC	690V AC	690V AC
Rated insulation voltage ( $U_i$ )	1000V	1000V	1000V	1000V
Rated surge withstand capacity ( $U_{imp}$ )	8kV	8kV	8kV	12kV
Conv. therm. current in the case ( $I_{the}$ ) horizontal installation (side-by-side pole)* vertical installation (vertical pole)**	160A 145A	250A 250A	400A 315A	630A 470A
Max. rated operating current ( $I_e$ )*	160A	250A	400A	630A
Utilisation categories	AC-23A (160A/500V) AC-23A (125A/690V) AC-22A (160A/690V)	AC-23B (250A/690V)	AC-23B (400A/690V)	AC-23B (630A/690V)
Mechanical durability (switch clearance)	7000	7000	7000	4000
Conditional rated short-circuit current with gG fuses	80kA size 00 - 160A - 690V	80kA size 1 - 250A - 690V	80kA size 2 - 400A - 690V	80kA size 3 - 630A - 690V
For NH fuse links in acc. with IEC 60269-2 with power losses per phase up to	12W	23W	34W	48W
* Metal casing, interior dimensions HxWxD [mm]: LTS-F160 (encapsulated) 252 x 378 x 302, LTS-F250 (encapsulated) 504 x 378 x 302, LTS-F400 (ventilated) 504 x 378 x 302, LTS-F630 (ventilated) 756 x 378 x 428				
** Metal casing, dimensions [mm]: LTS-F160 (encapsulated) 500 x 500 x 300, LTS-F250 (encapsulated) 500 x 500 x 300, LTS-F400 (encapsulated) 500 x 500 x 300, LTS-F630 (encapsulated) 600 x 600 x 400				
*** When continuously operating a number of devices, pay attention to the rated loading factor in acc. with IEC/EN 61439-2, Table 101.				

**CAPUS® Panel**  
**Switch disconnecter 3-pole up to 3150A ,**  
**Switch disconnecter 3-pole + N up to 3150A**

To IEC/EN 60947-3		125A	160A	200A	250A	315A	400A	630A
Thermal current (I <sub>th</sub> ) [A]	40°C	125	160	200	250	315	400	630
	50°C	125	160	200	250	315	400	630
	65°C	90	110	140	175	220	280	440
Rated insulation voltage (U <sub>i</sub> ) [V]		1000	1000	1000	1000	1000	1000	1000
Electric strength (50Hz, 1min) [V]		4000	4000	4000	5000	5000	5000	8000
Rated surge withstand capacity (U <sub>imp</sub> ) [kV]		8	8	8	8	8	8	12
Nominal operating current AC (I <sub>e</sub> ) [A]	AC-23A (U <sub>e</sub> 400V)	125	160	160	160	315	400	630
	AC-23A (U <sub>e</sub> 500V)	100	125	125	125	250	315	500
	AC-23A (U <sub>e</sub> 690V)	80	80	80	80	160	160	315
	AC-20A (U <sub>e</sub> 800V)	125	160	200	250	315	400	630
	AC-20A (U <sub>e</sub> 1000V)	125	160	200	250	315	400	630
Working capacity AC <sup>1</sup> (P <sub>e</sub> ) [kW]	AC-23A (3 x 230V)	39.8	50.9	50.9	50.9	100.3	127.4	200.7
	AC-23A (3 x 400V)	69.2	88.6	88.6	88.6	174.5	221.7	349.1
	AC-23A (3 x 500V)	69.2	86.6	86.6	86.6	173.2	218.2	346.4
	AC-23A (3 x 690V)	76.4	76.4	76.4	76.4	152.9	152.9	301.1
Reactive power [kVAR]	400V, sin φ = 0.65	56.2	72.0	72.0	72.0	141.8	180.1	283.7
Rated breaking capacity [A]	400V, cos φ = 0.35 - 0.45	1000	1280	1280	1280	2520	3200	5000
Rated making capacity [A]	400V, cos φ = 0.45	1250	1600	1600	1600	3150	4000	6300
Short-circuit behaviour		125A	160A	200A	250A	315A	400A	630A
Conditional short-circuit current (peak value) <sup>2</sup> (I <sub>cm</sub> ) [kA]		13	13	13	13	20	20	26
Rated short-time withstand current (1s) (I <sub>cw</sub> ) [kA] rms		7	7	7	7	12	12	16
Rated current in the event of short-circuit (rms value) <sup>3</sup> [kA] rms		100	100	100	100	100	100	100
Max. limited rated peak current [kA]		17	20	20	20	33	33	39
Max. power dissipation (I <sup>2</sup> t) [A <sup>2</sup> s] (x10 <sup>3</sup> )		55	198	198	198	1000	1000	1600
Mechanical service life without load <sup>4</sup> [switching operations]		30000	30000	30000	30000	20000	20000	10000
Mechanical service life with load <sup>5</sup> AC-23 (400V) [switching cycles]		1000	1000	1000	1000	1000	1000	1000
Weight (3-pole) [kg]		0.85	0.85	0.9	0.9	1.7	1.9	4.2
Weight (3-pole+N) [kg]		1.0	1.0	1.0	1.0	1.9	2.1	4.5
Types of connection		125A	160A	200A	250A	315A	400A	630A
Cable (Cu) [mm <sup>2</sup> ]		95	95	120	120	185	240	2x240
Laminated copper busbars (thickness/width) [mm]		5/25	5/25	5/30	5/30	7/25	7/40	2x5/40
Tightening torque [Nm]		4/13 <sup>5</sup>	4/13 <sup>5</sup>	13/18	13/18	18	24	24

<sup>1</sup> Values for guidance only. The respective current depends on the motor manufacturer.

<sup>2</sup> Without limiting protective device (short-circuit duration: 50 ... 100ms).

<sup>3</sup> With protective device, which limits the peak current and power dissipation to the stated values.

<sup>4</sup> AC-22B.

<sup>5</sup> Terminal/blade-type connection.

You can find further voltages and switchgear characteristics at [www.woehner.com](http://www.woehner.com)

To IEC/EN 60947-3		800A	1250A	1600A	1800A	2000A	2500A	3150A
Thermal current ( $I_{th}$ ) [A]	40°C	800	1250	1600	1800	2000	2500	3150
	50°C	800	1250	1600	1800	2000	2500	3150
	65°C	560	875	1600	1600	2000	2000	2200
Rated insulation voltage ( $U_i$ ) [V]		1000	1000	1000	1000	1000	1000	1000
Electric strength (50Hz, 1min) [V]		8000	8000	10000	10000	10000	10000	10000
Rated surge withstand capacity ( $U_{imp}$ ) [kV]		12	12	12	12	8	8	8
Nominal operating current AC ( $I_e$ ) [A]	AC-23A ( $U_e$ 400V)	630	800	1000	1250 <sup>4</sup>	1600	1800	2000 <sup>4</sup>
	AC-23A ( $U_e$ 500V)	500	800	900	1000 <sup>4</sup>	1250	1600 <sup>4</sup>	1600 <sup>4</sup>
	AC-23A ( $U_e$ 690V)	315	500	630	800 <sup>4</sup>	1000	1000	1000
	AC-20A ( $U_e$ 800V)	800	1250	1600	1800	2000	2500	3150
	AC-20A ( $U_e$ 1000V)	800	1250	1600	1800	2000	2500	3150
Working capacity AC <sup>1</sup> ( $P_e$ ) [kW]	AC-23A (3 x 230V)	200.7	254.9	318.6	398.3	509.9	573.6	637.3
	AC-23A (3 x 400V)	349.1	443.4	554.2	692.8	886.8	997.6	1108.5
	AC-23A (3 x 500V)	346.4	554.2	623.5	692.8	866.0	1108.5	1108.5
	AC-23A (3 x 690V)	301.1	478.0	602.3	764.8	956.0	956.0	956.0
Reactive power [kVAR]	400V, $\sin \phi = 0.65$	283.7	360.2	450.3	562.9	720.5	810.5	900.6
Rated breaking capacity [A]	400V, $\cos \phi = 0.35 - 0.45$	5000	6400	8000	10000	12800	14400	16000
Rated making capacity [A]	400V, $\cos \phi = 0.45$	6300	8000	10000	12500	16000	18000	20000
Short-circuit behaviour		800A	1250A	1600A	1800A	2000A	2500A	3150A
Conditional short-circuit current (peak value) <sup>2</sup> ( $I_{cm}$ ) [kA]		26	60	75	75	100	100	100
Rated short-time withstand current (1s) ( $I_{cw}$ ) [kA] rms		16	25	50	50	50	50	50
Rated current in the event of short-circuit (rms value) <sup>3</sup> [kA] rms		100	72	–	–	–	–	–
Max. limited rated peak current [kA]		39	55	–	–	–	–	–
Max. power dissipation ( $I^2t$ ) [A <sup>2</sup> s] ( $\times 10^3$ )		1600	4900	–	–	–	–	–
Mechanical service life without load <sup>5</sup> [switching operations]		10000	10000	10000	10000	–	2500	2500
Mechanical service life with load <sup>5</sup> AC-23 (400V) [switching cycles]		500	500	500	500	–	500	500
Weight (3-pole) [kg]		4.2	7.0	18.5	18.5	–	50.0	50.0
Weight (3-pole+N) [kg]		4.5	7.6	20.8	20.8	–	58.0	58.0
Types of connection		800A	1250A	1600A	1800A	2000A	2500A	3150A
Cable (Cu) [mm <sup>2</sup> ]		2x240	2x300	–	–	–	–	–
Laminated copper busbars (thickness/width) [mm]		2x5/40	2x10/50	2x7/80	2x7/80	–	3x12/80	3x12/100
Tightening torque [Nm]		24	45	55	55	–	45	45

<sup>1</sup> Values for guidance only. The respective current depends on the motor manufacturer.

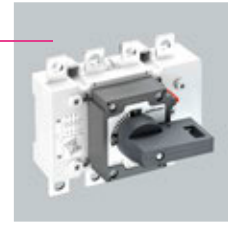
<sup>2</sup> Without limiting protective device (short-circuit duration: 50 ... 100ms).

<sup>3</sup> With protective device, which limits the peak current and power dissipation to the stated values.

<sup>4</sup> AC-22B.

<sup>5</sup> Terminal/blade-type connection.

You can find further voltages and switchgear characteristics at [www.woehner.com](http://www.woehner.com)



**CAPUS®Panel**  
**Change-over switch 3-pole up to 1000A,**  
**Change-over switch 3-pole + N up to 1000A**



To IEC/EN 60947-3		125A	160A	200A	250A	315A	400A	630A	800A	1000A
Thermal current (I <sub>th</sub> ) [A]	40°C	125	160	200	250	315	400	630	800	1000
	in control cabinet	–	–	–	250	315	400	630	800	1000
Rated insulation voltage (U <sub>i</sub> ) [V]		1000	1000	1000	1000	1000	1000	1000	1000	1000
Electric strength (50Hz, 1min) [V]		4000	4000	4000	6000	6000	6000	8000	8000	8000
Rated surge withstand capacity (U <sub>imp</sub> ) [kV]		8	8	8	8	8	8	12	12	12
Nominal operating current AC (I <sub>e</sub> ) [A]	AC-23A (U <sub>e</sub> 400V)	125	160	160	–	–	–	–	–	–
	AC-23B (U <sub>e</sub> 400V)	–	–	–	180	200	250	500	630	1000
	AC-23A (U <sub>e</sub> 500V)	100	125	125	–	–	–	–	–	–
	AC-23B (U <sub>e</sub> 500V)	–	–	–	150	160	200	315	400	800
	AC-22A (U <sub>e</sub> 690V)	100	125	160	200	250	315 <sup>4</sup>	500	630 <sup>4</sup>	800
	AC-23A (U <sub>e</sub> 690V)	80	80	–	–	–	–	–	–	–
	AC-23B (U <sub>e</sub> 690V)	–	–	–	100	125	160	250	315	630
	AC-20A (U <sub>e</sub> 800V)	125	160	200	250	315	400	630	800	1000
Working capacity AC <sup>1</sup> (P <sub>e</sub> ) [kW]	AC-23A (3 x 400V)	69.2	88.6	88.6	90.0	100.0	125.0	250.0	315.0	501.0
	AC-23A (3 x 500V)	69.2	86.6	86.6	94.0	100.0	125.0	197.0	250.0	501.0
	AC-23A (3 x 690V)	76.4	76.4	76.4	86.0	108.0	138.0	216.0	272.0	544.0
Reactive power [kVAR]	400V	–	–	–	1040	131.0	166.0	261.0	333.0	416.0
Rated breaking capacity [A]	AC-23 400V	–	–	–	1440	1600	2000	4000	4000	8000
Rated making capacity [A]	AC-23 400V	–	–	–	1800	2000	2500	5000	5000	10000
<b>Short-circuit behaviour</b>										
Conditional short-circuit current (peak value) <sup>2</sup> (I <sub>cm</sub> ) [kA]		13	13	13	12	12	12	20	20	32
Rated short-time withstand current (1s) <sup>2</sup> (I <sub>cw</sub> ) [kA] rms		7	7	7	8	8	8	13	13	25
Mechanical service life without load [switching operations]		30000	30000	30000	10000	10000	10000	10000	10000	10000
Mechanical service life with load AC-22A (400V) [switching cycles]		–	–	1000	1000	1000	200	1000	100	500
Operating frequency [cycles per hour]		–	–	–	120	120	60	60	20	20
Tightening torque <sup>3</sup> [Nm]		–	–	–	11/13	11/13	11/13	25/30	25/40	50/62
Weight (3-pole) [kg]		1.8	1.8	1.9	4.8	5	5	11.5	11.9	22.5
Weight (3-pole+N) [kg]		2.1	2.1	2.2	5.3	5.5	5.5	12.6	13.2	25
<b>Types of connection</b>										
Cable (Cu) [mm <sup>2</sup> ]		95	95	120	240	240	240	2x240	2x240	–
Laminated copper busbars (thickness/width) [mm]		5/25	5/25	5/30	2x5/30	2x5/30	2x5/30	2x6/45	2x6/45	2x10/60
Tightening torque [Nm]		4/12	4/13	13/18	24	24	24	45	45	55

<sup>1</sup> Values for guidance only. The respective current depends on the motor manufacturer

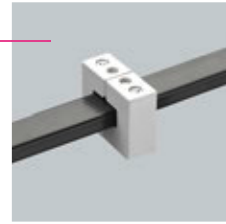
<sup>2</sup> Without limiting protective device (short-circuit duration: 50 ... 100ms).

<sup>3</sup> Typical value for switches that work with continuous current in an uninterrupted state.

<sup>4</sup> AC-22B.

You can find further voltages and switchgear characteristics at [www.woehner.com](http://www.woehner.com)

**Short-circuit withstand capacity diagrams in acc. with IEC/EN 61439-1 for laminated flexible copper busbars**

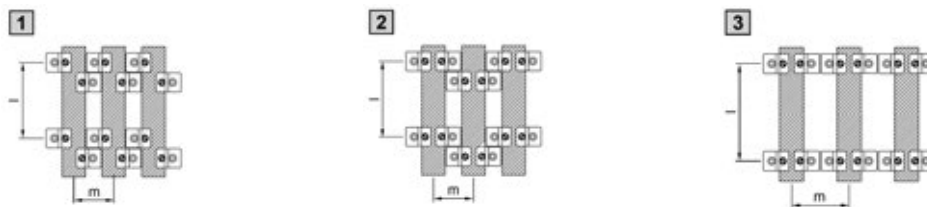


Dimensions	Characteristic curve (short-circuit withstand capacity)	Type of installation*	Part no. Tin-plated	Part no. plain
6 x 15.5 x 0.8	a	1	01 900	01 035
10 x 15.5 x 0.8	a	1	01 091	01 583
5 x 24 x 1	a	1	01 075	01 611
10 x 24 x 1	b	1	01 076	01 184
5 x 32 x 1	b	2/3	01 095	01 612
10 x 32 x 1	c	2/3	01 096	01 613
5 x 40 x 1	b	2/3	01 097	01 614
10 x 40 x 1	c	2/3	01 099	01 615
5 x 50 x 1	b	2/3	01 112	01 060
10 x 50 x 1	c	2/3	01 113	01 509
10 x 63 x 1	d	2/3	01 123	01 510

\* Mounting on commercially available standard C-rail

Characteristic curve	Distance between supports (l) mm		Centre distance (m) mm	
	min.	max.	min.	max.
a	150	300	34	60
b	150	350	42	85
c	200	400	51	85
d	200	450	81	100

Type of installation with universal holder



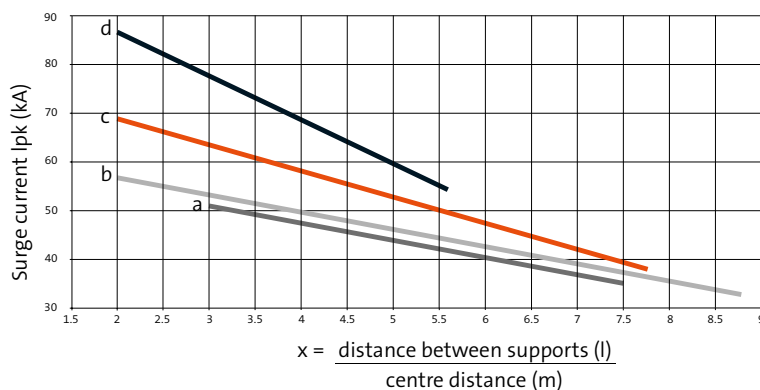
**Short-circuit withstand capacity diagram**

Basis of testing: IEC/EN 61439-1

Implemented test: Dynamic short-circuit resistance in acc. with IEC/EN 61439-1.

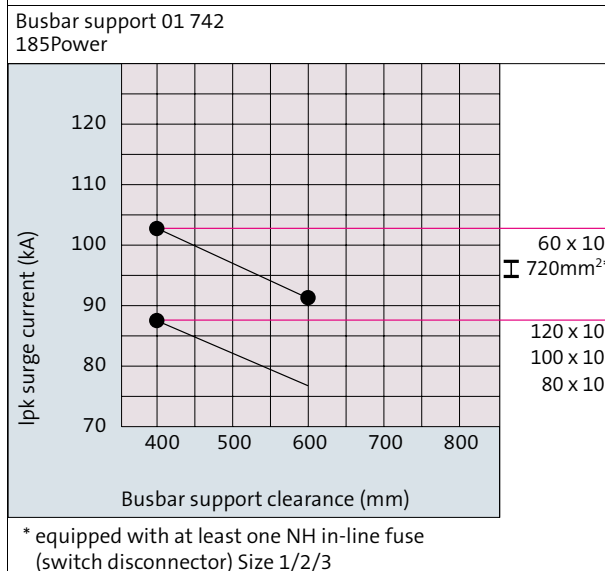
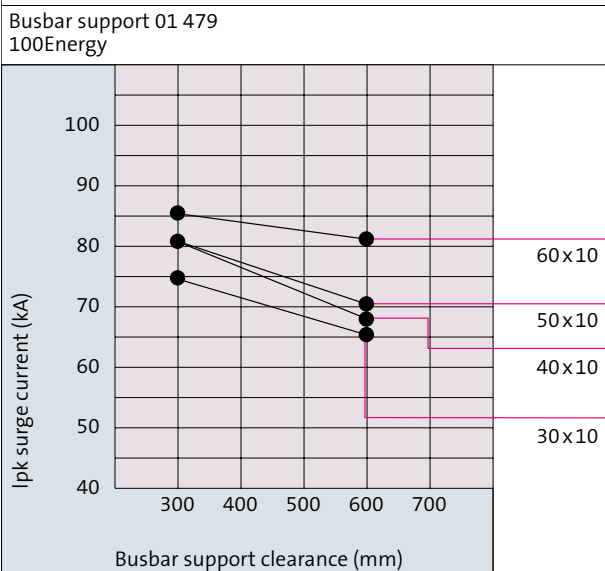
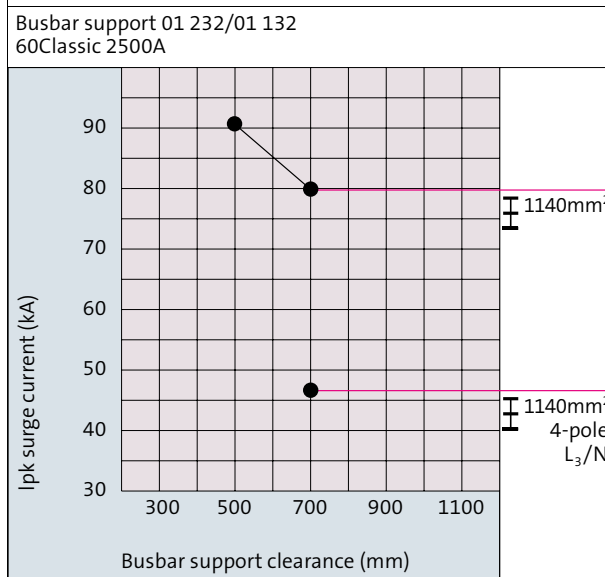
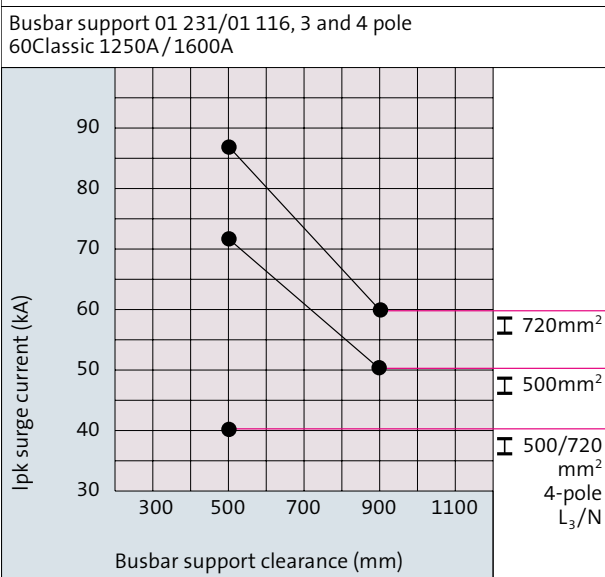
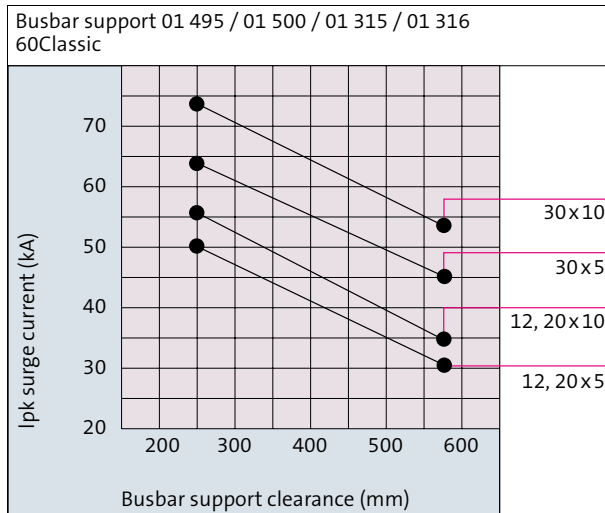
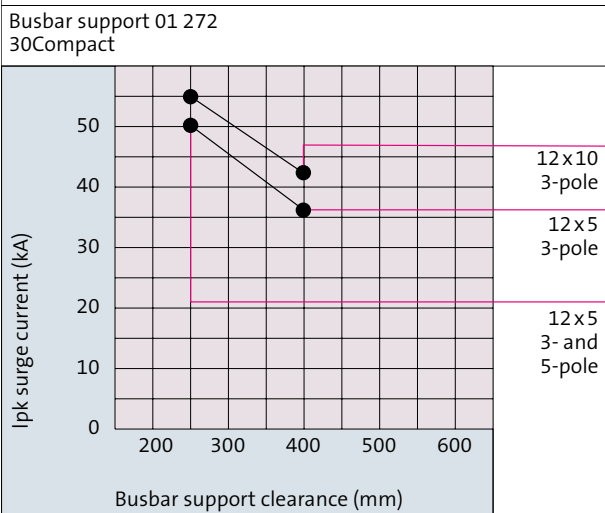
The dimensions for the distance between supports (m) and the centre distance (a) must be within the stated min./max. limits. Using curves a to d and quotients from l/m the permitted surge current I<sub>pk</sub> can be determined.

The specified installation method must be adhered to.



### Short-circuit withstand capacity diagrams in acc. with IEC/EN 61439-1 for 60, 100 and 185mm busbar systems

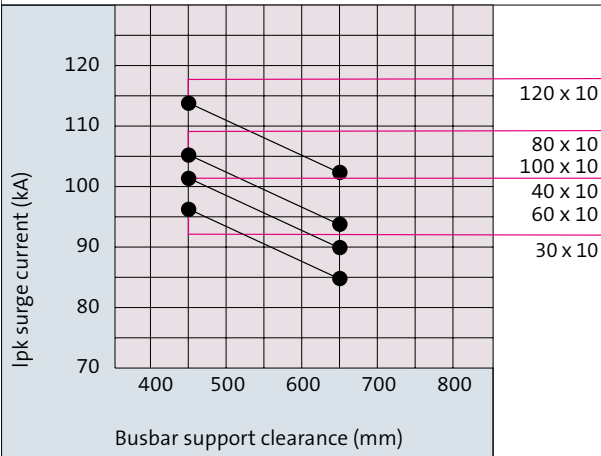
(●) Measured values from type tests



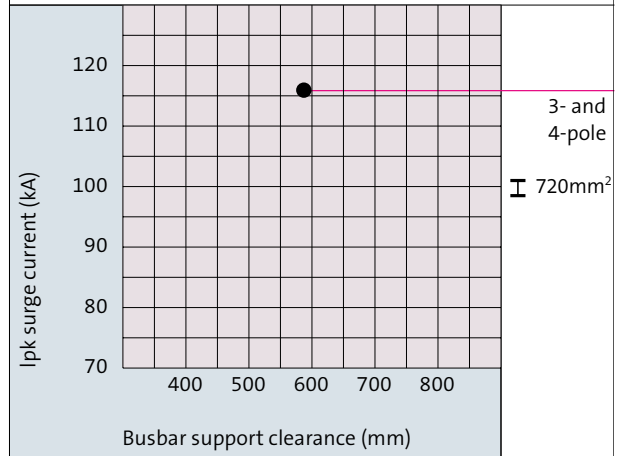
**Short-circuit withstand capacity diagrams in acc. with IEC/EN 61439-1 for 85mm busbar systems and central in-feed**

(●) Measured values from type tests

Busbar support 01 430  
185Power



Centre-feed unit  
Current flow through 80% of busbar length



**Assignment of surge current to effective figure of the short-circuit current IEC/EN 61439-1**

Values of factor *n*

Effective value of the short-circuit current	cos φ	<i>n</i>
/ ≤ 5	0.7	1.5
5 < / ≤ 10	0.5	1.7
10 < / ≤ 20	0.3	2
20 < / ≤ 50	0.25	2.1
50 < /	0.2	2.2

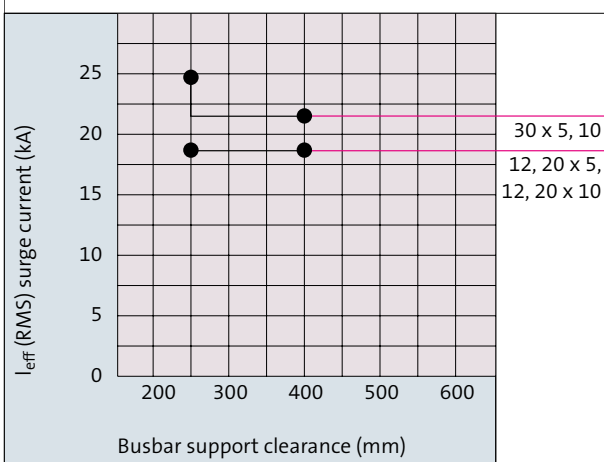
According to Table 7 as per IEC/EN 61439-1 or Table 4 according to IEC/EN 61439-1, the factor *n* is used to determine the ratio between surge current *I<sub>pk</sub>* and the effective value of the short-circuit current by taking the power factor into account.

See IEC/EN 61439-1 for deviations.

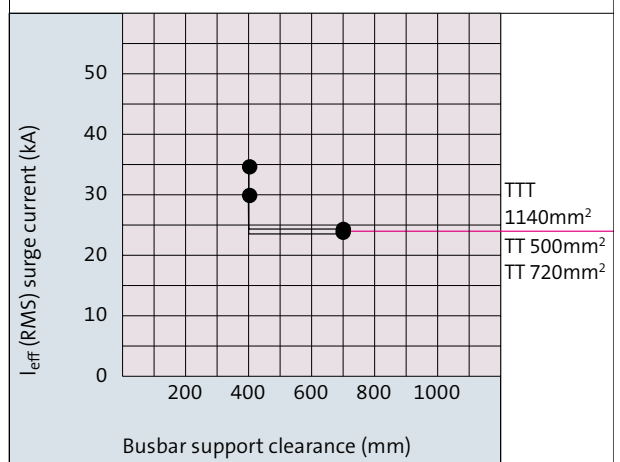
**Short-circuit strength diagrams according to UL 845 for 60mm busbar systems**

(●) Measured values from type tests

Busbar support 01 508



Busbar support 01 231 / 01 232



Additional SCCR values in installation instructions 94717  
e.g. SCCR 100kA: —□— 500A, 30 x 10, 800mm centre distance

## Overview of the applicability of Wöhner products in terms of operating voltage

(only the conditions according to IEC standards are taken into consideration)

All specifications apply for overvoltage category III in accordance with IEC 60439-1 or IEC 61439-1

The applicability for other overvoltage categories can be derived from the rated surge withstand capacity  $U_{imp}$ .

The following clearances must be maintained:

Rated surge withstand capacity $U_{imp}$	Minimum clearance
4kV	3.0mm
6kV	5.5mm
8kV	8.0mm
12kV	14mm

All specifications apply for level of soiling 3 in accordance with IEC 60439-1 or IEC 61439-1

(Wöhner uses insulating parts made from materials in material class IIIa).

The following creepage distances must be maintained:

Rated insulation voltage $U_i$	Creepage distance
400V AC / DC	6.3mm
500V AC / DC	8.0mm
690V AC / DC	10.0mm
800V AC / DC	12.5mm
1000V AC / DC	16.0mm
1250V DC	20.0mm
1500V DC	25.0mm

The values shown in the table below apply for the Wöhner items themselves.

The user is responsible for maintaining the proper clearances and creepage distances, taking the installation conditions into account.

The maximum permitted power dissipation of the fuse links must be taken into account with components having fuses.

Short circuit data for DC applications is available upon request.

## Values for selected items with regard to insulation coordination

Part no.	Rated operating Voltage $U_e$ (V)		Rated surge capacity $U_{imp}$ (kV)	Rated operating current $I_e$ (A)	Maximum permitted operating voltage (V)		Note
	AC	DC			AC	DC	
01 008	690			2000	800	800	2)
01 047	690				1000	1500	2)
01 068	690				1000	1500	2)
01 069	690			1600	800	800	2)
01 070	690			1600	800	800	2)
01 071	690			1600	800	800	2)
01 092	690				1000	1500	2)
01 094	690			630	1000	1500	2)
01 116	690		8		1000	1500	2)
01 132	690		6		1000	1500	2)
01 135	690				1000	1500	2)
01 141	690				1000	1000	2)
01 145	690				1000	1000	2)
01 147	690		6		800	800	
01 162	690		6		800	800	
01 165	690		6		800	800	
01 166	690				1000	1000	2)
01 185	690			1600	800	800	2)
01 186	690			2500	800	800	2)
01 193	690				1000	1000	2)
01 198	690	1000	4	225	1000	1000	

1) The value for the maximum permitted operating voltage of fuse combination units in accordance with IEC 60947-3 is only valid when the device is used as a fuse holder **without a load-switching function**.

2) Due to the insulating characteristics, the use of single-pole devices is determined exclusively by the installation conditions.

Part no.	Rated operating Voltage $U_e$ (V)		Rated surge capacity $U_{imp}$ (kV)	Rated operating current $I_e$ (A)	Maximum permitted operating voltage (V)		Note
	AC	DC			AC	DC	
01 199	690		6		800	800	
01 203	690				1000	1500	2)
01 230	690		8		1000	1500	
01 231	690		8		1000	1500	
01 232	690		8		1000	1500	
01 240	690		6		800	800	
01 243	690		6		800	800	
01 272	690		6		1000	1500	
01 274	690				800	800	2)
01 275	690				800	800	2)
01 284	690				1000	1500	2)
01 285	690				1000	1500	2)
01 287	690				1000	1500	2)
01 289	690				1000	1500	2)
01 290	690				1000	1500	2)
01 292	690				1000	1500	2)
01 295	690				800	800	
01 318	690				1000	1500	2)
01 319	690				1000	1500	2)
01 355	690		6		1000	1500	2)
01 356	690		6		1000	1500	
01 357	690		8		1000	1500	
01 360	690		6		690		
01 361	690		6		690		
01 362	690		6		690		
01 401	690		6		800	800	
01 422	690		8		1000	1500	
01 430	690		8		1000		
01 441	690			1000	1000		
01 442	690			1600	1000		
01 443	690			1600	1000		
01 479	690		6		1000	1500	
01 480	690		8		1000		2)
01 481	690		8		1000		2)
01 484	690		6		1000	1500	
01 485	690		8		1000	1500	
01 495	690		8		1000	1500	
01 498	400	250	6	63	500	250	
01 500	690		8		1000	1500	
01 508	690		8		1000	1500	
01 512	690				1000	1500	2)
01 513	690			1600	800	800	2)
01 514	690				1000	1500	2)
01 537	690		6		800	800	
01 538	690		6		800	800	
01 562	690		6	80	1000	1000	
01 563	690		6	80	1000	1000	
01 601	690		6		1000	1500	2)
01 602	690	1000	6		1000	1500	
01 603	690		8		1000	1500	
01 647	400	250	6	63	500	250	
01 747	690				1000	1500	2)
01 748	690				1000	1500	2)
01 749	690				1000	1500	2)
01 753	690		6		800	800	

- 1) The value for the maximum permitted operating voltage of fuse combination units in accordance with IEC 60947-3 is only valid when the device is used as a fuse holder **without a load-switching function**.
- 2) Due to the insulating characteristics, the use of single-pole devices is determined exclusively by the installation conditions.

Part no.	Rated operating Voltage $U_e$ (V)		Rated surge capacity $U_{imp}$ (kV)	Rated operating current $I_e$ (A)	Maximum permitted operating voltage (V)		Note
	AC	DC			AC	DC	
01 754	690		6		800	800	
01 759	690				1000	1500	2)
01 760	690			600	1000	1500	2)
01 823	690				1000	1000	2)
01 827	690				1000	1000	2)
01 829	690				1000	1000	2)
01 886	690				1000	1000	2)
01 905	690				1000	1000	2)
01 906	690			1600	800	800	2)
01 907	690			1600	800	800	2)
01 911	690			1600	800	800	2)
01 934	690			1600	800	800	2)
01 935	690			1600	800	800	2)
01 936	690			1600	800	800	2)
01 990	690				1000	1000	2)
03 173	690			160	800	800	2)
03 193	690			160	800	800	2)
03 195	690			250	800	800	2)
03 196	690			250	800	800	2)
03 197	690			630	800	800	2)
03 198	690			630	800	800	2)
03 199	690	440	6	160	800	800	
03 213	690			630	800	800	2)
03 214	600			70	600		
03 215	600			80	600		
03 217	600			100	600		
03 219	600			125	600		
03 220	600			150	600		
03 221	600			175	600		
03 222	600			200	600		
03 224	600			250	600		
03 225	600			300	600		
03 226	600			350	600		
03 227	600			400	600		
03 228	600	300		70	600	300	
03 229	600	300		80	600	300	
03 230	600	300		90	600	300	
03 231	600	300		100	600	300	
03 233	600	300		125	600	300	
03 234	600	300		150	600	300	
03 235	600	300		175	600	300	
03 236	600	300		200	600	300	
03 238	600	300		250	600	300	
03 239	600	300		300	600	300	
03 240	600	300		350	600	300	
03 241	600	300		400	600	300	
03 288	1000	1500	6	250	1000	1500	
03 289	1000	1500	6	250	1000	1500	
03 290	1000	1500	6	250	1000	1500	
03 293	1000	1500	6	600	1000	1500	
03 294	1000	1500	6	600	1000	1500	
03 299	690	440	6	160	800	800	
03 300	690	440	6	250	800	800	
03 301	690	440	6	250	800	800	
03 316	690	440	6	125	800	800	

- 1) The value for the maximum permitted operating voltage of fuse combination units in accordance with IEC 60947-3 is only valid when the device is used as a fuse holder **without a load-switching function**.
- 2) Due to the insulating characteristics, the use of single-pole devices is determined exclusively by the installation conditions.

Part no.	Rated operating Voltage $U_e$ (V)		Rated surge capacity $U_{imp}$ (kV)	Rated operating current $I_e$ (A)	Maximum permitted operating voltage (V)		Note
	AC	DC			AC	DC	
03 350	690	440	6	160	1000	1000	2)
03 351	690	440	6	160	800	800	
03 354	690	440	6	160	1000	1000	2)
03 355	690	440	6	160	800	800	
03 369	690	440	6	160	1000	1000	
03 370	690	440	6	160	1000	1000	
03 384	690	440	6	250	800	800	
03 518	690	440	6	400	800	800	
03 519	690			160	800	800	2)
03 520	690	440	6	160	800	800	
03 587	690	440	6	160	800	800	
03 599	690	440	6	400	800	800	
03 601	690	440	6	250	800	800	
03 620	690			160	800	800	2)
03 654	690	440	6	160	800	800	
03 656	690	440	6	160	800	800	
03 657	690			250	800	800	2)
03 668	690			160	800	800	2)
03 693	690	440	6	400	800	800	
03 757	690			400	800	800	2)
03 758	690	440	6	160	1000	1000	2)
03 759	690	440	6	160	800	800	
03 760	690	440	6	160	1000	1000	2)
03 761	690	440	6	160	800	800	
03 762	690	440	6	250	1000	1000	2)
03 763	690	440	6	250	800	800	
03 765	690	440	6	250	800	800	
03 766	690	440	6	400	1000	1000	2)
03 767	690	440	6	400	800	800	
03 768	690	440	6	630	1000	1000	2)
03 769	690	440	6	630	800	800	
03 790	690	440	6	630	800	800	
03 795	690	440	6	400	800	800	
05 188	690			63	800	800	2)
05 779	600	600			600	600	2)
05 780	1500	1500			1500	1500	2)
05 781	1500	1500			1500	1500	2)
05 782	1500	1500			1500	1500	2)
05 783	2000	2000			2000	2000	2)
05 784	2000	2000			2000	2000	2)
05 786	2000	2000			2000	2000	2)
05 787	2000	2000			2000	2000	2)
05 788	2000	2000			2000	2000	2)
05 789	3000	3000			3000	3000	2)
05 790	2000	2000			2000	2000	2)
05 791	2000	2000			2000	2000	2)
05 792	1500	1500			1500	1500	2)
05 800	1500	1500			1500	1500	2)
05 801	1500	1500			1500	1500	2)
05 802	1500	1500			1500	1500	2)
30 322	690				800	800	
30 473	690				800	800	
31 008	500			1		250	
31 009	500			8		250	
31 010	500			12		250	

- 1) The value for the maximum permitted operating voltage of fuse combination units in accordance with IEC 60947-3 is only valid when the device is used as a fuse holder **without a load-switching function**.
- 2) Due to the insulating characteristics, the use of single-pole devices is determined exclusively by the installation conditions.

Part no.	Rated operating Voltage $U_e$ (V)		Rated surge capacity $U_{imp}$ (kV)	Rated operating current $I_e$ (A)	Maximum permitted operating voltage (V)		Note
	AC	DC			AC	DC	
31 011	690			2		250	
31 012	400			80	500		
31 014	690	1000	4	80	1000	1000	2)
31 017	690			6		250	
31 024	400		4	80	1000	1000	2)
31 039	690		4	115	1000	1000	
31 057	690	1000	4	130	1000	1000	2)
31 101	690	1000	4	80	1000	1000	2)
31 110	690		6	32	800		1)
31 111	690		6	32	800		1)
31 112	690		6	32	800		1)
31 113	690		6	32	800		1)
31 114	690		6	32	800		1)
31 115	690		6	50	800		1)
31 116	690		6	50	800		1)
31 117	690		6	50	800		1)
31 118	690		6	50	800		1)
31 119	690		6	50	800		1)
31 120	690		6	100	800		1)
31 121	690		6	100	800		1)
31 122	690		6	100	800		1)
31 123	690		6	100	800		1)
31 124	690		6	100	800		1)
31 130	690		6	32	690		1)
31 132	690		6	32	690		1)
31 133	690		6	32	690		1)
31 135	690		6	50	690		1)
31 138	690		6	50	690		1)
31 140	690		6	100	690		1)
31 143	690		6	100	690		1)
31 158	400	110	6	63	800	110	1)
31 168	690		6	50	800		1)
31 171	690		6	100	800		1)
31 173	500		6	25	500	500	
31 174	500	500	6	25	500	500	
31 175	500	500	6	63	690	600	
31 176	500	500	6	63	690	600	
31 182	500			2		250	
31 183	500			4		250	
31 184	500			6		250	
31 185	500			10		250	
31 186	500			16		250	
31 187	500			20		250	
31 188	500			25		250	
31 189	400			32		200	
31 190	690			10		250	
31 191	690			16		250	
31 192	690			20		250	
31 193	690			25		250	
31 194	500			32		250	
31 195	500			40		250	
31 196	400			50		200	
31 198	690			32		250	
31 199	690			40		250	
31 200	690			50		250	

- 1) The value for the maximum permitted operating voltage of fuse combination units in accordance with IEC 60947-3 is only valid when the device is used as a fuse holder **without a load-switching function**.
- 2) Due to the insulating characteristics, the use of single-pole devices is determined exclusively by the installation conditions.

Part no.	Rated operating Voltage $U_e$ (V)		Rated surge capacity $U_{imp}$ (kV)	Rated operating current $I_e$ (A)	Maximum permitted operating voltage (V)		Note
	AC	DC			AC	DC	
31 201	690			63		250	
31 202	500			80		250	
31 203	500			100		250	
31 204	400			125		200	
31 232	690	110	6	32	800	110	1)
31 275	690		6	32	800		1)
31 276	690		6	32	800		1)
31 277	690		6	32	800		1)
31 278	690		6	50	800		1)
31 279	690		6	50	800		1)
31 280	690		6	50	800		1)
31 281	690		6	100	800		1)
31 282	690		6	100	800		1)
31 283	690		6	100	800		1)
31 284	600	600		30	600	600	
31 285	600	600		30	600	600	
31 286	400	250	6	16	400	250	
31 287	600	600		30	600	600	
31 288	400	250	6	16	400	250	
31 291	400	250	6	63	400	250	
31 293	400	250	6	63	400	250	
31 295	600	600		30	600	600	
31 296	600	600		30	600	600	
31 297	600	600		30	600	600	
31 298	600	600		30	600	600	
31 299	600	600		30	600	600	
31 300	600	600		30	600	600	
31 301	400	250	6	16	400	250	
31 302	400	250	6	16	400	250	
31 303	400	250	6	63	400	250	
31 306	400	250	6	63	400	250	
31 307	400	65	6	63	500	250	1)
31 308	400	65	6	63	500		1)
31 309	400		4	80	1000	1000	2)
31 311	400		4	80	1000	1000	2)
31 313	400	130	6	63	500	250	1)
31 314	400	130	6	63	500		1)
31 315	400	130	6	63	500		1)
31 323	600			10	600		
31 324	600	200		15	600	200	
31 325	600	200		20	600	200	
31 326	600	200		25	600	200	
31 327	600	200		30	600	200	
31 333	600	300		1	600	300	
31 338	600	300		2	600	300	
31 342	600	300		3	600	300	
31 345	600	300		4	600	300	
31 349	600	300		6	600	300	
31 351	600	300		8	600	300	
31 353	600	300		10	600	300	
31 354	600	300		12	600	300	
31 355	600	300		15	600	300	
31 357	600	300		20	600	300	
31 358	600	300		25	600	300	
31 359	600	300		30	600	300	

- 1) The value for the maximum permitted operating voltage of fuse combination units in accordance with IEC 60947-3 is only valid when the device is used as a fuse holder **without a load-switching function**.
- 2) Due to the insulating characteristics, the use of single-pole devices is determined exclusively by the installation conditions.

Part no.	Rated operating Voltage $U_e$ (V)		Rated surge capacity $U_{imp}$ (kV)	Rated operating current $I_e$ (A)	Maximum permitted operating voltage (V)		Note
	AC	DC			AC	DC	
31 360	600	300		35	600	300	
31 361	600	300		40	600	300	
31 362	600	300		45	600	300	
31 363	600			50	600		
31 364	600			60	600		
31 366	500			6		250	
31 368	500			10		250	
31 370	500			16		250	
31 371	500			20		250	
31 372	500			25		250	
31 373	500			32		250	
31 374	500			40		250	
31 385	690			50		250	
31 386	500			63		250	
31 387	500			80		250	
31 441	500	500	6	25	690	500	
31 442	500	500	6	63	690	600	
31 511	600	175		35	600	175	
31 512	600	175		40	600	175	
31 514	600	175		50	600	175	
31 515	600	175		60	600	175	
31 525	400	110	6	63	700	110	1)
31 548	690	1000	4	100	1000	1500	2)
31 549	690		4	100	690		
31 550	690		4	115	1000	1000	
31 554	400	250	6	63	500	250	
31 555	1000	1500	6	32	1000	1500	
31 556	400	65	6	63	500	250	1)
31 557	400	130	6	63	500		1)
31 561	690	600	4	100	690	690	
31 570		1000		30		1000	
31 572		1000		30		1000	
31 574	400		6	63	800		1)
31 575	400		6	63	800		1)
31 578	400		6	63	800		1)
31 579	400		6	63	800		1)
31 588	400		6	63	800		1)
31 918	500	500	6	25	690	500	
31 919	500	500	6	63	690	600	
31 920	600	600		60	600	600	
31 921	600	600		60	600	600	
31 922	600	600		60	600	600	
31 923	600	600		60	600	600	
31 924	600	600		60	600	600	
31 925	600	600		60	600	600	
31 929	72	72		30	72	72	
31 930	72		6	32	72		1)
31 932	600	600		30	600	600	
31 933	600	600		30	600	600	
31 934	600	600		30	600	600	
31 935	400	250	6	63	500	250	
31 936	400	250	6	63	500	250	
31 940	690		6	50	800		1)
31 941	690		6	50	800		1)
31 942	690		6	100	800		1)

- 1) The value for the maximum permitted operating voltage of fuse combination units in accordance with IEC 60947-3 is only valid when the device is used as a fuse holder **without a load-switching function**.
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Part no.	Rated operating Voltage $U_e$ (V)		Rated surge capacity $U_{imp}$ (kV)	Rated operating current $I_e$ (A)	Maximum permitted operating voltage (V)		Note
	AC	DC			AC	DC	
31 943	690		6	100	800		1)
31 946	500	500	6	25	690	500	
31 947	500	500	6	63	690	600	
31 950	500	500	6	25	690	500	
31 951	500	500	6	63	690	600	
31 954	690	600	6	32	800	800	1)
31 955	690	600	6	32	700	700	1)
31 956	1000	1000	6	20	1000	1000	1)
31 957	690		6	100	800		1)
31 958	600		6	30	600		
31 959	600		6	30	600		
31 960	1000	1000	6	20	1000	1000	1)
31 961	690	600	6	32	800	800	1)
31 963	690	600	6	32	800	800	1)
31 964	690	600	6	32	700	700	1)
31 968	600	600		30	600	600	
31 970	600	600		60	600	600	
31 971		1000	6	30		1000	
31 972	690		6	50	800		1)
31 973		1000	6	30		1000	
31 974		1000	6	30		1000	1)
32 004	690		6	630	800	800	
32 017	690		6	250	800	800	
32 018	690		6	160	800	800	
32 020	690		6	160	800	800	
32 023	690		6	250	800	800	
32 137	690		6	250	800	800	
32 138	690		6	600	800	800	
32 140	690		6	250	800	800	
32 156	690		6	250	800	800	
32 157	690		6	570	800	800	
32 168	690		6	250	800	800	
32 214	690		6	200	800	800	
32 215	690		6	200	800	800	
32 216	690		6	250	800	800	
32 400	690		6	25	800	800	
32 401	690		6	16	800	800	
32 402	690		6	25	800	800	
32 404	690		6	32	800	800	
32 408	690		6	32	800	800	
32 412	690		6	45	800	800	
32 416	690		6	45	800	800	
32 420	690		6		800	800	
32 421	690		6		800	800	
32 425	690		6		800	800	
32 426	690		6		800	800	
32 427	690		6	32	800	800	
32 428	690		6	32	800	800	
32 429	690		6	16	800	800	
32 430	690		6	25	800	800	
32 431	690		6	25	800	800	
32 432	690		6	25	800	800	
32 433	690		6	25	800	800	
32 434	690		6	32	800	800	
32 436	690		6	25	800	800	

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Part no.	Rated operating Voltage $U_e$ (V)		Rated surge capacity $U_{imp}$ (kV)	Rated operating current $I_e$ (A)	Maximum permitted operating voltage (V)		Note
	AC	DC			AC	DC	
32 438	690		6	32	800	800	
32 439	690		6	25	800	800	
32 440	690		6	16	800	800	
32 441	690		6	32	800	800	
32 442	690		6	32	800	800	
32 443	690		6	32	800	800	
32 444	690		6	32	800	800	
32 445	690		6	25	800	800	
32 446	690		6	32	800	800	
32 448	690		6	25	800	800	
32 449	690		6	32	800	800	
32 450	690		6	25	800	800	
32 451	690		6	32	800	800	
32 452	690		6	25	800	800	
32 453	690		6	32	800	800	
32 454	690		6	63	800	800	
32 455	690		6	63	800	800	
32 456	690		6	63	800	800	
32 457	690		6	63	800	800	
32 459	690		6	63	800	800	
32 460	690		6	63	800	800	
32 461	690		6	63	800	800	
32 463	690		6	63	800	800	
32 464	690		6	80	800	800	
32 465	690		6	80	800	800	
32 466	690		6	80	800	800	
32 467	690		6	80	800	800	
32 469	690		6	80	800	800	
32 472	690		6	80	800	800	
32 477	690		6		800	800	
32 478	690		6		800	800	
32 484	690		6		800	800	
32 485	690		6		800	800	
32 498	690		6	32	800	800	
32 533	690		6	25	800	800	
32 534	690		6	25	800	800	
32 535	690		6	63	800	800	
32 549	690		6	160	800	800	
32 570	690		6	160	800	800	
32 575	690		6	160	800	800	
32 577	690		6	160	800	800	
32 578	690		6	250	800	800	
32 579	690		6	400	800	800	
32 580	690		6	250	800	800	
32 581	690		6	500	800	800	
32 582	690		6	250	800	800	
32 583	690		6	500	800	800	
32 584	690		6	250	800	800	
32 585	690		6	500	800	800	
32 588	690		6	32	800	800	
32 590	690		6	32	800	800	
32 591	690		6	63	800	800	
32 592	690		6	250	800	800	
32 593	690		6	580	800	800	
32 594	690	440		200	800	800	

- 1) The value for the maximum permitted operating voltage of fuse combination units in accordance with IEC 60947-3 is only valid when the device is used as a fuse holder **without a load-switching function**.
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Part no.	Rated operating Voltage $U_e$ (V)		Rated surge capacity $U_{imp}$ (kV)	Rated operating current $I_e$ (A)	Maximum permitted operating voltage (V)		Note
	AC	DC			AC	DC	
32 601	690		6	290	800	800	
32 637	690		6	25	800	800	
32 638	690		6	32	800	800	
32 639	690		6	32	800	800	
32 641	690		6	600	800	800	
32 651	690		6	250	800	800	
32 655	690		6	32	800	800	
32 659	690		6	32	800	800	
32 660	690		6	160	800	800	
32 661	690		6	160	800	800	
32 662	690		6	80	800	800	
32 663	690		6	80	800	800	
32 664	690		6	80	800	800	
32 752	690		8	1000	800		
32 753	690		8	1000	800		
32 754	690		8	1000	800		
32 755	690		8	1000	800		
32 756	690		8	1450	800		
32 757	690		8	1250	800		
32 758	690		8	1250	800		
32 759	690		8	1250	800		
32 760	690		8	1000	800		
32 761	690		8	1440	800		
32 762	690		8	1440	800		
32 763	690		8	1440	800		
32 764	690		8	1250	800		
32 765	690		8	1250	800		
32 766	690		8	1000	800		
32 767	690		8	800	800		
32 768	690		8	1440	800		
32 771	690		8	1000	800		
32 772	690		8	1000	800		
32 773	690		8	1000	800		
32 774	690		8	1000	800		
32 775	690		8	1450	800		
32 776	690		8	1250	800		
32 777	690		8	1250	800		
32 778	690		8	1250	800		
32 779	690		8	1440	800		
32 780	690		8	1440	800		
32 781	690		8	1440	800		
32 782	690		8	1440	800		
32 784	690		8	1250	800		
32 785	690		8	1000	800		
32 786	690		8	1000	800		
32 975	690		6	400	800	800	
32 976	690		6	160	800	800	
32 977	690		6	250	800	800	
32 978	690		6	630	800	800	
32 980	690		6	580	800	800	
32 981	690		6	100	800	800	
33 075	690	440	6	160	800	800	1)
33 079	690	440	6	160	800	800	1)
33 087	690		6	250	1000	1000	
33 088	690		6	400	1000	1000	







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Part no.	Rated operating Voltage $U_e$ (V)		Rated surge capacity $U_{imp}$ (kV)	Rated operating current $I_e$ (A)	Maximum permitted operating voltage (V)		Note
	AC	DC			AC	DC	
33 089	690		6	630	1000	1000	
33 093	690		8	250	1000	1000	1)
33 094	690		8	400	1000	1000	1)
33 095	690		8	630	1000	1000	1)
33 097	690		8	250	1000	1000	1)
33 098	690		8	400	1000	1000	1)
33 099	690		8	630	1000	1000	1)
33 149	690	250	6	250	690	250	1)
33 150	690	250	6	400	690	250	1)
33 151	690	250	6	630	690	250	1)
33 160	690	250	6	250	690	250	1)
33 161	690	250	6	400	690	250	1)
33 162	690	250	6	630	690	250	1)
33 194	690	440	6	250	800	800	1)
33 198	690	440	6	160	800	800	1)
33 199	690	440	6	160	800	800	1)
33 200	690	440	6	160	800	800	1)
33 201	690	440	6	250	800	800	1)
33 202	690	440	6	400	800	800	1)
33 203	690	440	6	630	800	800	1)
33 206	690	250	2	160	690	250	1)
33 207	690	250	6	160	690	250	1)
33 208	690	250	6	160	690	250	1)
33 216	690	440	6	125	800	800	1)
33 217	690	440	6	125	800	800	1)
33 221	690	440	6	160	800	800	1)
33 222	690	440	6	160	800	800	1)
33 234	690		8	160	800	800	1)
33 235	690		8	160	800	800	1)
33 243	690		8	250	1000	1000	1)
33 244	690		8	400	1000	1000	1)
33 245	690		8	630	1000	1000	1)
33 285	690		4	160	800	250	1)
33 286	690		4	160	800	250	1)
33 308	600	600		400	600	600	
33 311	600	600		400	600	600	
33 321	690		8	1250	1000	1000	1)
33 324	690	250	6	160	690	250	1)
33 325	690	250	2	250	690	250	1)
33 326	690	250	2	400	690	250	1)
33 327	690	250	2	630	690	250	1)
33 328	690	250	2	160	690	250	1)
33 329	690	250	2	160	690	250	1)
33 330	690	250	2	250	690	250	1)
33 331	690	250	2	400	690	250	1)
33 332	690	250	2	630	690	250	1)
33 384	690		6	160	800	800	
33 393	690	440	6	250	800	800	1)
33 394	690	250	6	160	690	250	1)
33 398	690	440	6	160	800	800	1)
33 402	600			100	600	600	
33 403	600			200	600	600	
33 408	600			100	600	600	
33 409	600	600		200	600	600	
33 416	690	440	6	125	800	800	1)



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Part no.	Rated operating Voltage $U_e$ (V)		Rated surge capacity $U_{imp}$ (kV)	Rated operating current $I_e$ (A)	Maximum permitted operating voltage (V)		Note
	AC	DC			AC	DC	
33 420	690	250	2	160	690	250	1)
33 421	600			30	600	600	
33 422	600	600		60	600	600	
33 600	690	440	6	250	800	800	1)
33 601	690	440	6	250	800	800	1)
33 602	690	440	6	400	800	800	1)
33 603	690	440	6	630	800	800	1)
33 700	690		8	160	1000		1)
33 701	690		8	250	1000		1)
33 702	690		8	400	1000		1)
33 703	690		8	630	1000		1)
33 704	690		8	160	1000		1)
33 705	690		6	160	1000	1000	
33 706	690		6	250	1000	1000	
33 707	690		6	400	1000	1000	
33 708	690		6	630	1000	1000	
33 715	690		8	160	1000		1)
33 716	690		8	250	1000		1)
33 717	690		8	400	1000		1)
33 718	690		8	630	1000		1)
33 719	690		8	160	1000		1)
33 720	690		4	160	800	250	1)
33 721	690		4	250	800	250	1)
33 722	690		4	400	800	250	1)
33 723	690		4	630	800	250	1)
33 724	690		4	160	800	250	1)
33 730	690		8	910	1000		1)
33 731	690		8	1250	1000		1)
33 770	690		8	160	1000		1)
33 771	690		4	160	800	250	1)
33 772	690		8	160	1000		1)
33 773	690		8	160	1000		1)
33 774	690		4	160	800	250	1)
33 775	690		8	160	1000		1)
36 100	500		6	0.6	500		
36 101	500		6	0.6	500		
36 102	500		6	0.6	500		
36 103	500		6	2.4	500		
36 104	500		6	2.4	500		
36 105	500		6	2.4	500		
36 106	500		6	9	500		
36 107	500		6	9	500		
36 108	500		6	9	500		
36 109	500		6	0.6	500		
36 110	500		6	2.4	500		
36 111	500		6	9	500		

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Part no.	Type no.	USA	Canada	Germ. Lloyd	Germany	Netherlands	China
							
01 008	HH64.2	UL*	•				○
01 025	C025-L	•*	•	•			○
01 026	C026-L	•*	•	•			○
01 027	3x20x1	UL*		•			○
01 028	6x20x1	UL*		•			○
01 029	10x20x1	UL*		•			○
01 035	6x15,5x0,8	UL*		•			○
01 047	520			•			○
01 054	3x9x0,8	UL*		•			○
01 060	5x50x1	UL*		•			○
01 061	10x80x1	UL*		•			○
01 063	6x20x1	UL*		•			○
01 064	10x20x1	UL*		•			○
01 068	524	UL	•	•			○
01 069	CPC50-L	•*					○
01 070	CPC63-L	•*					○
01 071	CPC100-L	•*					○
01 075	5x24x1	UL*		•			○
01 076	10x24x1	UL*		•			○
01 084	6x9x0,8	UL*		•			○
01 089	4x15,5x0,8	UL*		•			○
01 090	6x15,5x0,8	UL*		•			○
01 091	10x15,5x0,8	UL*		•			○
01 092				•			○
01 094				•			○
01 095	5x32x1	UL*		•			○
01 096	10x32x1	UL*		•			○
01 097	5x40x1	UL*		•			○
01 099	10x40x1	UL*		•			○
01 112	5x50x1	UL*		•			○
01 113	10x50x1	UL*		•			○
01 114							○
01 116	S635-L	•*		•			○
01 119							○
01 120							○
01 121							○
01 123	10x63x1	UL*		•			○
01 126							○
01 127							○
01 128							○
01 129							○
01 130							○
01 131	511	UL	•	•			○
01 132	S645-L	•*		•			○
01 135	515-L	•*					○

Part no.	Type no.	USA	Canada	Germ. Lloyd	Germany	Netherlands	China
							
01 136	TC60-L	•*	•	•			○
01 137	TC60-L	•*	•	•			○
01 138							○
01 139							○
01 140	20x10-L	•*	•	•			○
01 141	LV30-L	•*		•			○
01 143							○
01 144							○
01 145	LVH-L	•*					○
01 147	M300-L	•*		•			○
01 162				•			○
01 165	M150-L	•*					○
01 166				•			○
01 170							○
01 184	10x24x1	UL*		•			○
01 185	H41.2	UL*	•	•			○
01 186	HH101.2	UL*	•				○
01 187	HH1140-L	•*	•	•			○
01 188	HH1140-L	•*	•	•			○
01 189	HH1140-L	•*	•	•			○
01 190	H720-L	•*	•	•			○
01 193				•			○
01 194	6x9x0,8	UL*		•			○
01 196	4x15,5x0,8	UL*		•			○
01 198							○
01 199							○
01 201							○
01 202							○
01 203	528	UL	•	•			○
01 204	30x10-L	•*	•	•			○
01 206							○
01 207							○
01 218							○
01 222							○
01 223	H500-L	•*	•	•			○
01 224	H500-L	•*	•	•			○
01 225	H500-L	•*	•	•			○
01 226	H500-L	•*	•	•			○
01 227	HH1140-L	•*	•	•			○
01 228							○
01 229	H720-L	•*	•	•			○
01 230							○
01 231	S630-L	•*	•	•			○
01 232	S640-L	•*	•				○
01 234	234-L	•*	•	•			○

- approved
-  UL Recognized
- \* for feeder circuits approved according to UL 508A up to 600V
-  waiting approval at editorial deadline
- no certification required

Part no.	Type no.	USA	Canada	Germ. Lloyd	Germany	Netherlands	China
01 236							○
01 237							○
01 238							○
01 240	240-L	●*	●	●			○
01 243	243-L	●*	●	●			○
01 244	C30x5-L	●*	●	●			○
01 245	C30x10-L	●*	●	●			○
01 249	H720-L	●*	●	●			○
01 250	H500-L	●*	●	●			○
01 251							○
01 252	CHH-L	●*	●	●			○
01 253	4x24x1			●			○
01 254							○
01 255	6x24x1			●			○
01 256	6x40x1			●			○
01 257							○
01 258							○
01 272	S612-L	●*					○
01 273	10x100x1			●			○
01 274	LVHH-L	●*					○
01 275	LVHH-L	●*					○
01 284	521		●	●			○
01 285	522		●	●			○
01 287	523		●	●			○
01 289	525		●	●			○
01 290	526		●	●			○
01 292	527		●	●			○
01 295							○
01 298							○
01 299							○
01 300	240		●	●			○
01 301	243		●	●			○
01 303							○
01 314	C314-L	●*					○
01 317	C317-L	●*					○
01 318	518		●	●			○
01 319	519		●	●			○
01 320	C026-L	●*					○
01 323	8x24x1			●			○
01 324	5x63x1			●			○
01 325							○
01 343	8x50x1			●			○
01 355							○
01 356	S356-L	●*					○
01 357	S62015-L	●*		●			○

Part no.	Type no.	USA	Canada	Germ. Lloyd	Germany	Netherlands	China
01 358	D620-L	●*					○
01 359	D620-L	●*					○
01 360	P620-L	●*					○
01 361	P620-L	●*					○
01 362	P620-L	●*					○
01 363							○
01 364							○
01 367							○
01 369							○
01 370	M120-L	●*					○
01 371							○
01 373							○
01 374	D612-L	●*					○
01 376							○
01 377							○
01 378							○
01 379							○
01 380							○
01 381	12x5-L	●*	●	●			○
01 382	12x5-L	●*	●	●			○
01 383	20x5-L	●*	●	●			○
01 384	20x5-L	●*	●	●			○
01 387	30x5-L	●*	●	●			○
01 388	30x5-L	●*	●	●			○
01 389	12x10-L	●*	●	●			○
01 390	12x10-L	●*	●	●			○
01 391	20x10-L	●*	●	●			○
01 392	20x10-L	●*	●	●			○
01 393	30x10-L	●*	●	●			○
01 394	30x10-L	●*	●	●			○
01 395	H500-L	●*	●	●			○
01 396	H500-L	●*	●	●			○
01 397	H720-L	●*	●	●			○
01 398	H720-L	●*	●	●			○
01 399	HH1140-L	●*	●	●			○
01 400	HH1140-L	●*	●	●			○
01 401	240-L	●*	●	●			○
01 413	412		●	●			○
01 417	C60.2-L	●*					○
01 420							○
01 421							○
01 422							○
01 424				●			○
01 425							○
01 426							○

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Part no.	Type no.	USA	Canada	Germ. Lloyd	Germany	Netherlands	China
01 427							○
01 430							○
01 431							○
01 432							○
01 433							○
01 434							○
01 436							○
01 437							○
01 438							○
01 439							○
01 440							○
01 441							○
01 442							○
01 443							○
01 444							○
01 479							○
01 480							○
01 481							○
01 482							○
01 484							○
01 485	485		●	●			○
01 495	S610		●	●			○
01 498	5683			●	●		
01 500	S610		●	●			○
01 508	S620-L	●*	●	●			○
01 509	10x50x1			●			○
01 510	10x63x1			●			○
01 512				●			○
01 513	HH41.2		●				○
01 514				●			○
01 515	B620-L	●*	●	●			○
01 518	B620-L	●*	●	●			○
01 537	M300-L	●*	●	●			○
01 538	M3210-L	●*	●	●			○
01 539	CTC60-L	●*	●	●			○
01 540	CTC60-L	●*	●	●			○
01 554	C60.1-L	●*	●	●			○
01 555	C60.2-L	●*	●	●			○
01 562		●*					
01 563	CPL16-L	●*					○
01 573	511-L	●*	●	●			○
01 583	10x15,5x0,8			●			○
01 586							○
01 587							○
01 590	502		●	●			○
01 596	CTC60-L	●*	●	●			○
01 597	CTC60-L	●*	●	●			○
01 599	C60.1-L	●*	●	●			○
01 601	S489-L	●*		●			○
01 602							○
01 603							○
01 608	H720-L	●*	●	●			○
01 609	H500-L	●*	●	●			○
01 610							○
01 611	5x24x1			●			○
01 612	5x32x1			●			○
01 613	10x32x1			●			○
01 614	5x40x1			●			○
01 615	10x40x1			●			○
01 616							○
01 617							○
01 618	12x5-L	●*	●	●			○
01 619	15x5			●			○
01 620	20x5-L	●*	●	●			○
01 621	25x5			●			○
01 622	30x5-L	●*	●	●			○
01 623	12x10-L	●*	●	●			○
01 624	20x10-L	●*	●	●			○
01 625	30x10-L	●*	●	●			○
01 626							○
01 627							○
01 628							○
01 647	5683			●	●		
01 742							○
01 747				●			○
01 748				●			○
01 749				●			○
01 753				●			○
01 754	413		●	●			○
01 756	512-L	●*	●	●			○
01 757	513-L	●*	●	●			○
01 759	530-L	●	●	●			○
01 760	529		●	●			○
01 765							○
01 766							○
01 767							○
01 823	LV30-L	●*		●			○
01 827	LVH-L	●*					○
01 829	LVH-L	●*					○
01 831	H720-L	●*	●	●			○

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01 838	H720-L	●*	●	●			○
01 886	LV30-L	●*		●			○
01 888							○
01 890							○
01 905							○
01 906	H51.1	RU*	●	●			○
01 907	H64.1	RU*	●	●			○
01 911	H64.2	RU*	●	●			○
01 926							○
01 927							○
01 928							○
01 929							○
01 930							○
01 931							○
01 932							○
01 934	H81.2	RU*	●	●			○
01 935	H101.2	RU*	●	●			○
01 936	H51.2	RU*	●	●			○
01 980				●			
01 981				●			
01 990	LV30-L	●*		●			○
01 996							○
01 997							○
03 173							○
03 193							○
03 195							○
03 196							○
03 197							○
03 198							○
03 199	NH-00				●		
03 213							○
03 214		●					
03 215		●					
03 217		●					
03 219		●					
03 220		●					
03 221		●					
03 222		●					
03 224		●					
03 225		●					
03 226		●					
03 227		●					
03 228		●					
03 229		●					
03 230		●					

Part no.	Type no.	USA	Canada	Germ. Lloyd	Germany	Netherlands	China
03 231		●					
03 233		●					
03 234		●					
03 235		●					
03 236		●					
03 238		●					
03 239		●					
03 240		●					
03 241		●					
03 289	PVH-NH1XL-30	RU					
03 290	PVH-NH1XL	RU					
03 293	PVH-NH2XL/3L	RU					
03 294	PVH-NH2XL/3L-40	RU					
03 299					●		
03 350	NH-00			●			
03 351	NH-00			●			
03 354	NH-00			●			
03 355	NH-00			●			●
03 369				●			
03 370				●			
03 519							○
03 620							○
03 654				●			
03 656				●			
03 657							○
03 668							○
03 692							○
03 693				●			
03 757							○
03 758	NH-00			●			
03 759	NH-00			●			
03 760	NH-00			●			
03 761	NH-00			●			
03 762				●			
03 763				●			
03 765				●			
03 766				●			
03 767				●			
03 768				●			
03 769				●			
03 835							○
05 188							○
05 779							○
05 780							○
05 781							○

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05 782							○
05 783							○
05 784							○
05 786							○
05 787							○
05 788							○
05 789							○
05 790							○
05 791							○
05 792							○
05 800							○
05 801							○
05 802							○
08 824							○
08 825							○
30 322							○
30 473							○
31 012							○
31 014							○
31 024							○
31 026							○
31 027							○
31 028							○
31 029							○
31 039	CTB-T35.1	●*					○
31 042	CTB-C1.1	●*					○
31 056							○
31 057							○
31 070				●			
31 071				●			
31 072				●			
31 073				●			
31 084							○
31 085							○
31 101							○
31 102							○
31 103							○
31 110	AES10x38	●	●				●
31 111	AES10x38	●	●				●
31 112	AES10x38	●	●				●
31 113	AES10x38	●	●			●	●
31 114	AES10x38	●	●			●	●
31 115	AES14x51	●	●				●
31 116	AES14x51	●	●				●
31 117	AES14x51	●	●				●

Part no.	Type no.	USA	Canada	Germ. Lloyd	Germany	Netherlands	China
31 118	AES14x51	●	●				●
31 119	AES14x51	●	●				●
31 120	AES22x58	●	●				●
31 121	AES22x58	●	●				●
31 122	AES22x58	●	●				●
31 123	AES22x58	●	●				●
31 124	AES22x58	●	●				●
31 130	AES10x38	●	●				●
31 132	AES10x38	●	●				●
31 133	AES10x38	●	●				●
31 135	AES14x51	●	●				●
31 138	AES14x51	●	●				●
31 140	AES22x58	●	●				●
31 143	AES22x58	●	●				●
31 157							○
31 158	SPL-D0			●	●		
31 168	AES14x51	●	●				●
31 171	AES22x58	●	●				●
31 173				●			
31 174				●			
31 175				●			
31 176				●			
31 205		RU					
31 206		RU					
31 207		RU					
31 208		RU					
31 209		RU					
31 210		RU					
31 211		RU					
31 212		RU					
31 213		RU					
31 214		RU					
31 215		RU					
31 216		RU					
31 217		RU					
31 219		RU					
31 220		RU					
31 221		RU					
31 225		RU					
31 226		RU					
31 227		RU					
31 228		RU					
31 229		RU					
31 232	SPL-10x38			●			
31 235		●					

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Part no.	Type no.	USA	Canada	Germ. Lloyd	Germany	Netherlands	China
31 236		●					
31 237		●					
31 238		●					
31 239		●					
31 240		●					
31 241		●					
31 242		●					
31 243		●					
31 244		●					
31 245		●					
31 246		●					
31 247		●					
31 248		●					
31 249		●					
31 250		●					
31 251		●					
31 252		●					
31 275	AES10x38	●	●				●
31 276	AES10x38	●	●				●
31 277	AES10x38	●	●				●
31 278	AES14x51	●	●				●
31 279	AES14x51	●	●				●
31 280	AES14x51	●	●				●
31 281	AES22x58	●	●				●
31 282	AES22x58	●	●				●
31 283	AES22x58	●	●				●
31 284	AJC 30	●	●				
31 285	AJC 30	●	●				
31 286				●			
31 287	AJC 30	●	●				
31 288				●			
31 291				●			
31 293				●			
31 295	AES CC	●	●				
31 296	AES CC	●	●				
31 297	AES CC	●	●				
31 298	AES CC	●	●				
31 299	AES CC	●	●				
31 300	AES CC	●	●				
31 301	CEB14			●	●		
31 302	CEB14			●	●		
31 303	CEB18			●	●		
31 306	CEB18			●	●		
31 307	APS-D0			●	●		
31 308	APS-D0			●	●		

Part no.	Type no.	USA	Canada	Germ. Lloyd	Germany	Netherlands	China
31 309							○
31 310							○
31 311							○
31 312							○
31 313	APS-D0			●	●		
31 314	APS-D0			●	●		
31 315	APS-D0			●	●		
31 323		●					
31 324		●					
31 325		●					
31 326		●					
31 327		●					
31 333		●					
31 338		●					
31 342		●					
31 345		●					
31 349		●					
31 351		●					
31 353		●					
31 354		●					
31 355		●					
31 357		●					
31 358		●					
31 359		●					
31 360		●					
31 361		●					
31 362		●					
31 363		●					
31 364		●					
31 390							○
31 394		●					
31 395		●					
31 396		●					
31 397		●					
31 398		●					
31 399		●					
31 400		●					
31 401		●					
31 404		●					
31 405		●					
31 406		●					
31 407		●					
31 441				●			
31 442				●			
31 511		●					

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Part no.	Type no.	USA	Canada	Germ. Lloyd	Germany	Netherlands	China
31 512		●					
31 514		●					
31 515		●					
31 525	SPL-D0			●	●		
31 548	CTB25-118	●*					○
31 549	CTB25-318	●*					○
31 550	CTB-T35	●*					○
31 552	CTB-C3	●*					○
31 555	AES10x85	●					
31 557				●	●		
31 561	CTB25-318	●*					○
31 570	AEL10x38/PV-30						●
31 572	AEL10x38/PV-20						●
31 574	SEL				●		●
31 575	SEL				●		●
31 578	SEL				●		●
31 579	SEL				●		●
31 588	SEL				●		●
31 918				●			
31 919				●			
31 920	AJC 60	●	●				
31 921	AJC 60	●	●				
31 922	AJC 60	●	●				
31 923	AJC 60	●	●				
31 924	AJC 60	●	●				
31 925	AJC 60	●	●				
31 929	AES CC	●	●				
31 930	AES10x38	●	●				●
31 932	AJC 30	●	●				
31 933	AJC 30	●	●				
31 934	AJC 30	●	●				
31 935	CEL18			●	●		
31 936	CEL18			●	●		
31 940	AES14x51	●	●				●
31 941	AES14x51	●	●				●
31 942	AES22x58	●	●				●
31 943	AES22x58	●	●				●
31 946				●			
31 947				●			
31 950				●			
31 951				●			
31 954	AEL10x38		●		●		
31 955	AEL10x38		●		●		
31 956	AEL10x38				●		
31 957	AES22x58	●	●				●
31 958	AELCC	●	●				
31 959	AELCC	●	●				
31 960	AEL10x38				●		
31 961	AEL10x38				●		
31 963	AEL10x38				●		
31 964	AEL10x38				●		
31 968	EEC6032AJC30		●				
31 970	EEC6080AJC60		●				
31 971	AES10x38/PV	●	●				●
31 972	AES14x51	●	●				●
31 973	AES10x38/PV	●	●				
31 974	AES10x38/PV	●	●				●
32 001							○
32 004							○
32 017	EPC60250-L	●*		●			○
32 018	EPC60160-L	●*	●				○
32 020	EPC60160		●				○
32 023	60250.1-L	●*		●			○
32 137	60250.1-L	●*	●	●			○
32 138	60630.1-L	●*	●	●			○
32 140	60250.1-L	●*	●	●			○
32 146		●*					○
32 156	60250.1-L	●*	●	●			○
32 157	60630.1-L	●*	●	●			○
32 168	60250		●	●			○
32 214	60200		●	●			○
32 215	60200		●	●			○
32 216	60250		●	●			○
32 400	EMC6025-L	●*	●	●			○
32 401	EMC6025-L	●*	●	●			○
32 402	EMC6025-L	●*	●	●			○
32 404	EMC6032-L	●*	●	●			○
32 408	EMC6032-L	●*	●	●			○
32 412	EMC6045-L	●*	●	●			○
32 416	EMC6045-L	●*	●	●			○
32 420	EMC6000-L	●*	●	●			○
32 421	EMC6000-L	●*	●	●			○
32 425	EMC6000-L	●*	●	●			○
32 426	EMC6000-L	●*	●	●			○
32 427	EEC6025-L	●*	●	●			○
32 428	EEC6025-L	●*	●	●			○
32 429	EEC6025		●	●			○
32 430	EEC6025-L	●*	●	●			○
32 431	EEC6025-L	●*	●	●			○
32 432	EEC6025-L	●*	●	●			○

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32 433	EEC6025-L	●*	●	●			○
32 434	EEC6025-L	●*	●	●			○
32 436	EEC6025-L	●*	●	●			○
32 438	EEC6025-L	●*	●	●			○
32 439	EEC6025-L	●*	●	●			○
32 440	EEC6025		●	●			○
32 441	EEC6032-L	●*	●	●			○
32 442	EEC6032-L	●*	●	●			○
32 443	EEC6032-L	●*	●	●			○
32 444	EEC6032-L	●*	●	●			○
32 445	EEC6025-L	●*	●	●			○
32 446	EEC6032-L	●*	●	●			○
32 448	EEC6025-L	●*	●	●			○
32 449	EEC6032-L	●*	●	●			○
32 450	EEC6025-L	●*	●	●			○
32 451	EEC6025-L	●*	●	●			○
32 452	EEC6025-L	●*	●	●			○
32 453	EEC6025-L	●*	●	●			○
32 454	EEC6063-L	●*	●	●			○
32 455	EEC6063-L	●*	●	●			○
32 456	EEC6063-L	●*	●	●			○
32 457	EEC6063-L	●*	●	●			○
32 459	EEC6063-L	●*	●	●			○
32 460	EEC6063-L	●*	●	●			○
32 461	EEC6063-L	●*	●	●			○
32 463	EEC6063-L	●*	●	●			○
32 464	EEC6080		●	●			○
32 465	EEC6080		●	●			○
32 466	EEC6080-L	●*	●	●			○
32 467	EEC6080-L	●*	●	●			○
32 469	EEC6080-L	●*	●	●			○
32 472	EEC6080-L	●*	●	●			○
32 477	EEC6000-L	●*	●	●			○
32 478	EEC6000-L	●*	●	●			○
32 484	EEC6000-L	●*	●	●			○
32 485	EEC6000-L	●*	●	●			○
32 486							○
32 487							○
32 498	EEC6025-L	●*	●	●			○
32 511							○
32 513							○
32 533	EEC6025-L	●*	●	●			○
32 534	EEC6025-L	●*	●	●			○
32 535	EEC6063-L	●*	●	●			○
32 549	EPC60160-L	●*	●				○

Part no.	Type no.	USA	Canada	Germ. Lloyd	Germany	Netherlands	China
32 570	ECL60160-L	●*					○
32 575	EPC60160-L	●*	●				○
32 577	EPC60160-L	●*	●				○
32 578	EPC60250-L	●*		●			○
32 579	EPC60630-L	●*					○
32 580	EPC60250-L	●*		●			○
32 581	EPC60630-L	●*					○
32 582	EPC60250-L	●*		●			○
32 583	EPC60630-L	●*					○
32 584	EPC60250-L	●*		●			○
32 585	EPC60630-L	●*		●			○
32 588	EEC6025-L	●*					○
32 590	EEC6025-L	●*	●	●			○
32 591	ECC6063-L	●*	●	●			○
32 592	EPC60250-L	●*		●			○
32 593	EPC60630-L	●*		●			○
32 601	EPC60250-L	●*		●			○
32 628							○
32 629							○
32 630							○
32 631							○
32 632							○
32 633							○
32 634							○
32 637	EEC6025-L	●*	●	●			○
32 638	EEC6025-L	●*	●	●			○
32 639	EEC6025-L	●*	●	●			○
32 640							○
32 641	EPC60630-L	●*		●			○
32 651	EPC60250-L						○
32 655	EEC6025-L	●*	●	●			○
32 659	EEC6025-L	●*	●	●			○
32 660							○
32 661	EPC60160-L						○
32 662							○
32 663	EEC6080-L	●*					○
32 664	EEC6080-L	●*					○
32 750							○
32 751							○
32 752	EPC1851600						○
32 753	EPC1851600						○
32 754	EPC1851600						○
32 755	EPC1851600						○
32 756	EPC1851600						○
32 757	EPC1851600						○

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Part no.	Type no.	USA	Canada	Germ. Lloyd	Germany	Netherlands	China
32 758	EPC1851600						○
32 759	EPC1851600						○
32 760	EPC1851600						○
32 761	EPC1851600						○
32 762	EPC1851600						○
32 763	EPC1851600						○
32 764	EPC1851600						○
32 765	EPC1851600						○
32 766	EPC1851600						○
32 767	EPC1851600						○
32 768	EPC1851600						○
32 771	EPC1851600						○
32 772	EPC1851600						○
32 773	EPC1851600						○
32 774	EPC1851600						○
32 775	EPC1851600						○
32 776	EPC1851600						○
32 777	EPC1851600						○
32 778	EPC1851600						○
32 779	EPC1851600						○
32 780	EPC1851600						○
32 781	EPC1851600						○
32 782	EPC1851600						○
32 784	EPC1851600						○
32 785	EPC1851600						○
32 786	EPC1851600						○
32 907							○
32 912							○
32 914							○
32 915							○
32 921							○
32 937							○
32 947	TS35-L	●*	●	●			○
32 948	TS35-L	●*	●	●			○
32 949	TS35-L	●*	●	●			○
32 950	TS35-L	●*	●	●			○
32 951	TS35-L	●*	●	●			○
32 954	X-L	●*	●	●			○
32 956							○
32 963				●			○
32 964				●			○
32 969							○
32 973	EEC25-L	●*	●	●			○
32 974	EEC80-L	●*	●	●			○
32 975	60630.1-L	●*	●	●			○
32 976	60250.1-L	●*	●	●			○
32 977	60250.1-L	●*	●	●			○
32 978	EPC60630-L	●*		●			○
32 980							○
32 981	EEC6080-L	●*					○
32 982							○
32 983							○
32 984							○
32 985							○
32 986							○
32 987							○
33 075	QCB-NH 00			●	●		●
33 079	QCB-NH 00			●	●		●
33 093	SLS1						●
33 094	SLS2						●
33 095	SLS3						●
33 097	SLS1						●
33 098	SLS2						●
33 099	SLS3						●
33 126							○
33 127							○
33 128							○
33 149	QCB-NH1				●		
33 150	LTS2			●		●	●
33 151	LTS3			●		●	●
33 160	QCB-NH1				●		●
33 161	LTS2			●		●	●
33 162	LTS3			●		●	●
33 173							○
33 174							○
33 179							○
33 180							○
33 198	QCB-NH 00			●	●		●
33 199	LTS00			●			●
33 200	LTS00			●			●
33 201	QCB-NH1				●		●
33 202	LTS2			●		●	●
33 203	LTS3			●		●	●
33 206	QCB-NH 00			●			●
33 207	LTS00						●
33 208	LTS00						●
33 216	LTS000			●			●
33 217	LTS000			●			●
33 221	LTS00			●			●
33 222	LTS00			●			●

● approved

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Part no.	Type no.	USA	Canada	Germ. Lloyd	Germany	Netherlands	China
33 234	SLS00						●
33 235	SLS00						●
33 243	SLS1						●
33 244	SLS2						●
33 245	SLS3						●
33 285	SLS00						●
33 286	SLS00						●
33 287	SLS1						●
33 288	SLS2						●
33 289	SLS3						●
33 292							○
33 293							○
33 294							○
33 295							○
33 296							○
33 297							○
33 298							○
33 299							○
33 308	JC400	●	●				
33 311	JC400B	RU	●				
33 321	SLS3						●
33 324	QCB-NH00			●			●
33 325	QCB-NH1				●		●
33 326	LTS2			●		●	●
33 327	LTS3			●		●	●
33 328	LTS00						●
33 329	LTS00						●
33 330	QCB-NH1				●		
33 331	LTS2			●		●	●
33 332	LTS3			●		●	●
33 333	LTS-250					●	
33 334	LTS-400					●	
33 335	LTS-630					●	
33 336	LTS-800					●	
33 337	LTS-F160					●	
33 338	LTS-F250					●	
33 339	LTS-F400					●	
33 340	LTS-F630					●	
33 341							○
33 355	LTS-250					●	
33 356	LTS-400					●	
33 357	LTS-630					●	
33 358	LTS-800					●	
33 359	LTS-F160					●	
33 360	LTS-F250					●	

Part no.	Type no.	USA	Canada	Germ. Lloyd	Germany	Netherlands	China
33 361	LTS-F400						●
33 362	LTS-F630						●
33 394	QCB-NH00			●	●		●
33 398	QCB-NH 00			●	●		●
33 402	QCC-Class J 100A	RU					
33 403	QCC Class J 200A	RU					
33 408	QCC Class J 100A	RU					
33 409	QCC Class J 200A	RU					
33 416	QCB-NH00			●	●		●
33 420	QCB-NH 00			●			●
33 421	QCC-Class J 30A	RU					
33 422	QCC-Class J 60A	RU					
33 500	QCS-NH 00			●	●		●
33 501	QCS-NH 00			●	●		●
33 502	QCS-NH 00			●	●		●
33 503	QCS-NH 00			●	●		●
33 504	QCS-NH 00			●	●		●
33 505	QCS-NH 00			●	●		●
33 506	QCS-NH 00			●	●		●
33 507	QCS-NH 00			●	●		●
33 510	QCS-NH1				●		
33 511	QCB-NH1				●		
33 512	QCB-NH1				●		
33 513	QCB-NH1				●		
33 514	QCB-NH1				●		
33 515	QCB-NH1				●		
33 516	QCB-NH1				●		
33 544	QCS-200						●
33 600	QCB-NH1				●		●
33 601	QCB-NH1				●		●
33 602	LTS2			●		●	●
33 603	LTS3			●		●	●
33 700	QU185-00						
33 701	QU185-1						
33 702	QU185-2						
33 703	QU185-3						
33 704	QU185-00						
33 715	QU185-00						
33 716	QU185-1						
33 717	QU185-2						
33 718	QU185-3						
33 719	QU185-00						
33 720	QU185-00						
33 721	QU185-1						
33 722	QU185-2						

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Part no.	Type no.	USA	Canada	Germ. Lloyd	Germany	Netherlands	China
33 723	QU185-3						
33 724	QU185-00						
33 730	QU185-3						
33 741							
33 742							
33 744							
33 745							
33 746							
33 747							
33 748							
33 749							
33 750							
33 751							
33 752							
33 753							
33 754							
33 772	QU185-00						
33 775	QU185-00						
35 001	Z1140-L	●*					
35 004	Centre Feed Unit	●*					
35 005	Centre Feed Unit	●*					
35 006	Centre Feed Unit	●*					
35 007	Centre Feed Unit	●*					
35 008	Z1140-L	●*					
35 009	Z1140-L	●*					
35 015	Centre Feed Unit	●*					
35 016	Centre Feed Unit	●*					
35 017							
36 100	MCC 36100	●					
36 101	MCC 36101	●					
36 102	MCC 36102	●					
36 103	MCC 36103	●					
36 104	MCC 36104	●					
36 105	MCC 36105	●					
36 106	MCC 36106	●					
36 107	MCC 36107	●					
36 108	MCC 36108	●					
36 109	36109	●					
36 110	36110	●					
36 111	36111	●					
36 112	36112	●					
36 113	36113	●					
36 114	36114	●					
36 209	SWD 36209	●					
36 215	EU5C-SWD-PF2-1	●	●				

Part no.	Type no.	USA	Canada	Germ. Lloyd	Germany	Netherlands	China
36 216	EU5C-SWD-DP	●	●				
36 218	EU5C-SWD-CAN	●	●				
36 219	EU5C-SWD-EIP-MODTCP	●	●				
36 220		●	●				
36 905	SWD4-3LF8-24-2S	●	●				
36 906	SWD4-8SF2-5	●	●				
36 907	SWD4-8MF2	●	●				
36 908	SWD4-RC8-10	●	●				
36 911		●	●				
36 912		●	●				
36 913		●	●				

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**01 272**

**01 314**  
**01 317**

	a	b	c	d	e
<b>01 068</b>	17	23.5	36	55	5
<b>01 203</b>	17	23.5	36	55	10
<b>01 284</b>	7.5	11.5	22.5	25	5
<b>01 285</b>	10.5	15.5	29	36	5
<b>01 287</b>	14.5	20.5	32	42	5
<b>01 289</b>	7.5	11.5	22.5	25	10
<b>01 290</b>	10.5	15.5	29	35	10
<b>01 292</b>	14.5	20.5	32	42	10

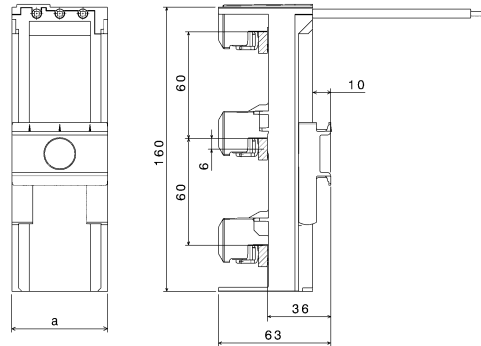
**01 135**

**01 165**

**01 401**

	a
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<b>32 590</b>	45
<b>32 591</b>	54



**31 554**

**01 562**

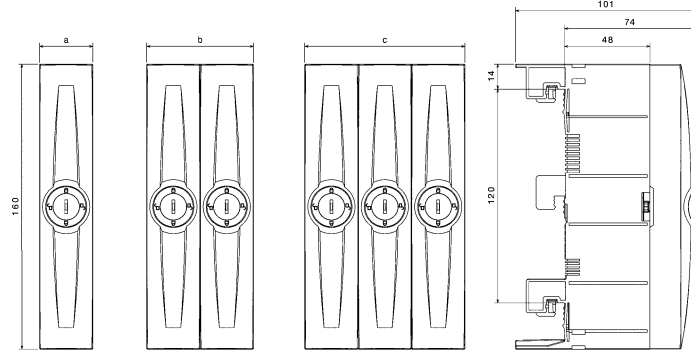
**33 416**

**03 316**

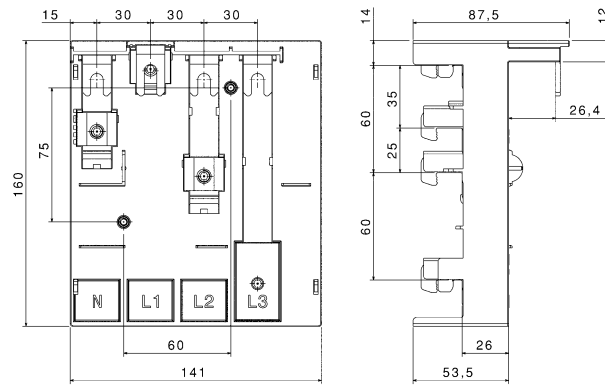




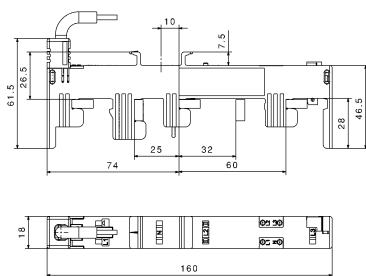
	a	b	c
<b>01 364</b>	30		
<b>01 367</b>	30		
<b>01 370</b>			90
<b>01 426</b>		60	
<b>01 427</b>	30		



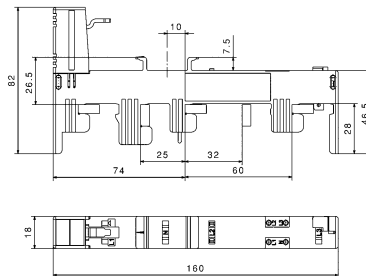
**32 640**



**32 629**  
**32 630**

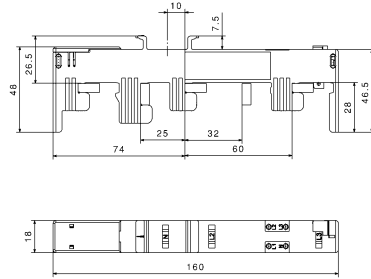


**32 628**

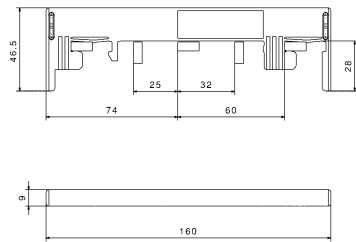




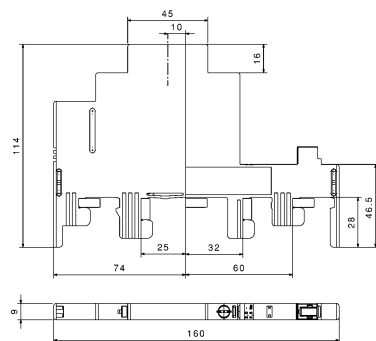
**32 631**

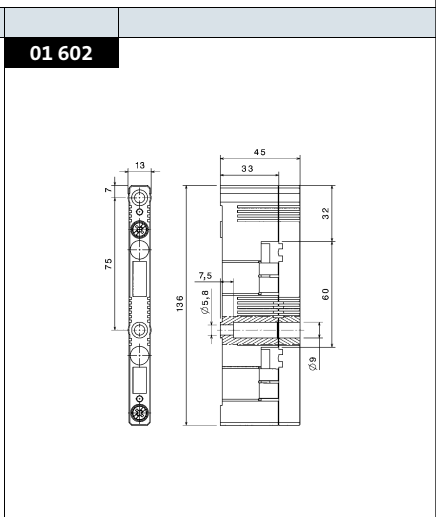
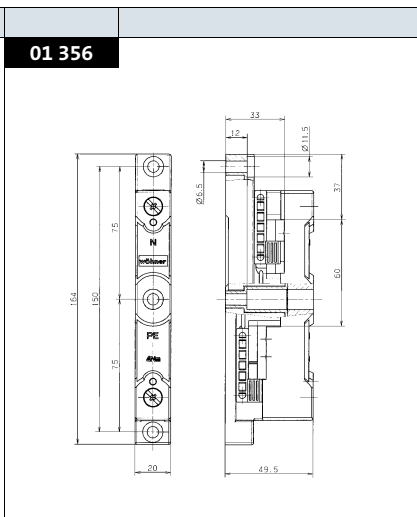
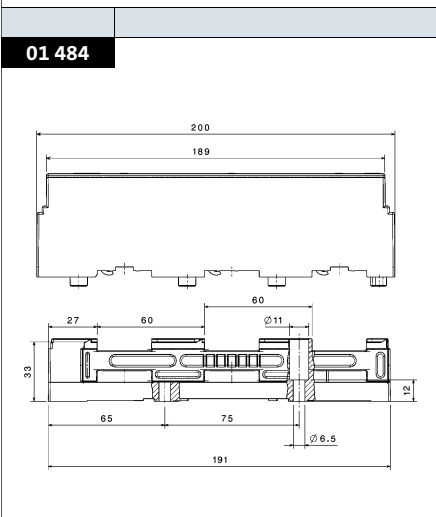
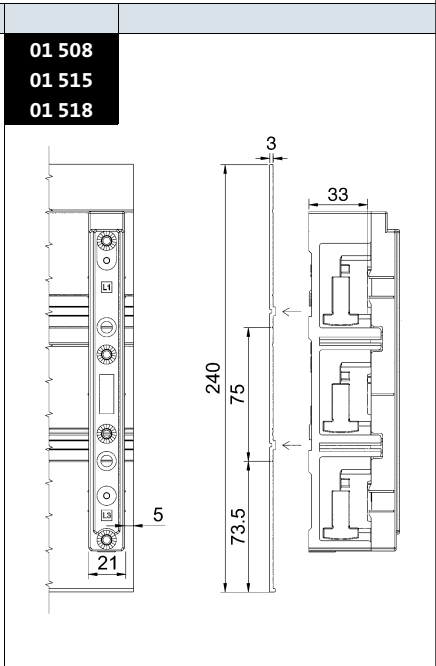
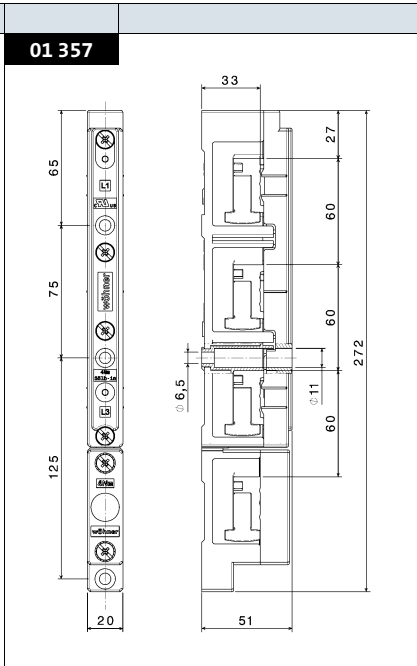
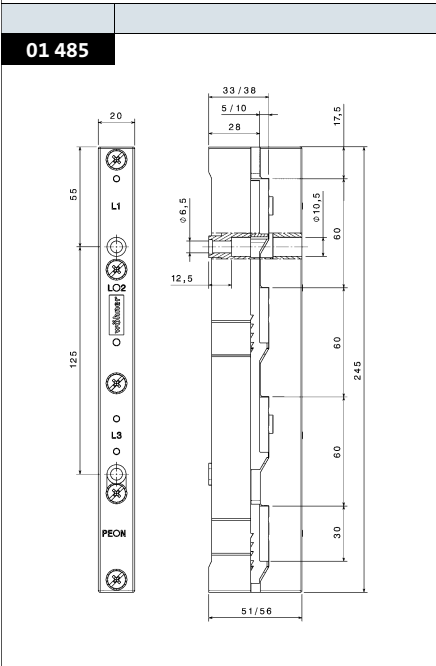
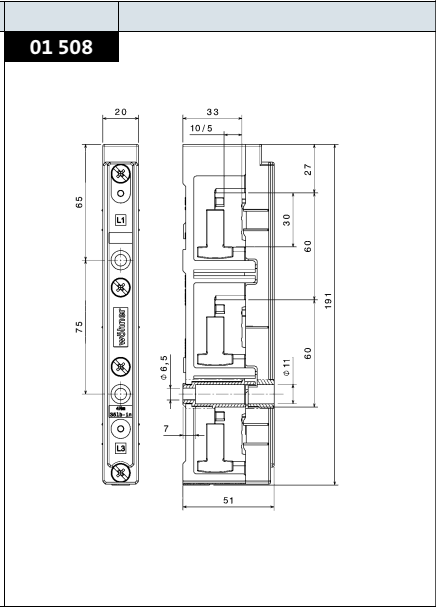
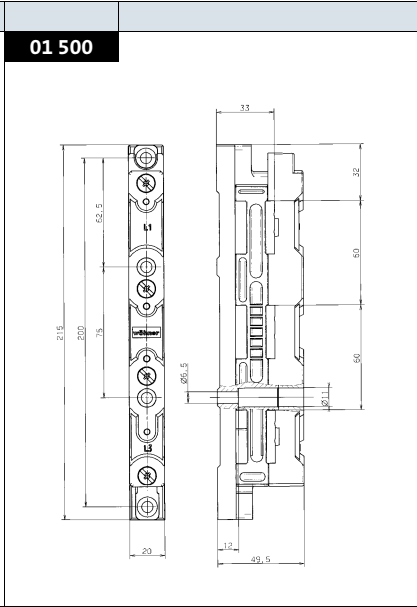
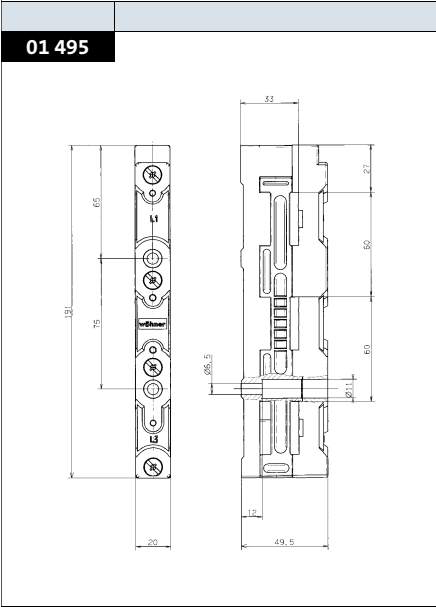


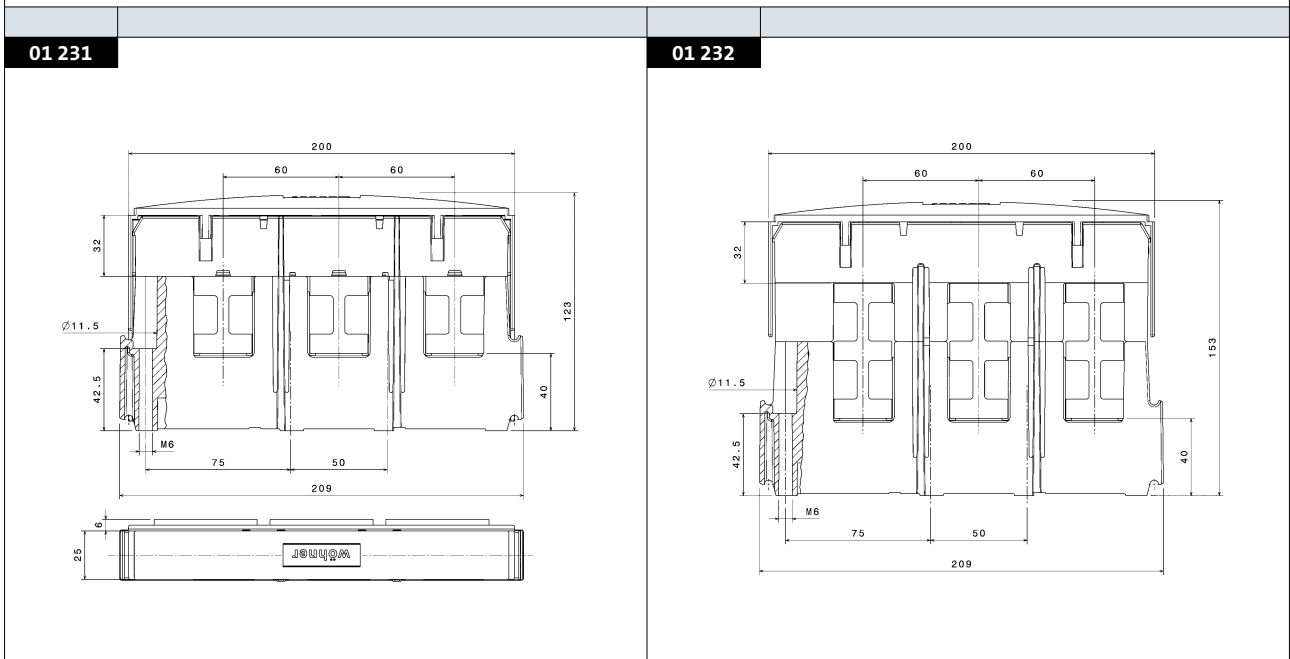
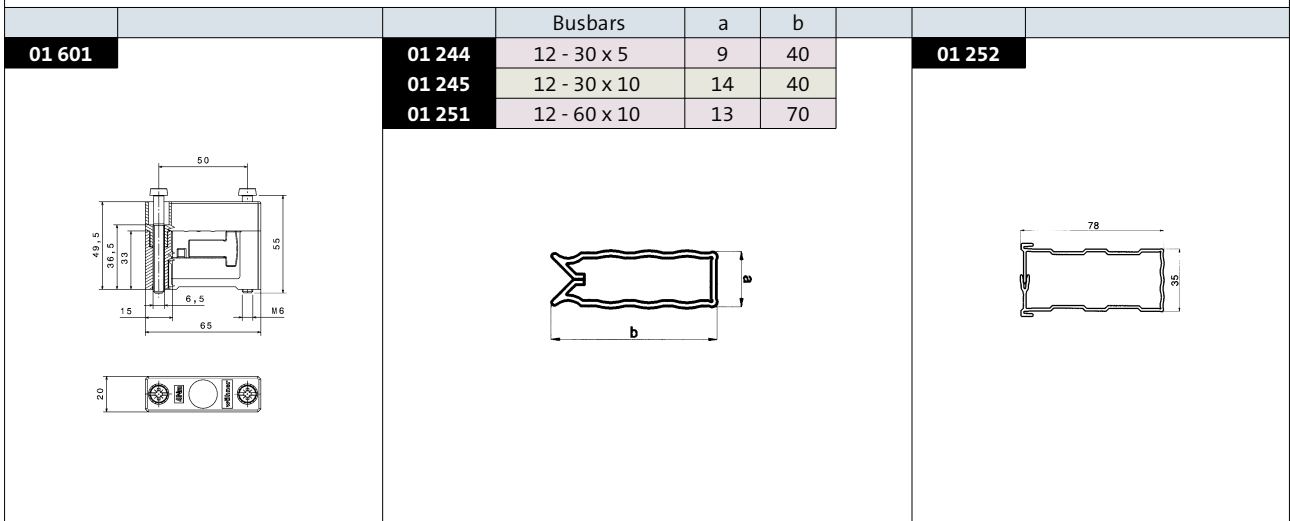
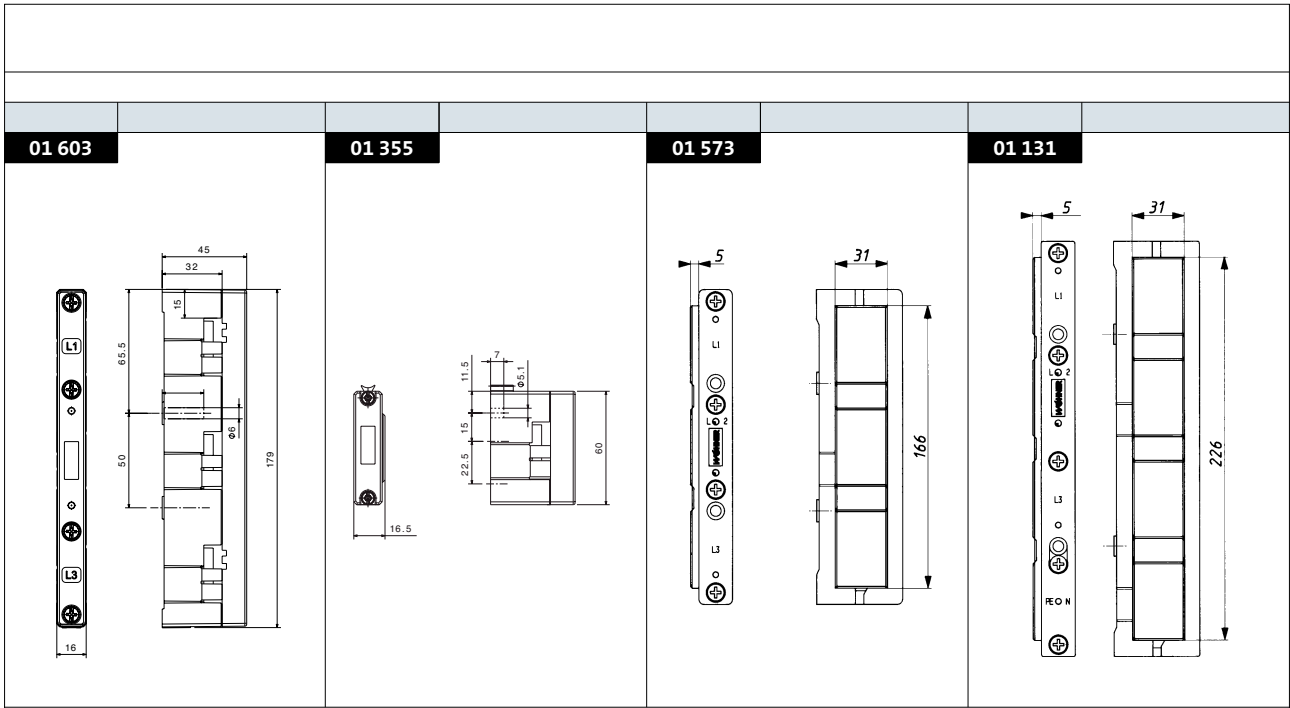
**32 633**

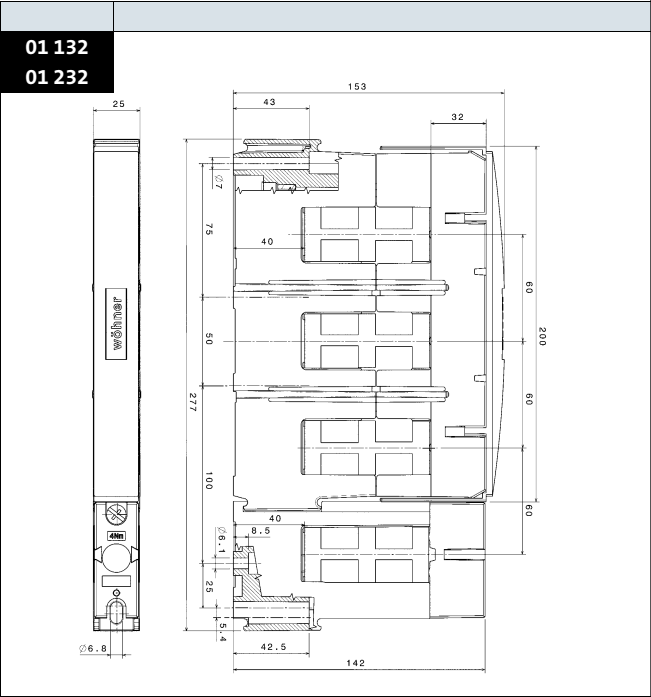
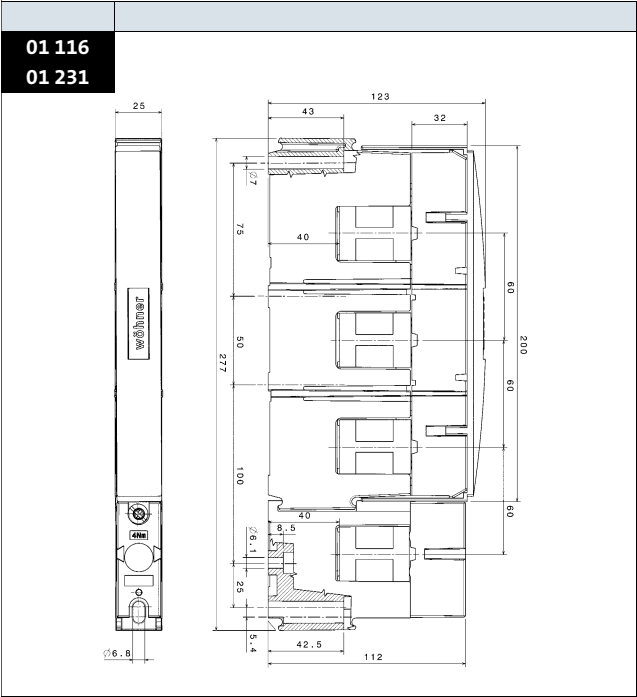


**32 632  
32 634**

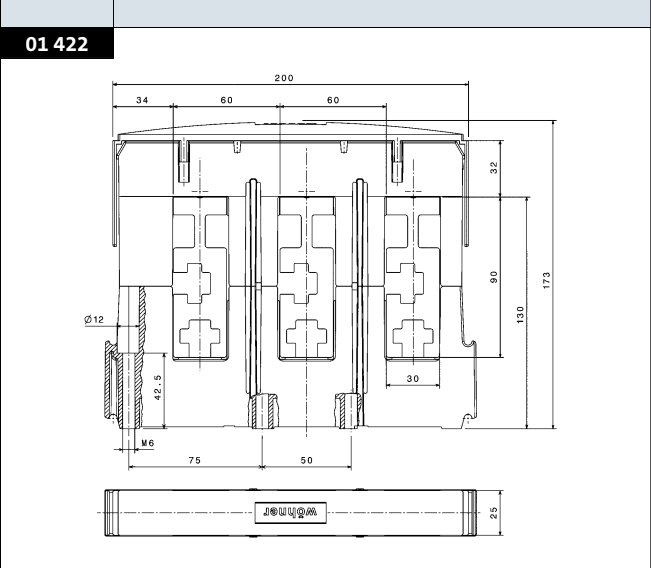
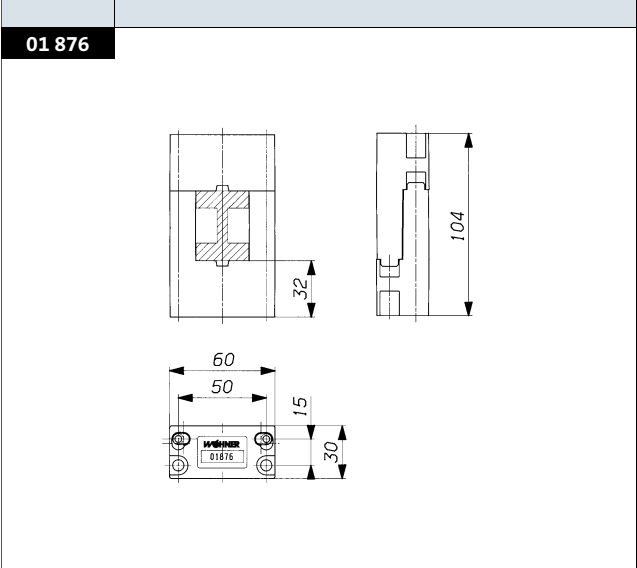
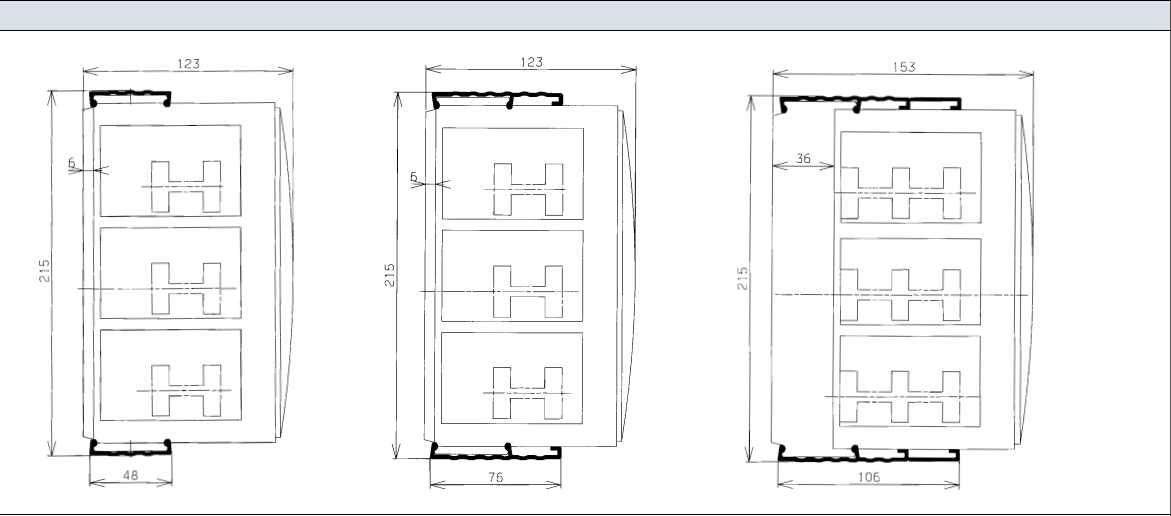








**01 236**  
**01 237**  
**01 238**



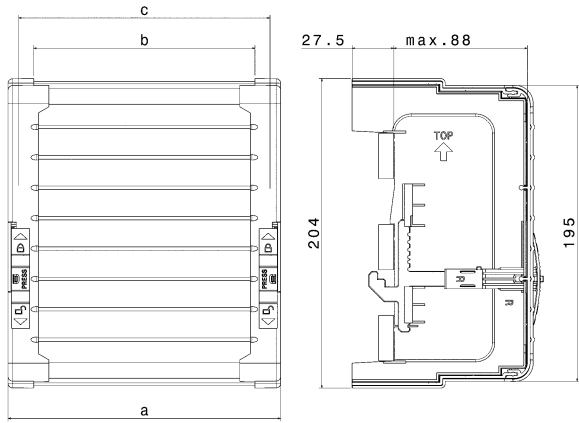
**01 231**  
**01 232**  
**01 515**

**01 025**  
**01 026**

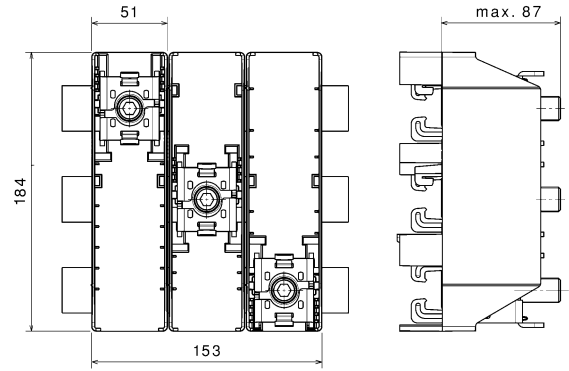
	a
<b>01 756</b>	135
<b>01 757</b>	270

	a	b	c	d
<b>01 413</b>	84	55	35	189
<b>01 590</b>	54	55	35	189

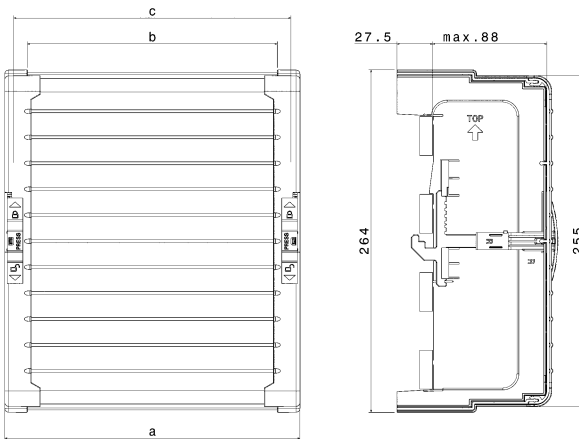
	a	b	c
<b>01 539</b>	180	146	166
<b>01 540</b>	250	216	236
<b>01 596</b>	228	194	214



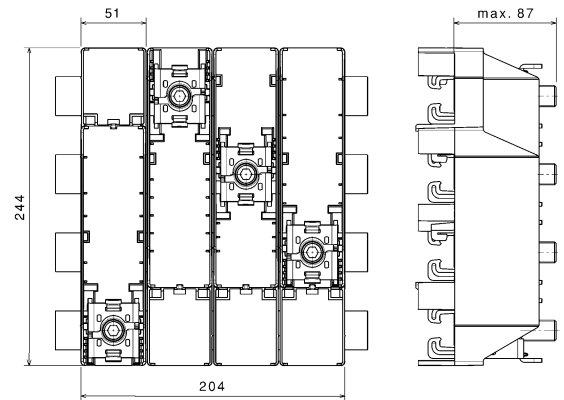
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**01 538**



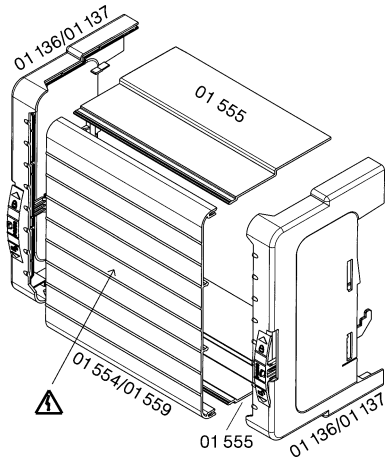
	a	b	c
<b>01 597</b>	228	194	214



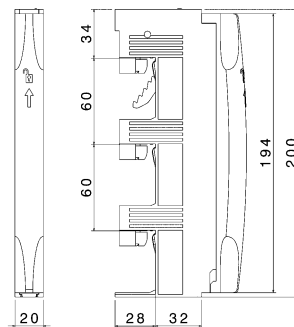
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**01 162**

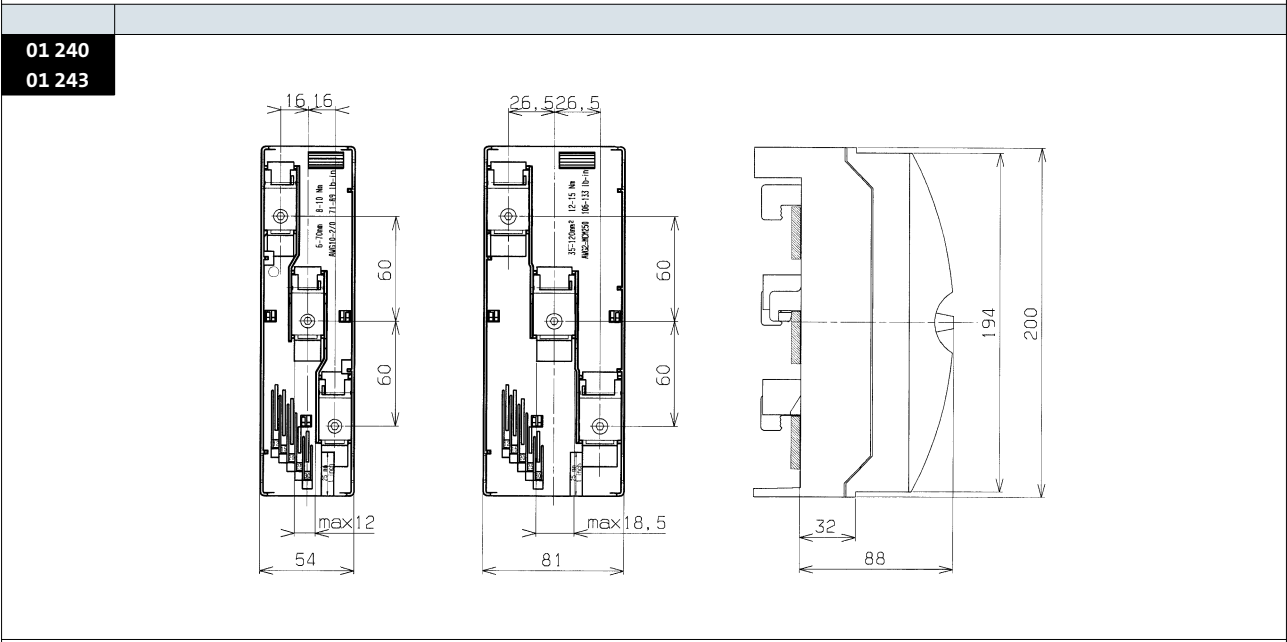


System cover, 3-pole, 4-pole

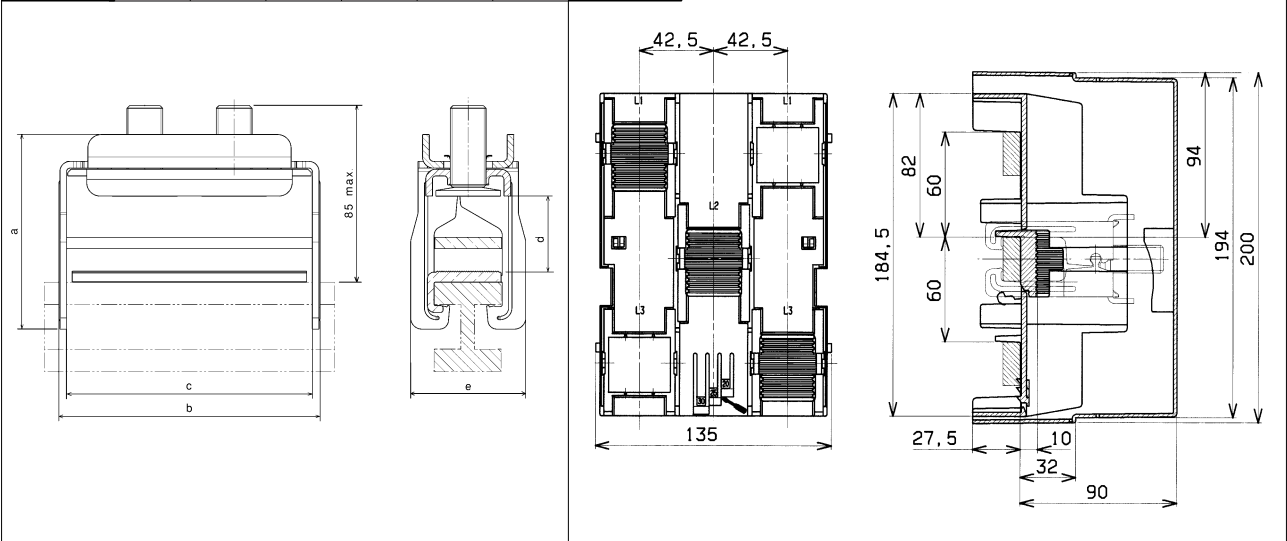


**01 563**

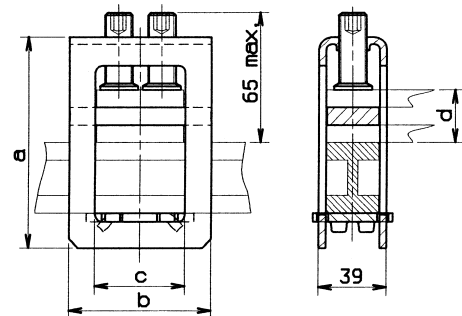




	a	b	c	d	d	e	
				min.	max.		
<b>01 069</b>	90	72	55	10	28	56	<b>01 199</b>
<b>01 070</b>	90	85	68	10	28	56	<b>01 753</b>
<b>01 071</b>	90	122	105	10	28	56	<b>01 754</b>



	a	b	c	d	d
				min.	max.
<b>01 008</b>	154	94	64	23	45
<b>01 185</b>	118	72	41	20	42
<b>01 186</b>	154	132	101	23	45
<b>01 513</b>	154	72	41	23	45
<b>01 906</b>	103	82	51	5	28
<b>01 907</b>	103	94	64	5	28
<b>01 911</b>	118	94	64	20	42
<b>01 934</b>	118	112	81	20	42
<b>01 935</b>	118	132	101	20	42
<b>01 936</b>	118	82	51	20	42



	a	b	c	d	e		
<b>01 068</b>	17	23.5	36	55	5		<b>01 429</b>
<b>01 203</b>	17	23.5	36	55	10		
<b>01 284</b>	7.5	11.5	22.5	25	5		
<b>01 285</b>	10.5	15.5	29	36	5		
<b>01 287</b>	14.5	20.5	32	42	5		
<b>01 289</b>	7.5	11.5	22.5	25	10		
<b>01 290</b>	10.5	15.5	29	35	10		
<b>01 292</b>	14.5	20.5	32	42	10		

	a	b	c	d	e	f	g	max. h	l	
<b>01 047</b>	42	38	37	47	23.5	15	27.5	55	10	
<b>01 512</b>	24	17.5	19.5	24.5	11.5	9	23	30	10	
<b>01 514</b>	32	29.5	29	36	20.5	12	24	42	10	
<b>01 747</b>	24	17.5	19.5	24.5	11.5	9	23	30	5	
<b>01 748</b>	32	29.5	29	36	20.5	12	24	42	5	
<b>01 749</b>	42	38	37	47	23.5	15	27.5	55	5	

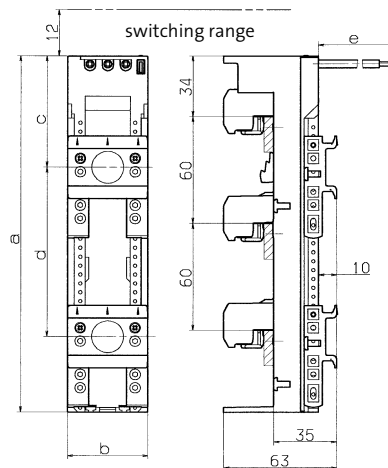
<b>01 319</b>	<b>01 318</b>	<b>01 759</b>

	a	b	h	c	d		a + b	A	c	
<b>01 206</b>	20	40	20	40	60		<b>01 201</b>	10 - 26	120 - 240	21
<b>01 586</b>	30	30	20	50	50		<b>01 202</b>	10 - 26	150 - 300	25
<b>01 587</b>	30	35	20	50	55					
<b>01 996</b>	20	25	20	40	45					
<b>01 997</b>	20	30	20	40	50					

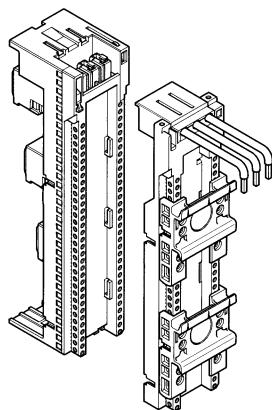
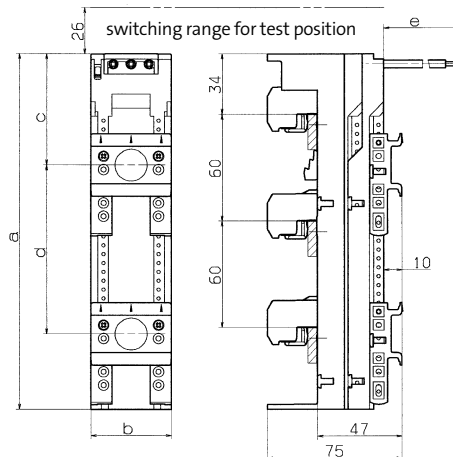
<b>01 141</b>	a	b		<b>01 166</b>	a	b		<b>01 827</b>	
<b>01 823</b>	95	36		<b>01 193</b>	55	43			
<b>01 886</b>	40	—			150	138			
	150	85							
<b>01 145</b>	a	b	<b>30 473</b>	<b>01 905</b>					
<b>01 829</b>	95	40							
	150	90							
<b>01 274</b>			<b>01 275</b>	<b>30 322</b>					
				<b>01 295</b>					



	a	b	c	d	e
32 429	200	45	63	95	125
32 430	200	45	63	—	93
32 431	200	45	63	95	93
32 432	200	90	63	95	93
32 433	260	45	63	95	93
32 436	200	45	63	95	Kl. 6 mm <sup>2</sup>
32 439	260	45	63	95	Kl. 6 mm <sup>2</sup>
32 441	200	54	63	—	93
32 442	200	54	63	95	93
32 443	200	63	63	—	93
32 444	200	72	63	—	93
32 446	200	81	63	95	93
32 449	260	54	63	95	93
32 454	200	54	63	—	115
32 455	200	54	63	95	115
32 456	200	63	103	—	115
32 457	200	72	103	—	115
32 459	200	81	63	95	115
32 461	260	54	63	95	115
32 466	200	54	63	—	Kl. 16 mm <sup>2</sup>
32 467	200	54	63	95	Kl. 16 mm <sup>2</sup>
32 469	200	72	63	—	Kl. 16 mm <sup>2</sup>
32 472	260	54	63	95	Kl. 16 mm <sup>2</sup>
32 477	200	45	63	95	—
32 478	200	54	63	95	—
32 484	260	45	63	95	—
32 485	260	54	63	95	—



	a	b	c	d	e
32 400	200	45	63	95	93
32 401	200	45	63	95	125
32 402	260	45	63	95	93
32 404	200	54	63	95	93
32 408	260	54	63	95	93
32 412	200	54	63	95	115
32 416	260	54	63	95	115
32 420	200	45	63	95	—
32 421	200	54	63	95	—
32 425	260	45	63	95	—
32 426	260	54	63	95	—
32 662	200	54	63	150	80
32 663	260	54	63	150	80
32 664	260	117	63	150	80



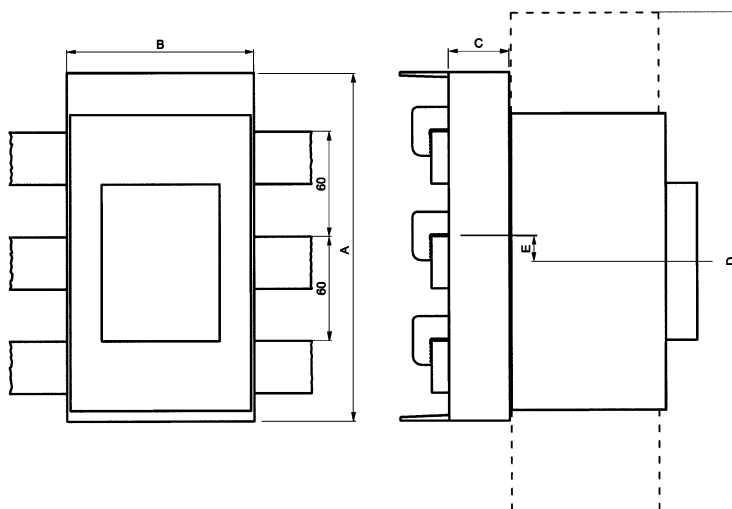
<p><b>32 214</b></p>	<p><b>32 215</b></p>
<p><b>32 168</b></p>	<p><b>32 216</b></p>
<p><b>32 982</b></p>	

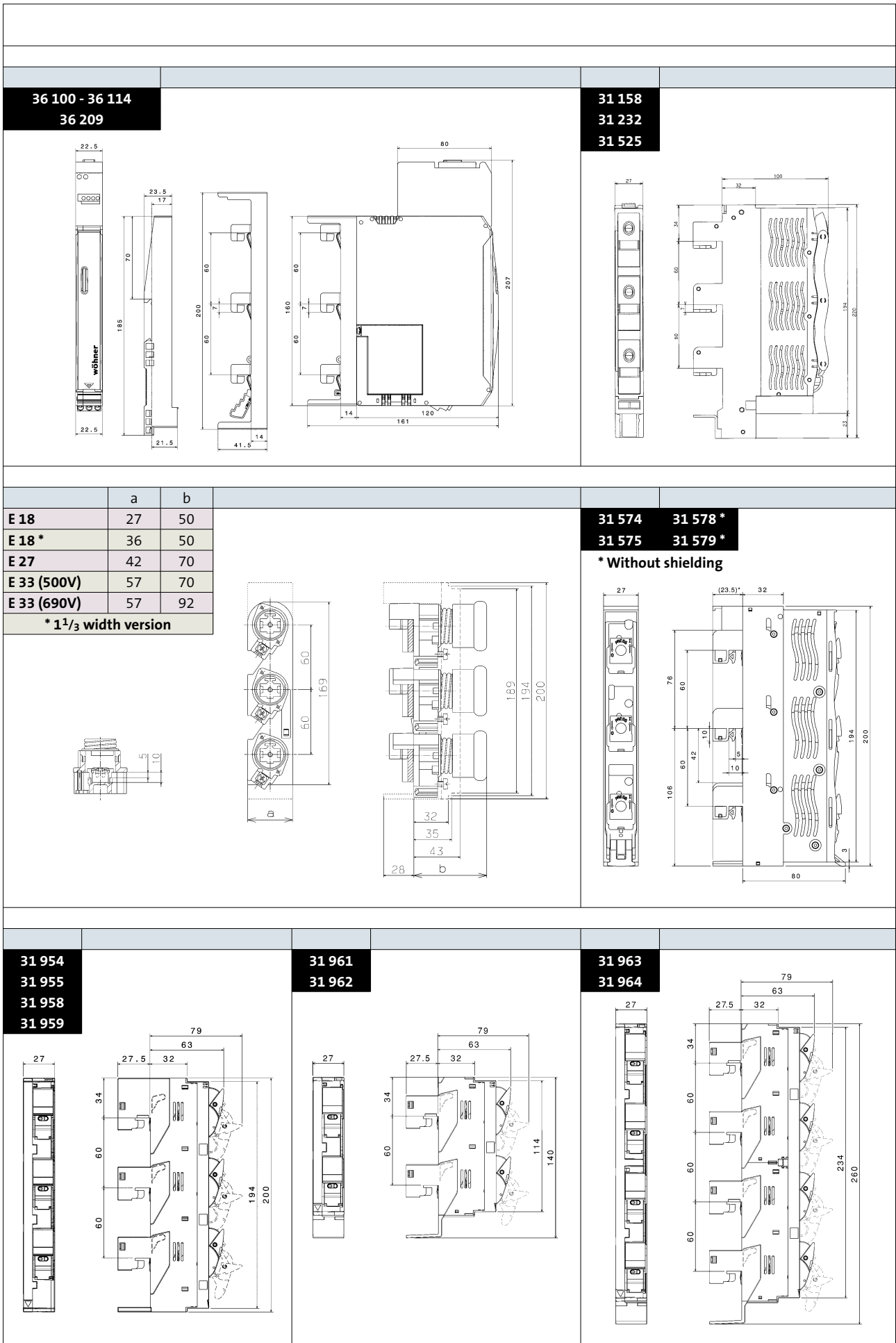


	Switchgear	A	B	C	D	E <sub>o</sub> *	E <sub>u</sub> **
32 137	AB 140U-J	190	106	35	–	18	10
32 138	AB 140U-L	270	140	35	–	11	12
32 140	Eaton NZM2-XKR4	190	106	35	–	22	2
32 156	SE NSX250, GE FD 250	190	106	35	–	12	12
32 157	SE NSX630	270	140	35	–	12	12
32 549	AB 140-CMN	200	90	50	–	11	–
32 570	Eaton NZM1	200	90	38	–	17	–
32 575	ABB T-max1, T-max2, GE FD 160, SE NS 80	200	90	26	–	10 - 20	–
32 578	Siemens 3VL2, 3VL3, 4 pole	240	140	35	–	16	–
32 579	Siemens 3VL4, 4 pole	300	185	35	–	15	–
32 580	Eaton NZM2-XKR4, 4 pole	240	140	35	–	2	–
32 581	Eaton NZM3-XKR13O, 4 pole	300	185	35	–	15	–
32 582	SE NSX250, 4 pole	270	140	35	–	- 8	–
32 583	SE NSX630, 4 pole	300	185	35	–	15	–
32 584	ABB T-max4, 4 pole	240	140	35	–	7	–
32 585	ABB T-max5, 4 pole	300	185	35	325	15	–
32 593	ABB Tmax T5	300	140	35	–	- 20	50
32 601	ABB Tmax T4	240	105	35	–	- 6	11
32 641	Siemens 3VT630	300	140	35	–	12	18
32 651	Siemens 3VT250	240	105	35	–	20	6
32 975	Siemens 3VL4	295	140	55	–	6	19
32 976	Siemens 3VL1 UL	190	106	53	–	8	15
32 977	Siemens 3VL2, 3VL3 UL	190	106	53	–	16	7
32 978	Eaton NZM3-XKR13O	300	140	35	–	15	15
32 980	Siemens 3VL5	325	184	55	–	- 7	–
32 981	Siemens S3	200	72	27	–	20	–
32 661	Siemens 3VA1	160	76	35	–	12	–
32 660	Siemens 3VA1	200	76	35	–	12	–
32 018	ABB Tmax XT1, XT2	200	106	35	–	9	–
32 020	ABB Tmax XT1, XT2	200	106	35	–	–	7
32 023	ABB Tmax XT4	190	106	35	–	12	12
32 017	Siemens 3VA2	240	105	35	–	12	0

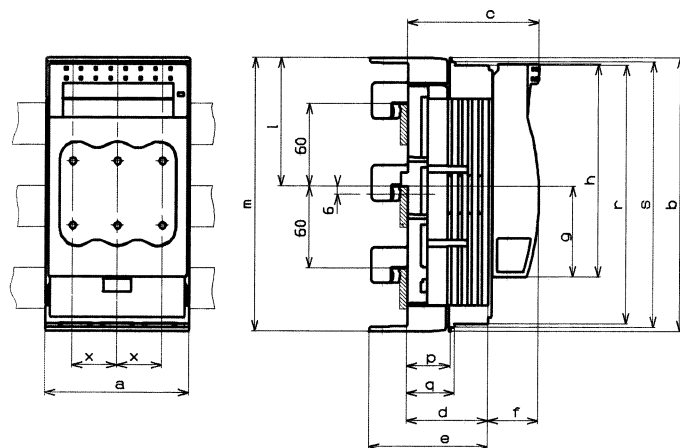
\* E<sub>o</sub> Switch centre displacement in case of upper connection

\*\* E<sub>u</sub> Switch centre displacement in case of lower connection

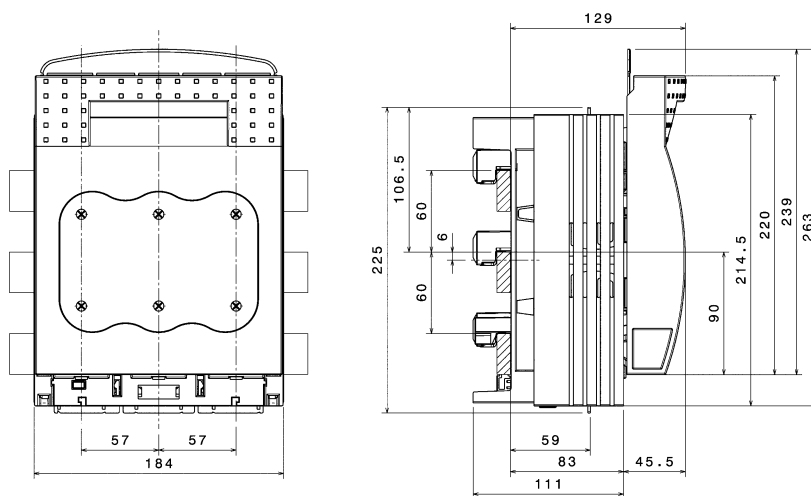




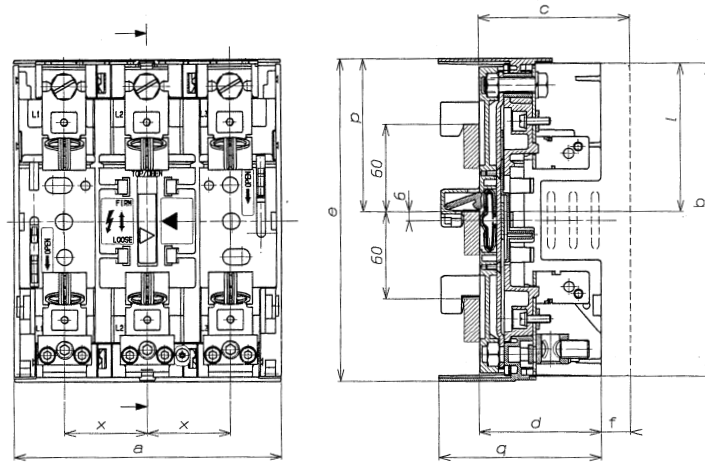
	a	b	c	d	e	g	h	l	m	p	q	r	s	x	
<b>33 402</b>	100A	106	200	104.5	67.5	95	66	155	94	200	32	35	189	194	33
<b>33 421</b>															
<b>33 422</b>															



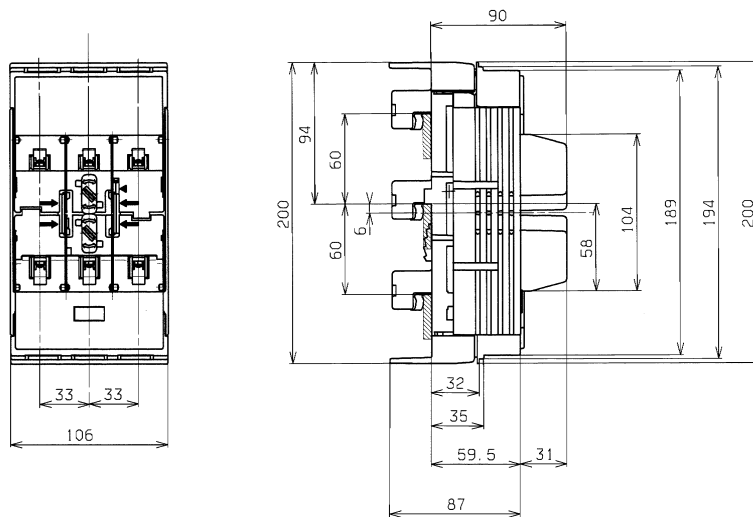
**33 403**



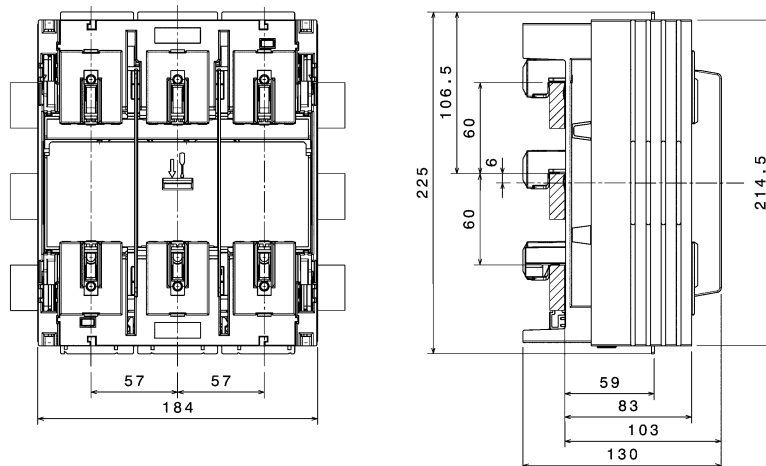
	a	b	c	d	e	f	l	p	q	x
<b>33 311</b>	256	267	132.5	112.5	285	20	121.5	136.5	139	81



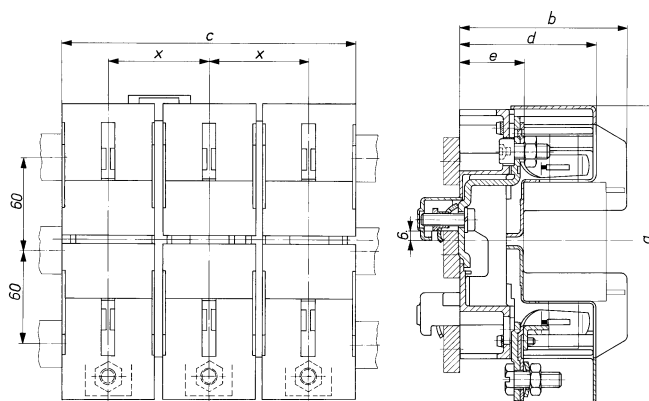
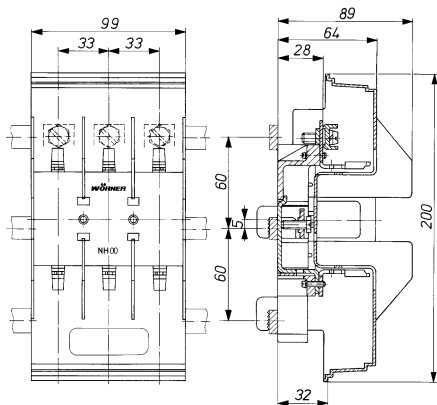
**03 199**  
**03 299**



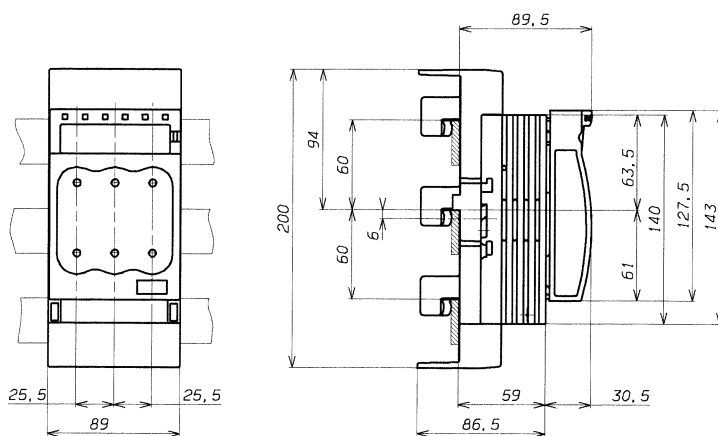
**03 300**  
**03 301**



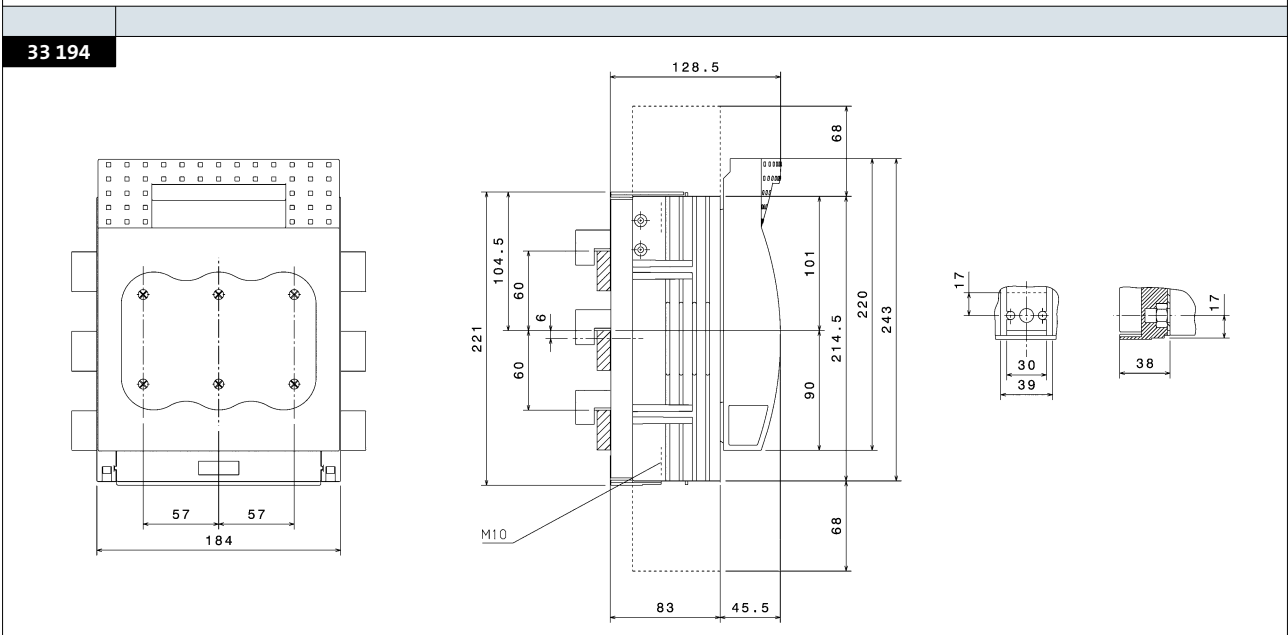
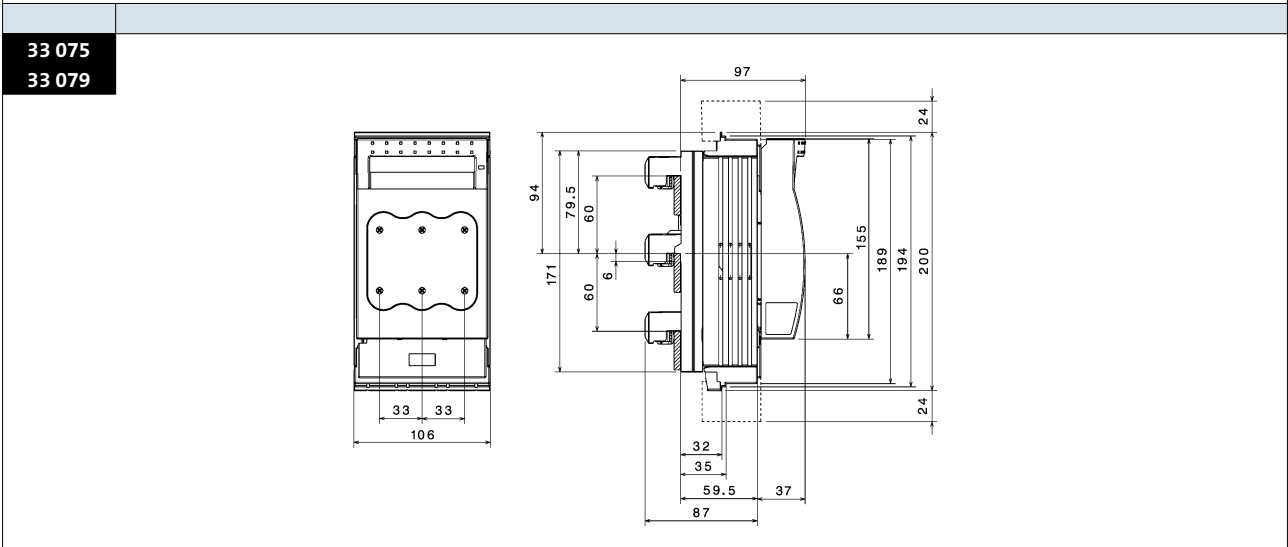
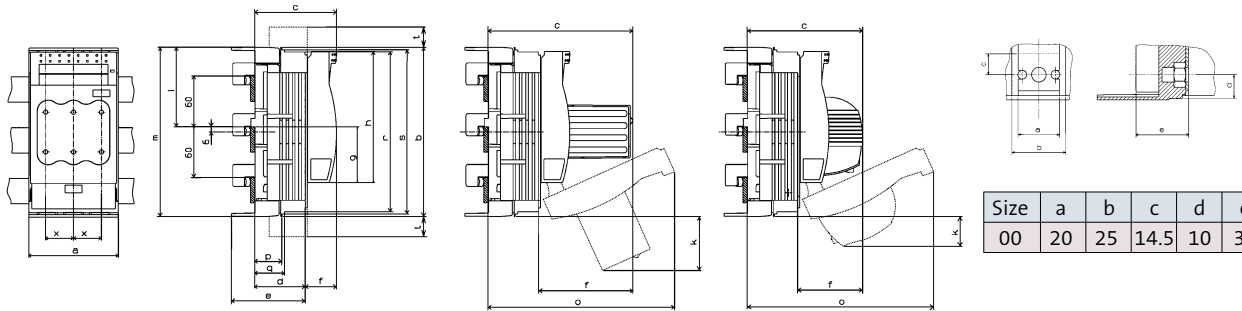
03 654 03 656	03 693	a	b	c	d	e	x
		206	121	195	104	40	65



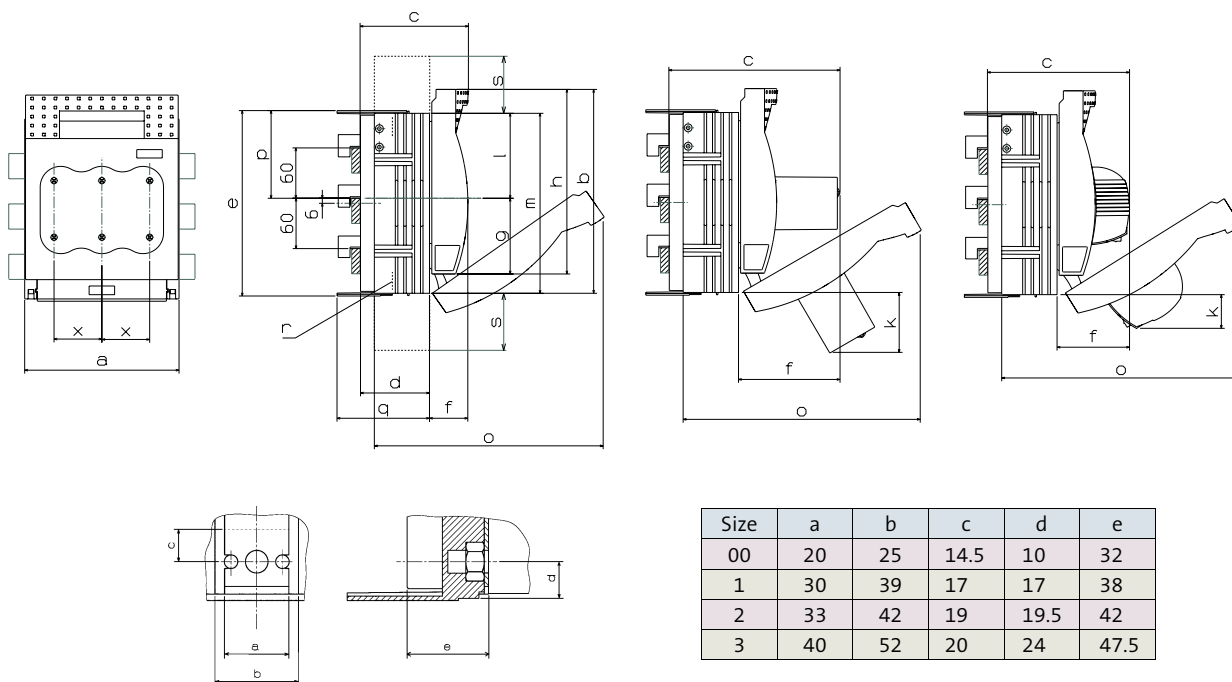
33 216



	Size	a	b	c	d	e	f	g	h	k	l	m	o	p	q	r	s	t	x
<b>33 198</b>	00	106	200	97	59.5	87	37	66	155	—	94	200	220.5	32	35	189	194	24	33
<b>33 206</b>	00	106	200	171.5	59.5	87	112	66	155	64	94	200	220.5	32	35	189	194	24	33
<b>33 324</b>	00	106	200	136.5	59.5	87	77	66	155	36	94	200	220.5	32	35	189	194	24	33
<b>33 394</b>	00	106	200	136.5	59.5	87	77	66	155	36	94	200	220.5	32	35	189	194	24	33
<b>33 398</b>	00	106	200	97	59.5	87	37	66	155	—	94	200	220.5	32	35	189	194	24	33
<b>33 420</b>	00	106	200	171.5	59.5	87	112	66	155	64	94	200	220.5	32	35	189	194	24	33

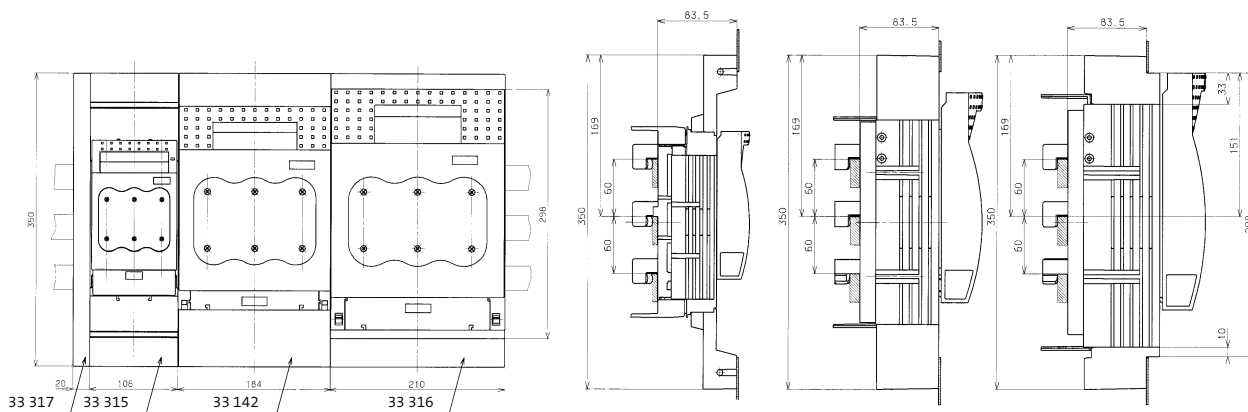


	Size	a	b	c	d	e	f	g	h	l	m	p	q	r	s	x
<b>33 160</b>	1	184	243	203.5	83	221	120.5	90	220	101	214.5	104.5	110.5	M10	68	57
<b>33 161</b>	2	210	288	220	97	268	123	98	249	118	255	128	124.5	M10	52	65
<b>33 162</b>	3	256	300	234.5	111.5	285	123	104.5	259	121.5	267	136.5	139	M12	48	81
<b>33 325</b>	1	184	243	171	83	221	80	90	220	101	214.5	104.5	110.5	M10	68	57
<b>33 326</b>	2	210	288	187.5	97	268	90.5	98	249	118	255	128	124.5	M10	52	65
<b>33 327</b>	3	256	300	202	111.5	285	90.5	104.5	259	121.5	267	136.5	139	M12	48	81
<b>33 600</b>	1	184	243	128.5	83	221	45.5	90	220	101	214.5	104.5	110.5		68	57
<b>33 601</b>	1	184	243	128.5	83	221	45.5	90	220	101	214.5	104.5	110.5	M10	68	57
<b>33 602</b>	2	210	288	145	97	268	48	98	249	118	255	128	124.5	M10	52	65
<b>33 603</b>	3	256	300	159.5	111.5	285	48	104.5	259	121.5	267	136.5	139	M12	48	81

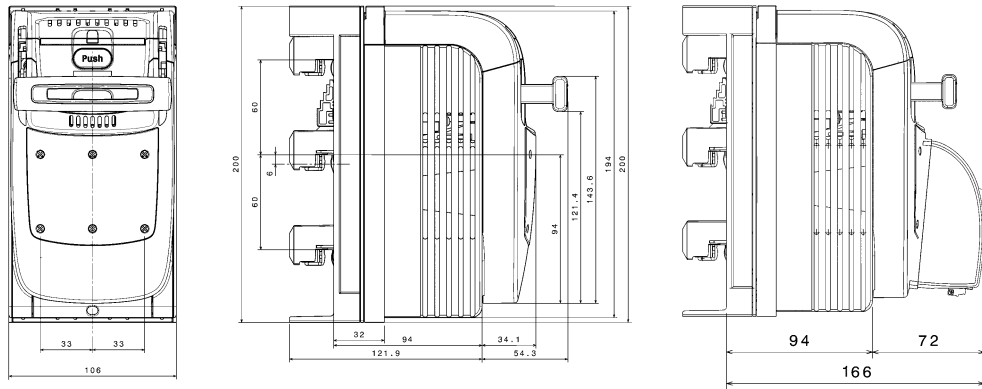


Size	a	b	c	d	e
00	20	25	14.5	10	32
1	30	39	17	17	38
2	33	42	19	19.5	42
3	40	52	20	24	47.5

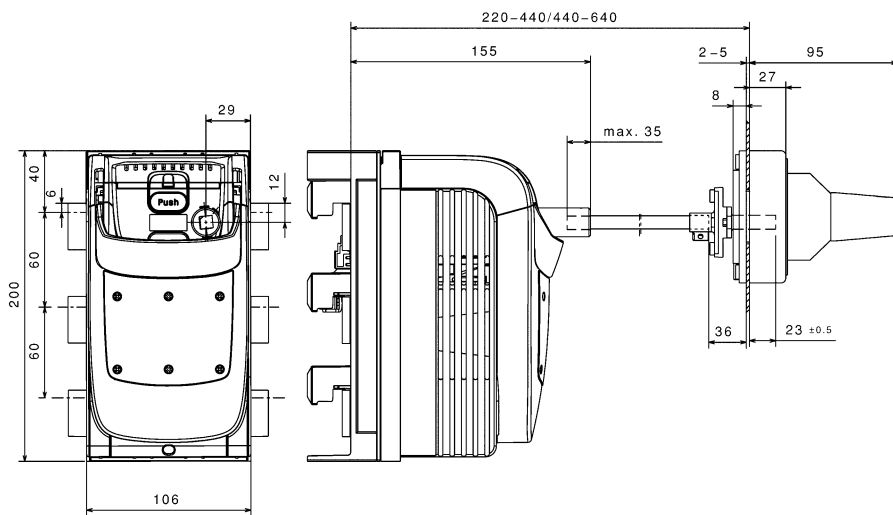
<b>33 142</b>	Size 00
<b>33 315</b>	Size 00
<b>33 316</b>	Size 1
<b>33 317</b>	Size 2



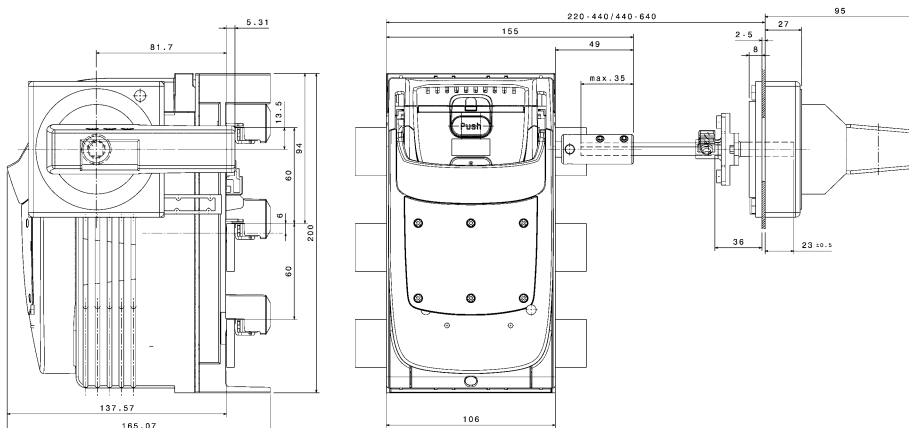
33 500  
33 501  
33 506  
33 540  
33 541



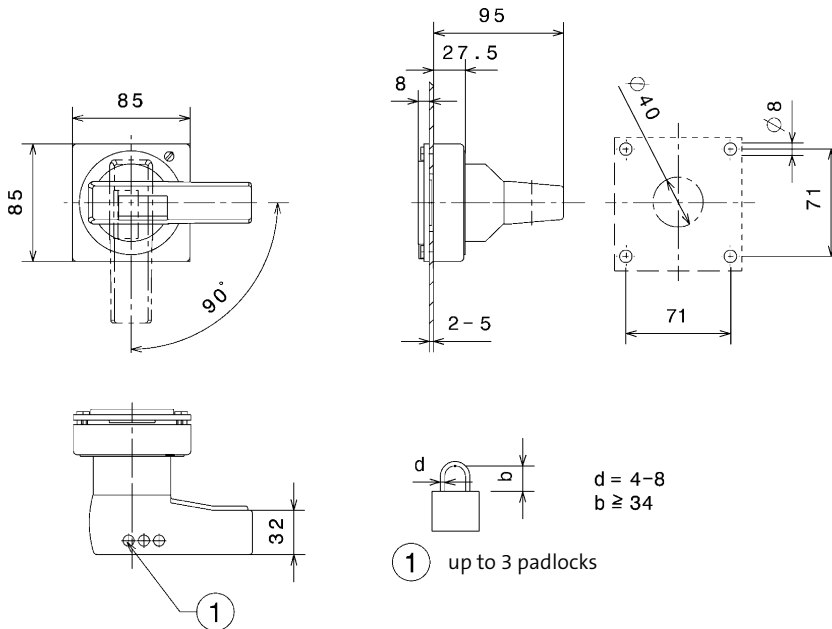
33 503  
33 504  
33 543  
33 544  
33 910  
33 911



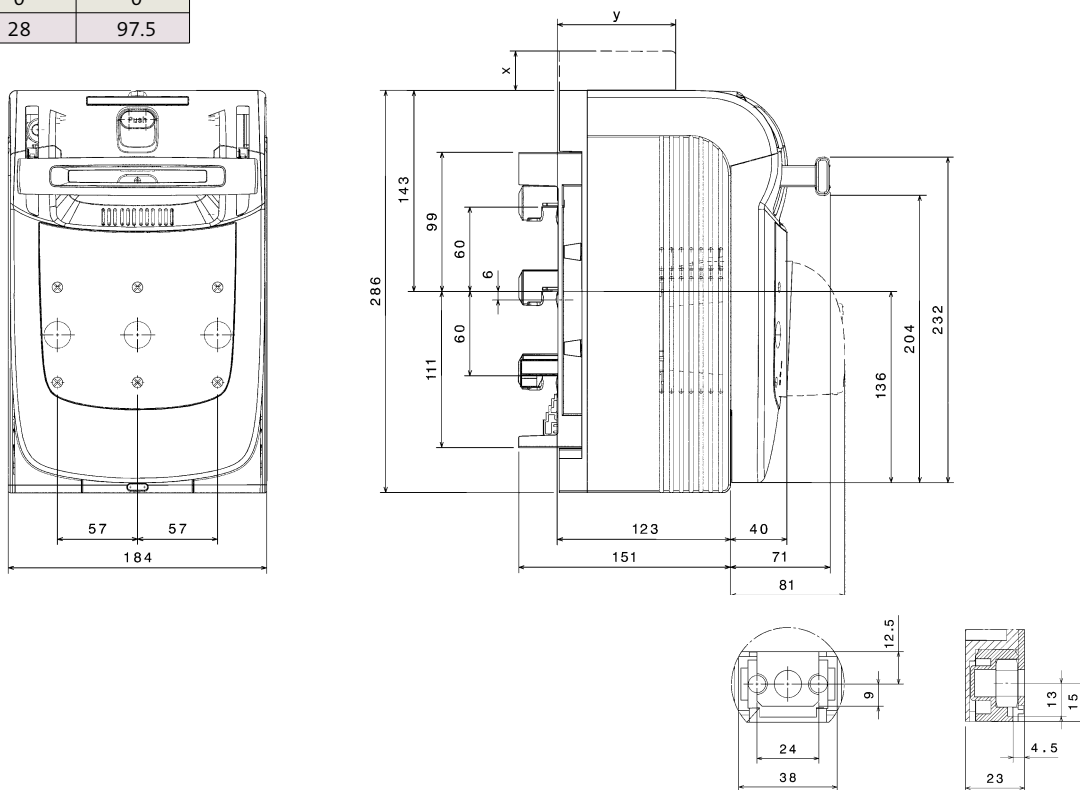
33 580



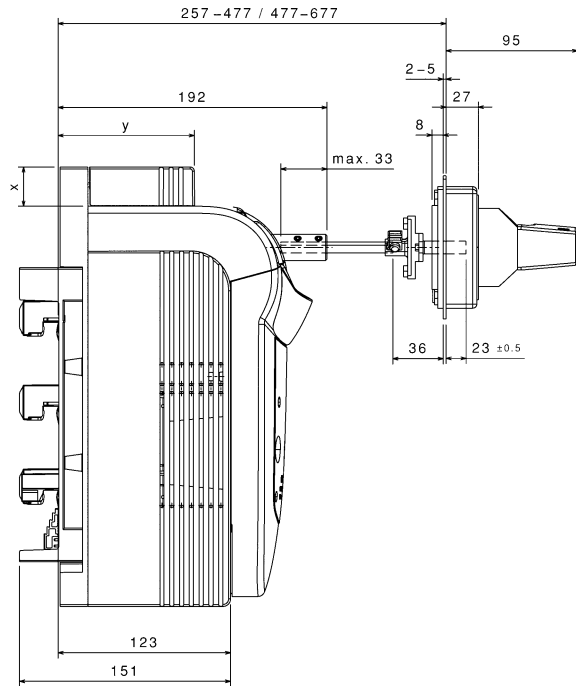
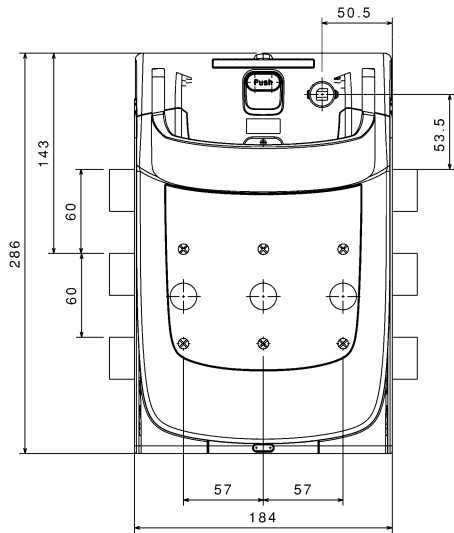
33 910  
33 911



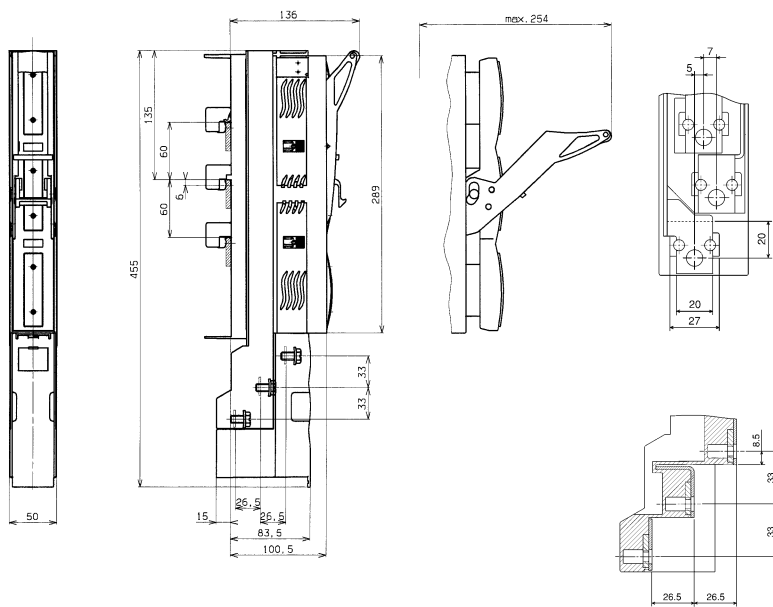
	x	y
33 510	0	0
33 511	28	97.5
33 516	0	0
33 550	0	0
33 551	28	97.5



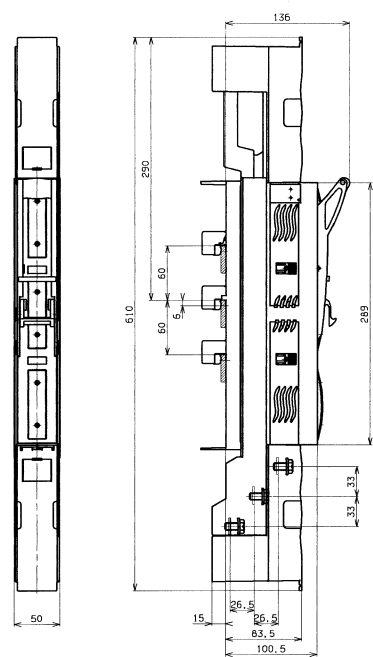
<b>33 513</b>	x	y
<b>33 514</b>	0	0
<b>33 553</b>	28	97.5
<b>33 554</b>	0	0
<b>33 910</b>	28	97.5
<b>33 911</b>		



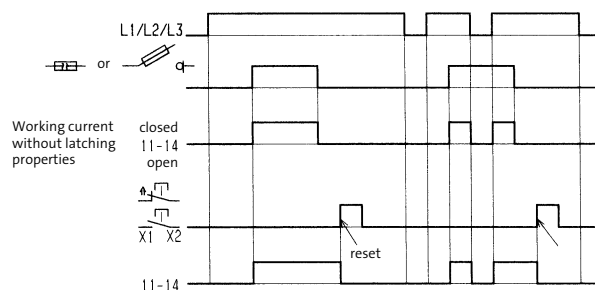
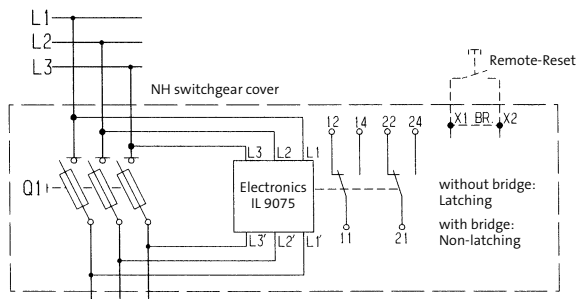
**33 234**



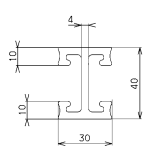
**33 285**



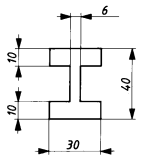
NH fuse switch disconnecter with electronic fuse monitoring



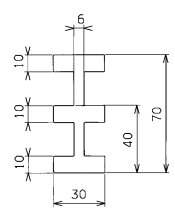
- 01 223
- 01 224
- 01 225
- 01 226
- 01 250
- 01 395
- 01 396
- 01 609



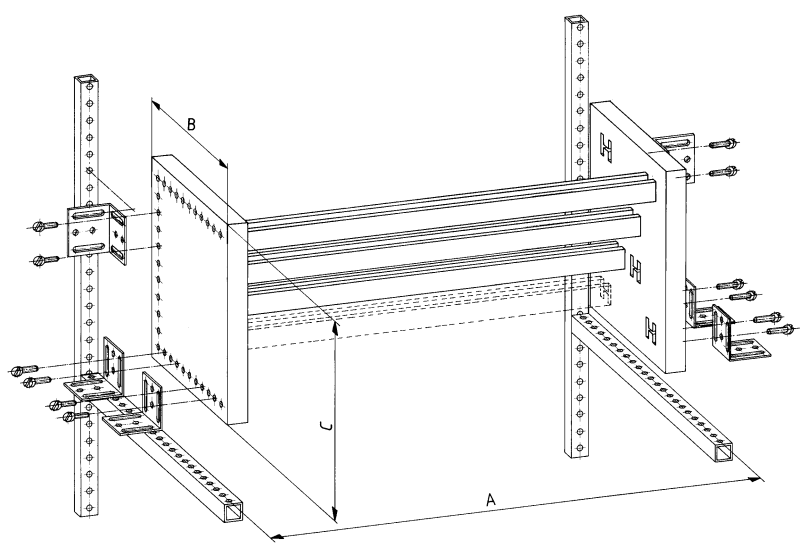
- 01 190
- 01 229
- 01 249
- 01 397
- 01 398
- 01 608
- 01 831
- 01 838



- 01 187
- 01 188
- 01 189
- 01 227
- 01 399
- 01 400



	a	b	c
35 004	688 - 763	300	300
35 005	488 - 563	300	300
35 006	688 - 763	300	300
35 007	488 - 563	300	300
35 015	488 - 563	300	300
35 016	688 - 763	300	300



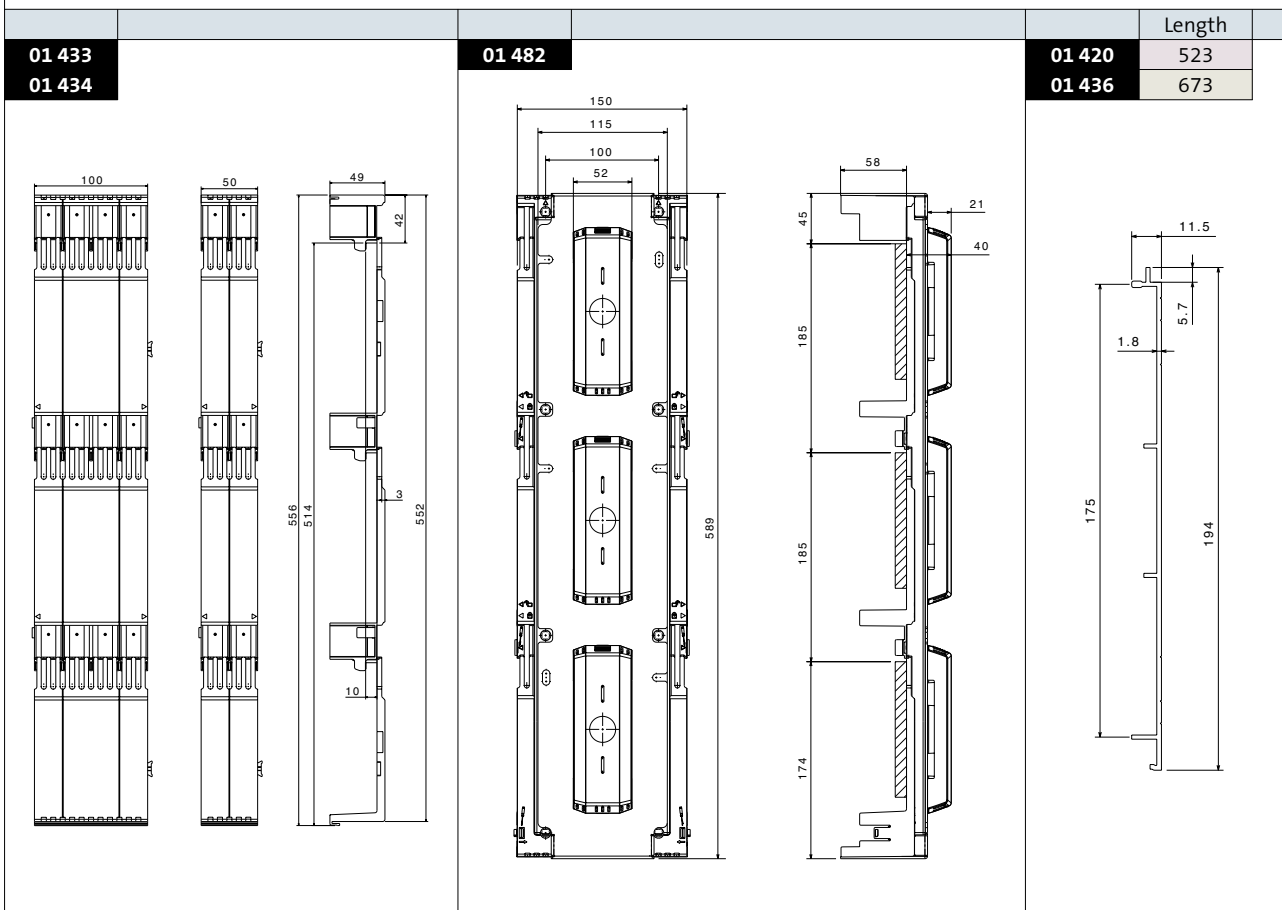
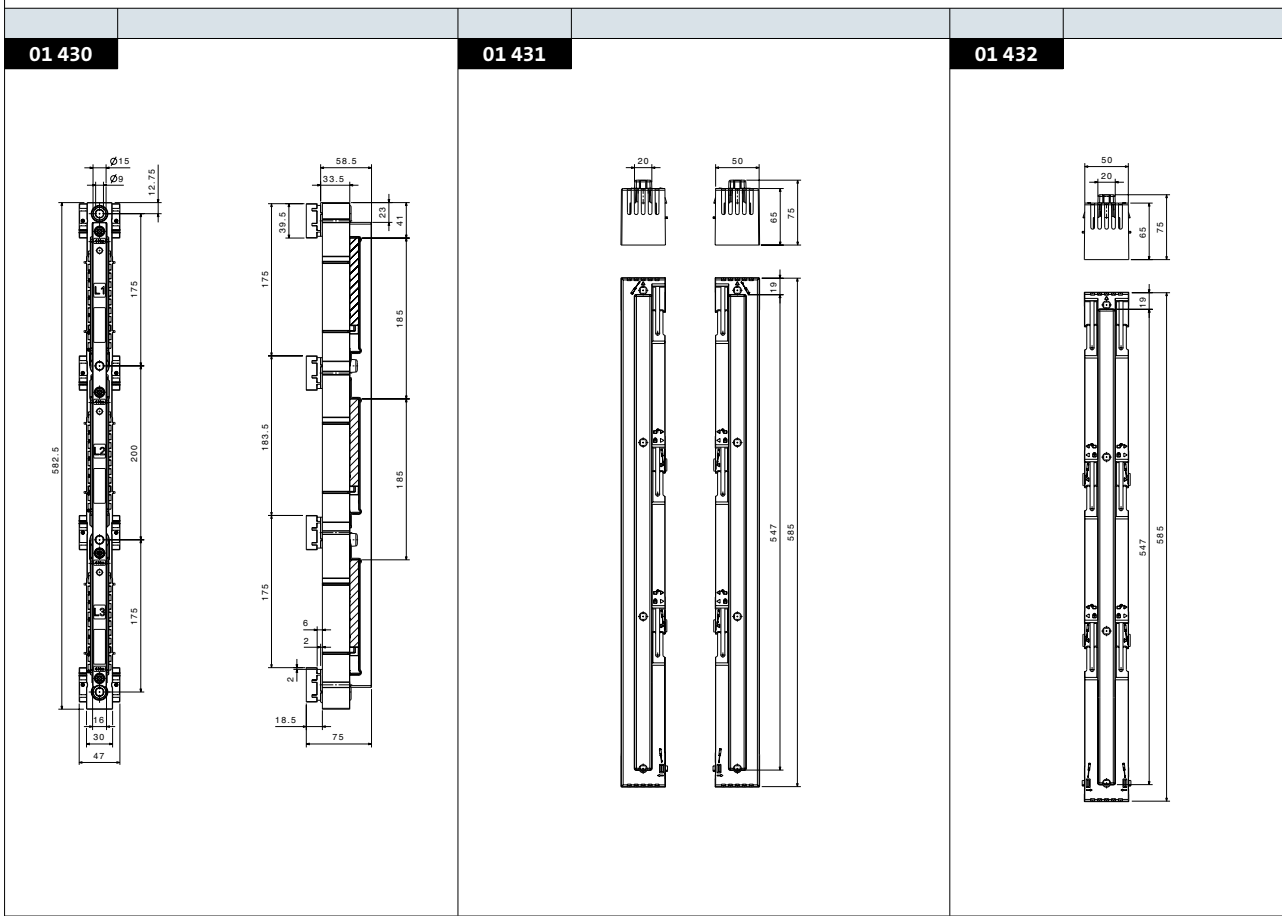
<p><b>35 008</b></p>	<p><b>35 009</b></p>		
<p><b>01 369</b></p>	<p><b>01 377</b> <b>01 378</b> <b>01 610</b></p>		
<p><b>01 379</b></p>	<p><b>01 380</b></p>		
<p><b>01 479</b></p>	<p><b>01 254</b></p>	<p><b>01 230</b></p>	<p><b>33 341</b></p>

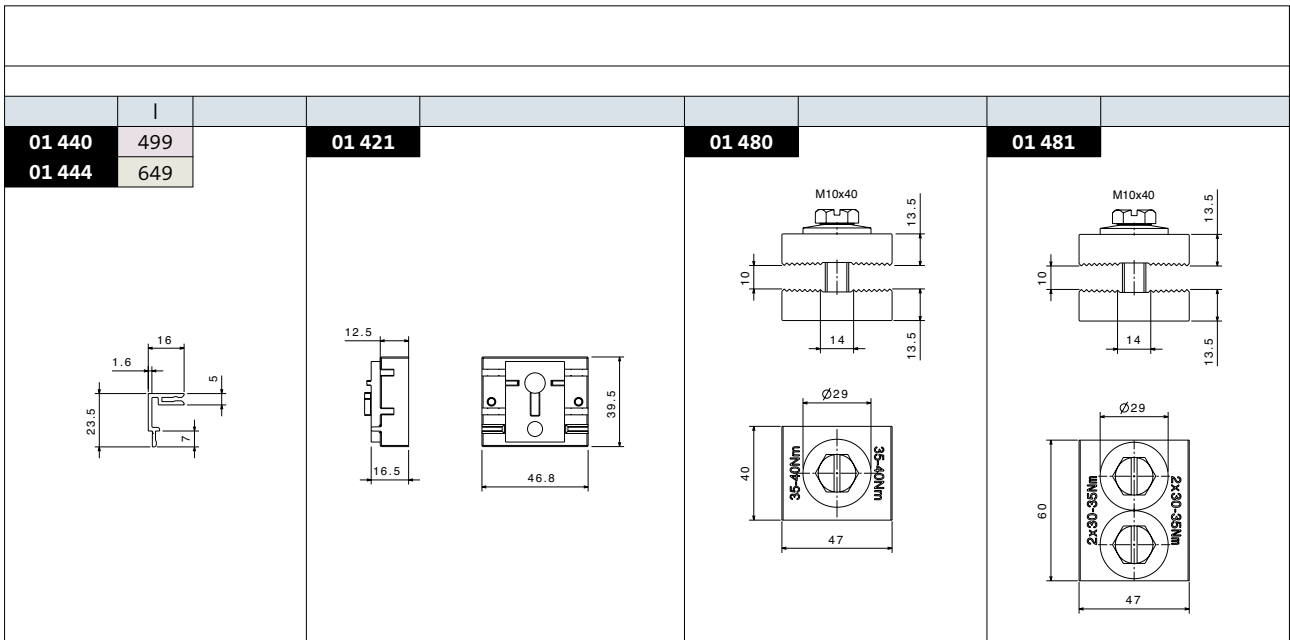
	a	b		
<b>01 092</b>	30	48		<b>32 001</b>

	a	b	c	d	h		a	b	c	d	e	f	g	max. h
<b>01 206</b>	20	40	40	60	20	<b>01 047</b>	42	38	37	47	23.5	15	27.5	55
<b>01 207</b>	32	50	50	70	20	<b>01 512</b>	24	17.5	19.5	24.5	11.5	9	23	30
<b>01 218</b>	40	63	60	82	20	<b>01 514</b>	32	29.5	29	36	20.5	12	24	42
<b>01 222</b>	40	80			30									
<b>01 616</b>	32	40	50	60	20									
<b>01 617</b>	50	63	70	82	20									

	a	b	c	d	e	g	h	k	Ø l	m	n	o	x
<b>03 369</b>	35	102	28	60	86	70	70	57					35
<b>03 370</b>	35	102	28	60	86	70	70	57					35
<b>03 384</b>	60	175	41	84	110	106	90	86					60
<b>03 587</b>	35	102	28	60	86	70	70	57	8.5				35
<b>03 599</b>	65	193	40	92	113	118	87	98					65
<b>03 601</b>	60	175	41	84	110	106	90	86	6.5	10	9	10	60
<b>03 790</b>	80	198	40	93	133	123	123	98	8.5	7	5	18	80
<b>03 795</b>	65	193	40	92	113	118	87	98	8.5	7	5	18	65

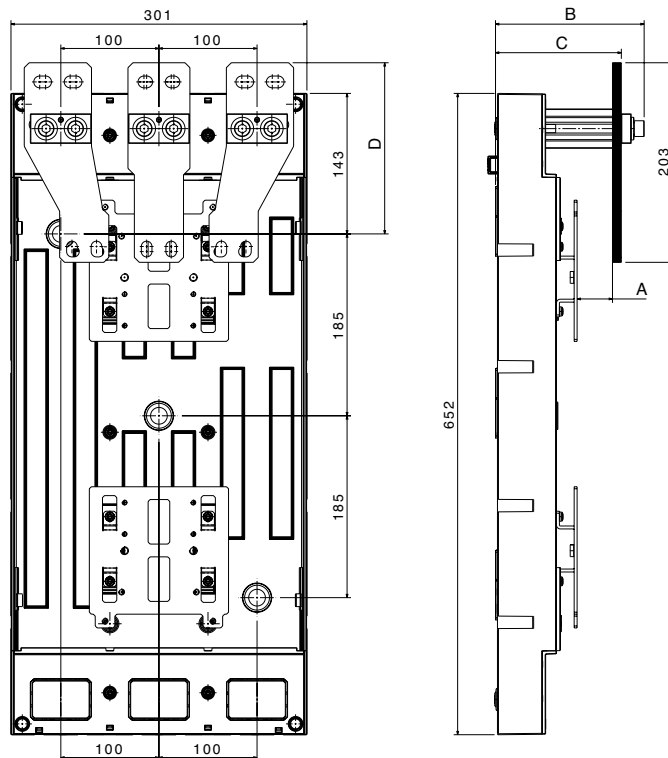






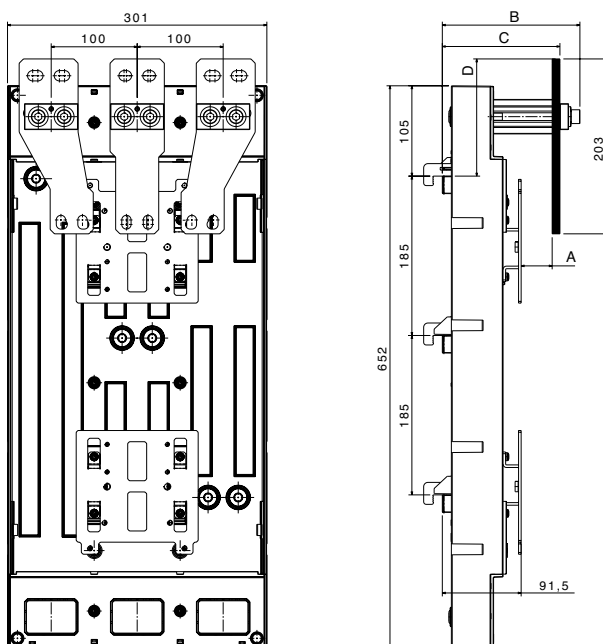
	Switchgear	A	B	C	D
32786	ABB Tmax T7 800 / 630	*)	*)	*)	*)
32785	ABB Tmax T7 1000	26	145	116	127
32784	ABB Tmax T7 1250	26.5	146	120	127
32782	Eaton NZM4 800, 630	*)	*)	*)	*)
32779	Eaton NZM4 1000	*)	*)	*)	*)
32781	Eaton NZM4 1250	*)	*)	*)	*)
32780	Eaton NZM4 1600	36	156	143	136
32778	Schneider Electric NS800 / 630	*)	*)	*)	*)
32777	Schneider Electric NS1000	*)	*)	*)	*)
32776	Schneider Electric NS1250	21.5	146	120	174
32775	Schneider Electric NS1600	21.5	151	125	174
32774	Siemens VL 800	*)	*)	*)	*)
32773	Siemens VL 1250 (1000A)	*)	*)	*)	*)
32772	Siemens VL 1250 (1250A)	36	151	128	74

\*) on request



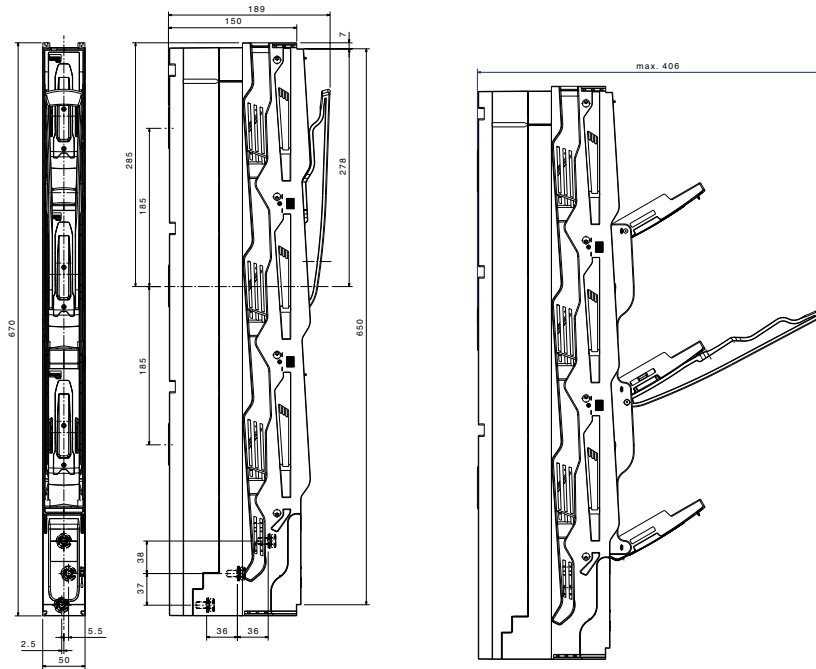
Switchgear		A	B	C	D
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<b>32765</b>	ABB Tmax T7 1250	26.5	154	128	89
<b>32768</b>	Eaton NZM4 800 / 630	*)	*)	*)	*)
<b>32763</b>	Eaton NZM4 1000	*)	*)	*)	*)
<b>32762</b>	Eaton NZM4 1250	*)	*)	*)	*)
<b>32761</b>	Eaton NZM4 1600	36	156	143	136
<b>32764</b>	Schneider Electric NS800 / 630	*)	*)	*)	*)
<b>32758</b>	Schneider Electric NS1000	*)	*)	*)	*)
<b>32757</b>	Schneider Electric NS1250	21.5	154	128	136
<b>32756</b>	Schneider Electric NS1600	21.5	159	133	136
<b>32754</b>	Siemens VL 800	*)	*)	*)	*)
<b>32755</b>	Siemens VL 1250 (1000A)	*)	*)	*)	*)
<b>32753</b>	Siemens VL 1250 (1250A)	36	160	137	136

\*) on request

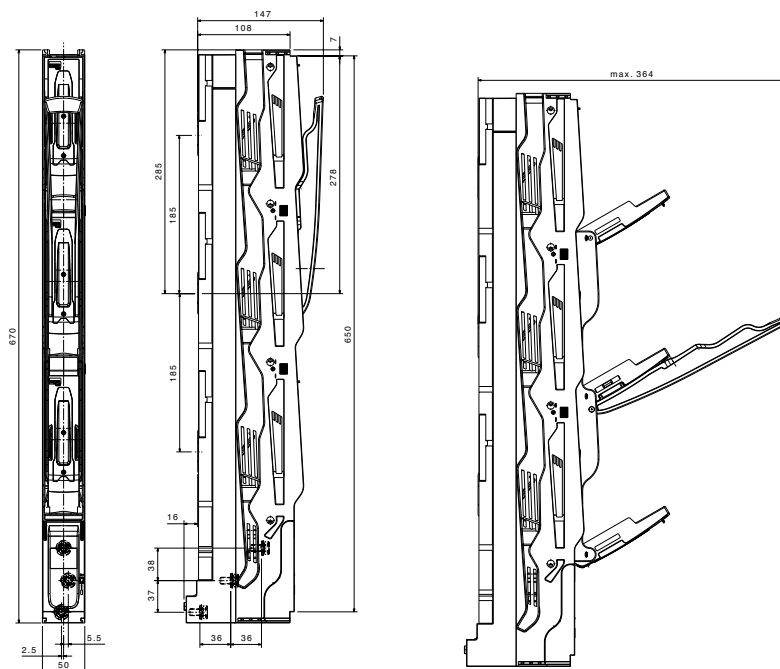


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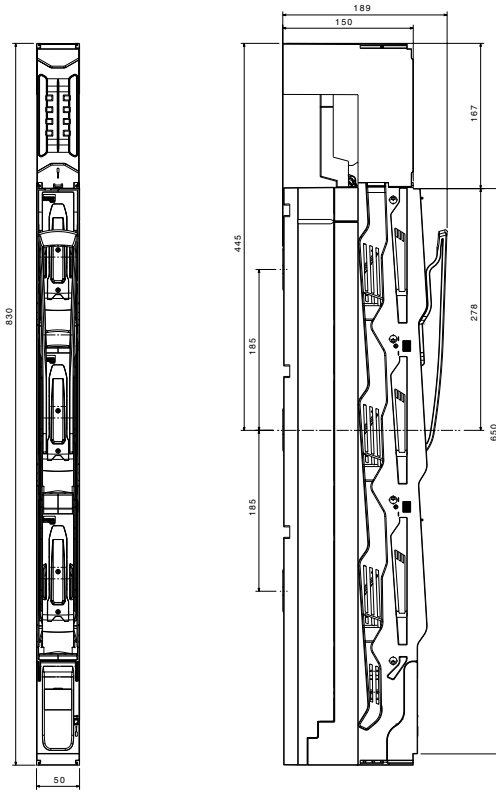
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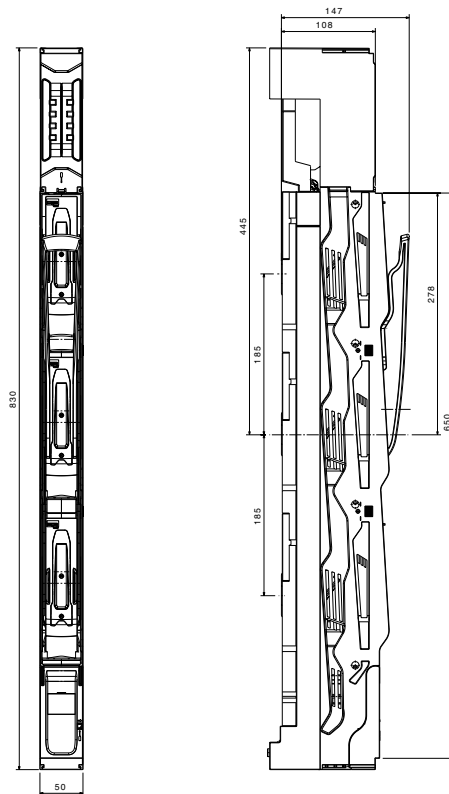
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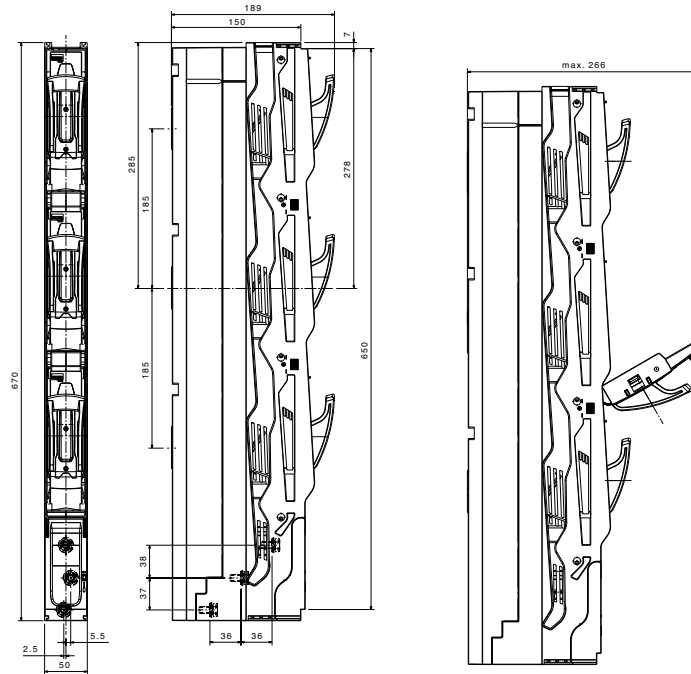
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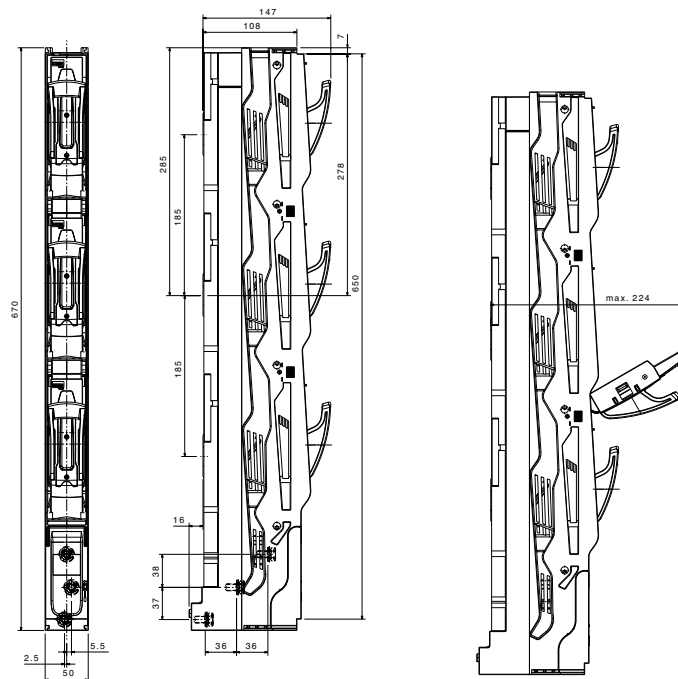
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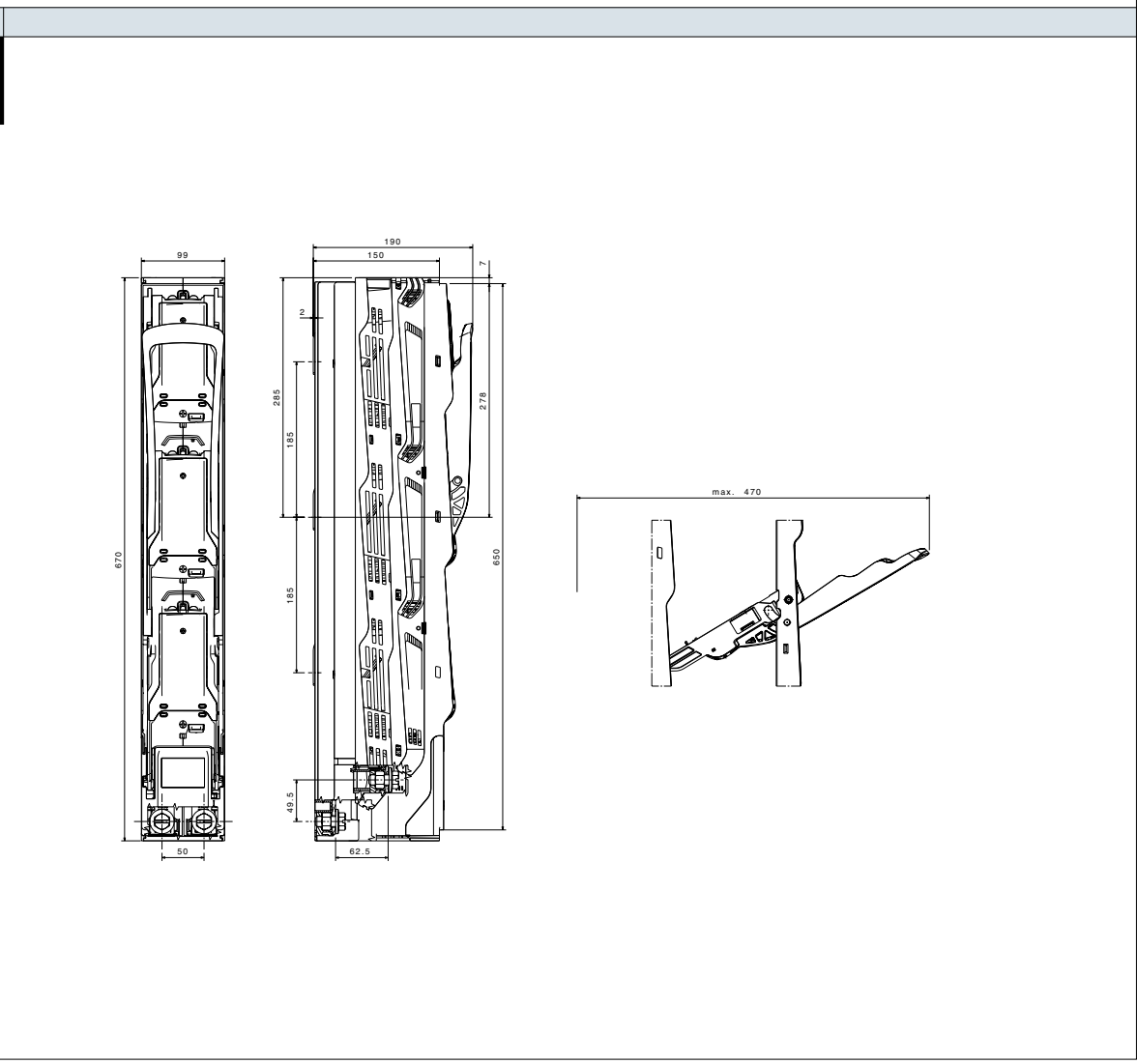
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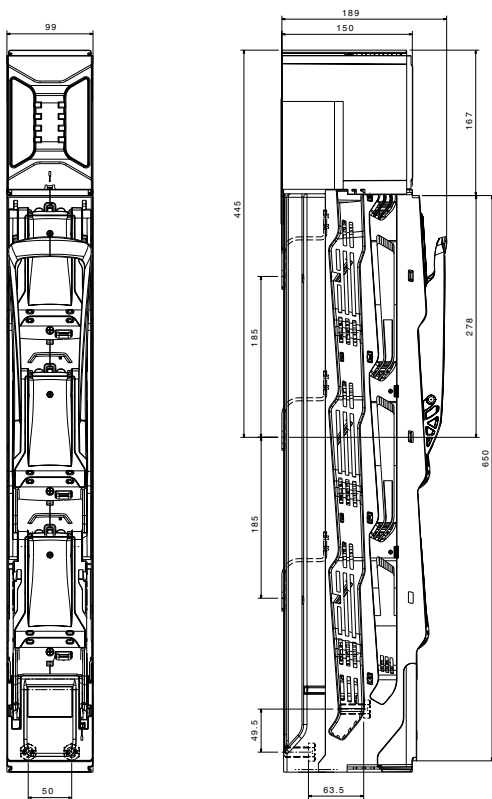
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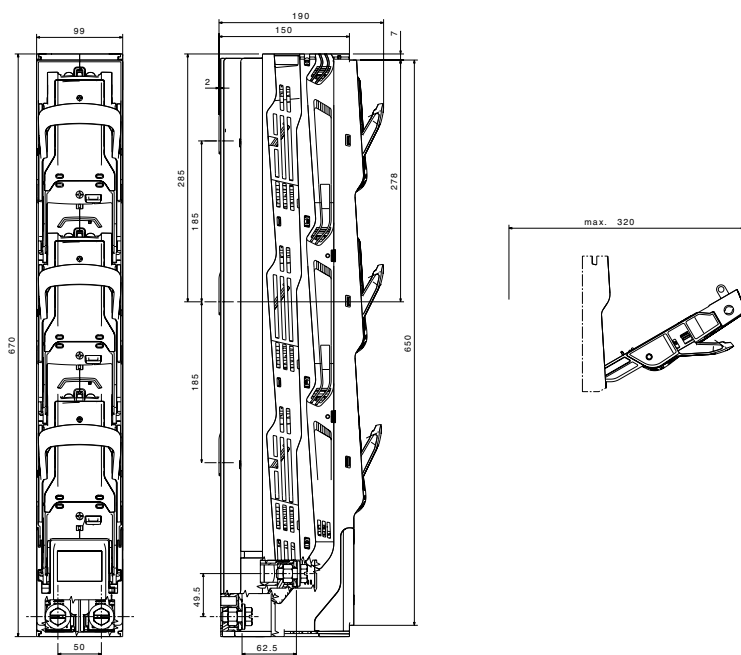
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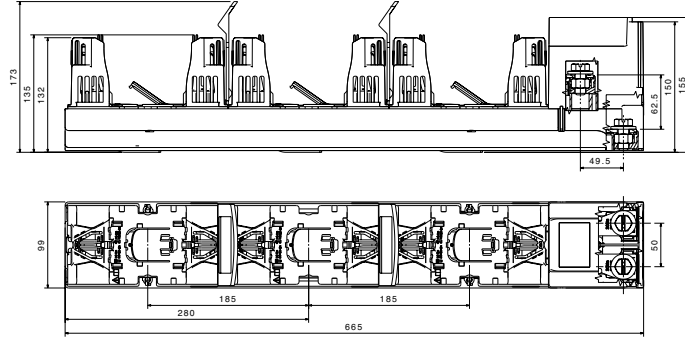


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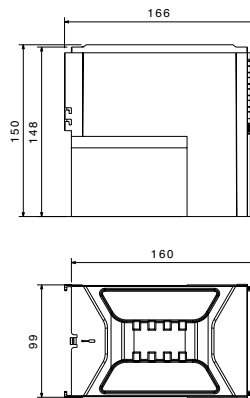




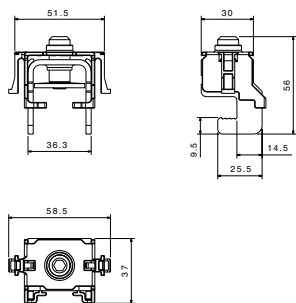
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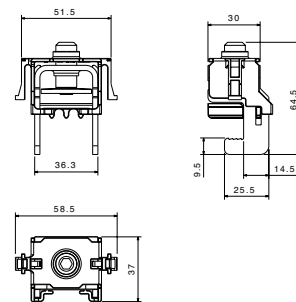
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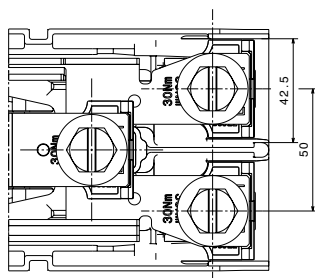
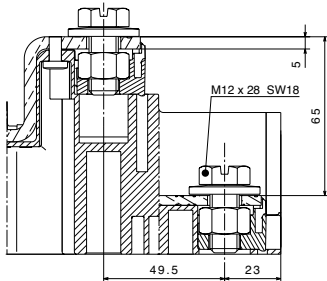
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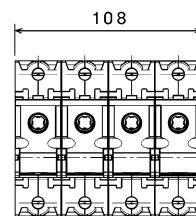
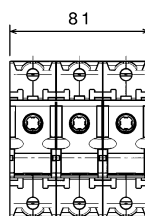
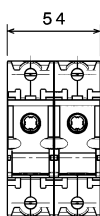
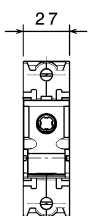
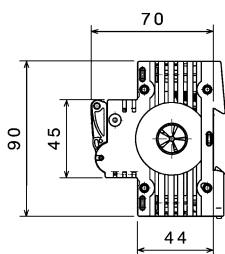
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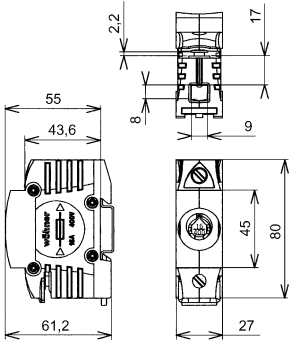
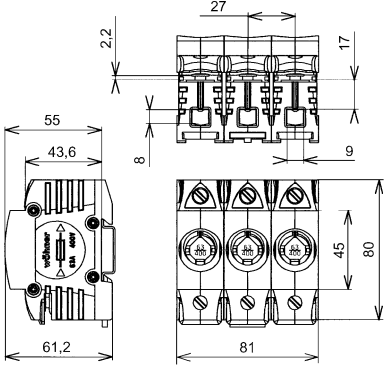
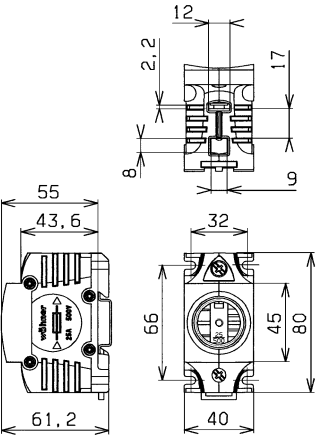
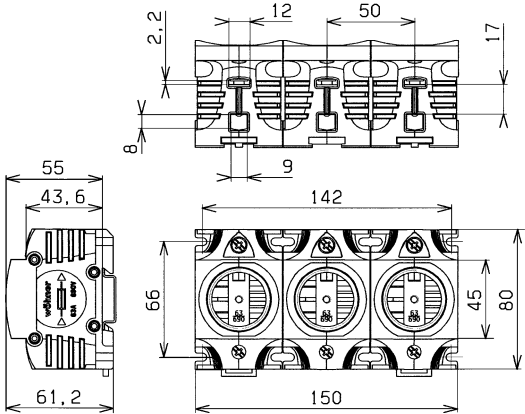
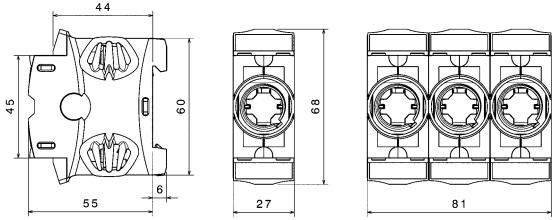
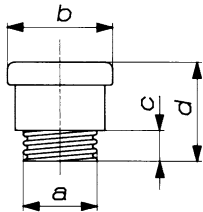


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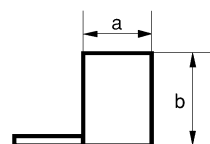
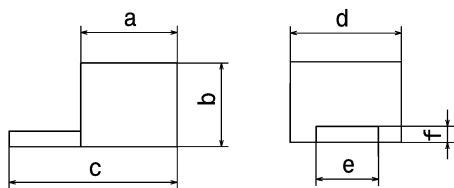


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<p><b>31 173</b></p> 	<p><b>31 175</b> <b>31 176</b></p> 																																													
<p><b>31 301</b> <b>31 302</b> <b>31 303</b> <b>31 306</b></p> 	<table border="1"> <thead> <tr> <th></th> <th>a</th> <th>b</th> <th>c</th> <th>d</th> </tr> </thead> <tbody> <tr> <td><b>01 098</b></td> <td>E 27</td> <td>38</td> <td>11.5</td> <td>36</td> </tr> <tr> <td><b>01 100</b></td> <td>E 33</td> <td>47</td> <td>12.5</td> <td>45</td> </tr> <tr> <td><b>01 103</b></td> <td>E 14</td> <td>26</td> <td>9</td> <td>29</td> </tr> <tr> <td><b>01 104</b></td> <td>E 18</td> <td>25</td> <td>9.5</td> <td>30</td> </tr> <tr> <td><b>31 005</b></td> <td>E 14</td> <td>22.5</td> <td>8.5</td> <td>29.5</td> </tr> <tr> <td><b>31 006</b></td> <td>E 18</td> <td>22.5</td> <td>8.5</td> <td>29.5</td> </tr> <tr> <td><b>31 098</b></td> <td>E 27</td> <td>32.5</td> <td>11.5</td> <td>41</td> </tr> <tr> <td><b>31 100</b></td> <td>E 33</td> <td>44</td> <td>12.5</td> <td>42</td> </tr> </tbody> </table> 		a	b	c	d	<b>01 098</b>	E 27	38	11.5	36	<b>01 100</b>	E 33	47	12.5	45	<b>01 103</b>	E 14	26	9	29	<b>01 104</b>	E 18	25	9.5	30	<b>31 005</b>	E 14	22.5	8.5	29.5	<b>31 006</b>	E 18	22.5	8.5	29.5	<b>31 098</b>	E 27	32.5	11.5	41	<b>31 100</b>	E 33	44	12.5	42
	a	b	c	d																																										
<b>01 098</b>	E 27	38	11.5	36																																										
<b>01 100</b>	E 33	47	12.5	45																																										
<b>01 103</b>	E 14	26	9	29																																										
<b>01 104</b>	E 18	25	9.5	30																																										
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<b>31 006</b>	E 18	22.5	8.5	29.5																																										
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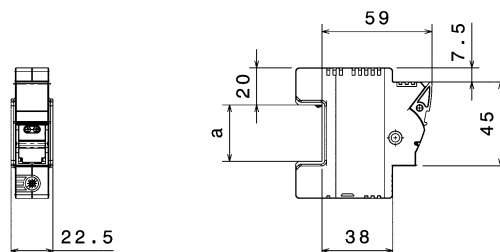
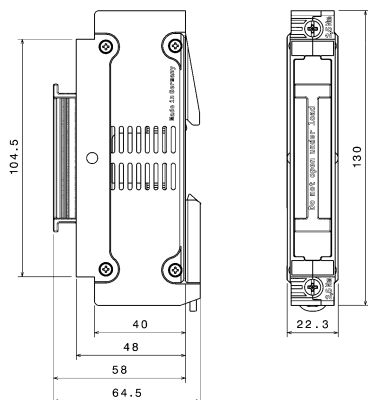
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<b>31 029</b>	17	26	49	20	6	2
<b>31 039</b>	21	29	42	16	6.5	3
<b>31 085</b>	20	26	53	17	6	2
<b>31 103</b>	13	18	45	17	4	2
<b>31 157</b>	13	17	50	13	4	2
<b>31 550</b>	21	29	60	16	6.5	3

	a	b	Poles	Division
<b>31 012</b>	17	16	3	27
<b>31 014</b>	5	15	1	27
<b>31 024</b>	5	15	1	27
<b>31 056</b>	30	15	3	27
<b>31 057</b>	6	26	1	27
<b>31 101</b>	5	15	1	18
<b>31 102</b>	18	16	3	18
<b>31 309</b>	5	15	1	40
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<b>31 311</b>	5	15	1	50
<b>31 312</b>	17	16	3	50
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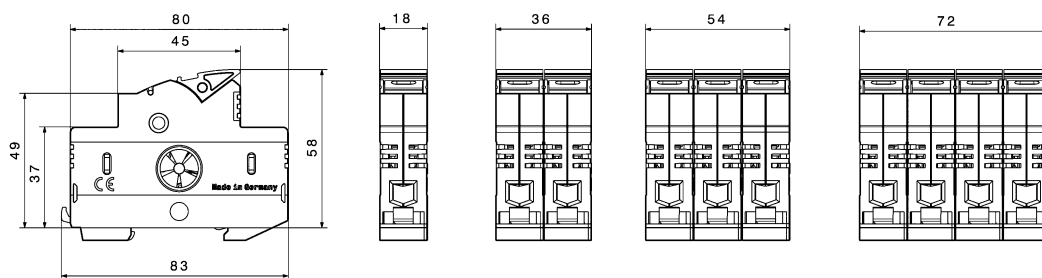


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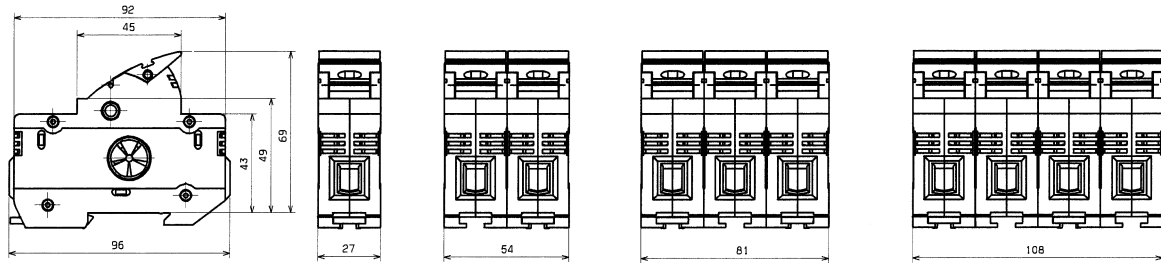
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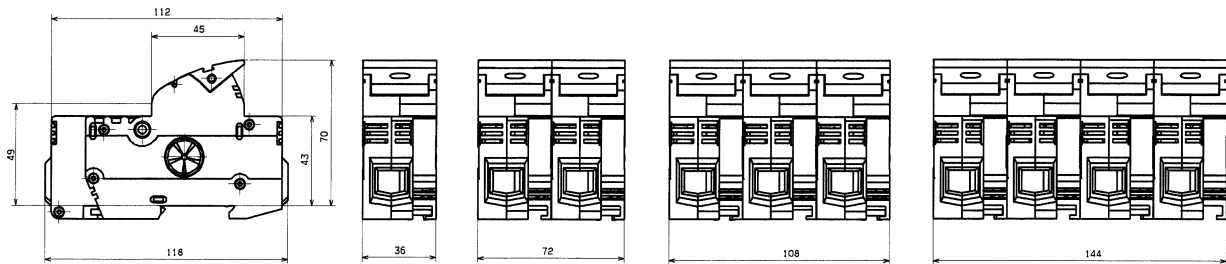
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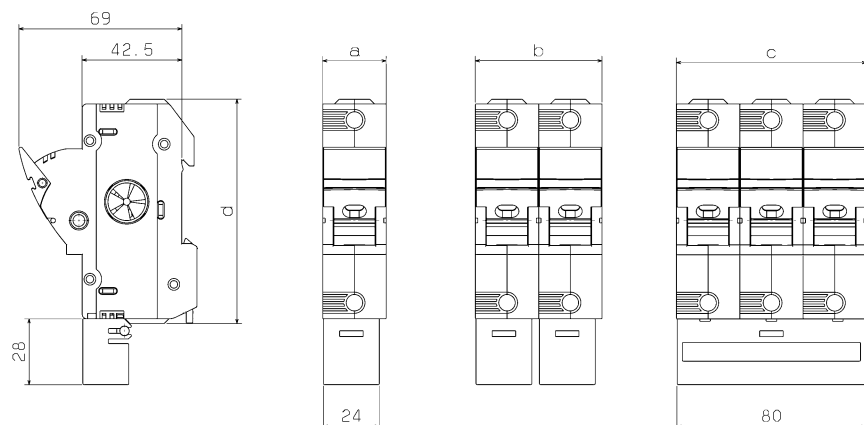
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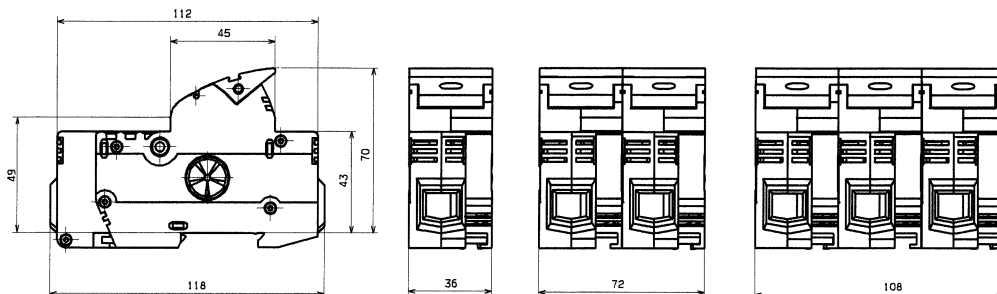
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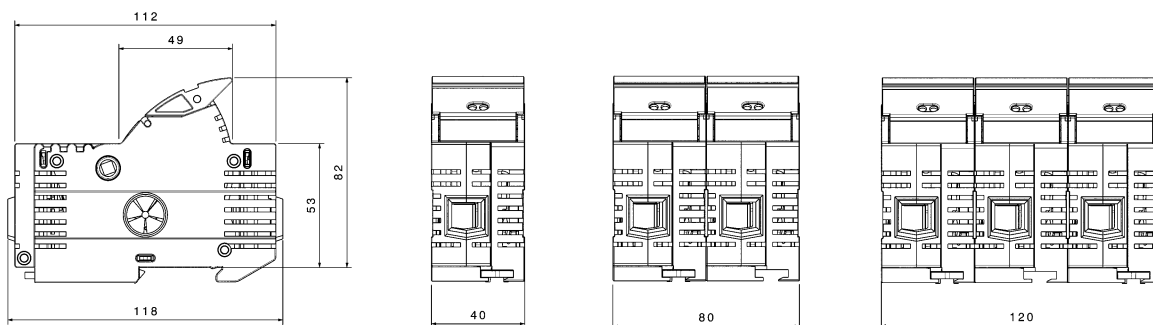
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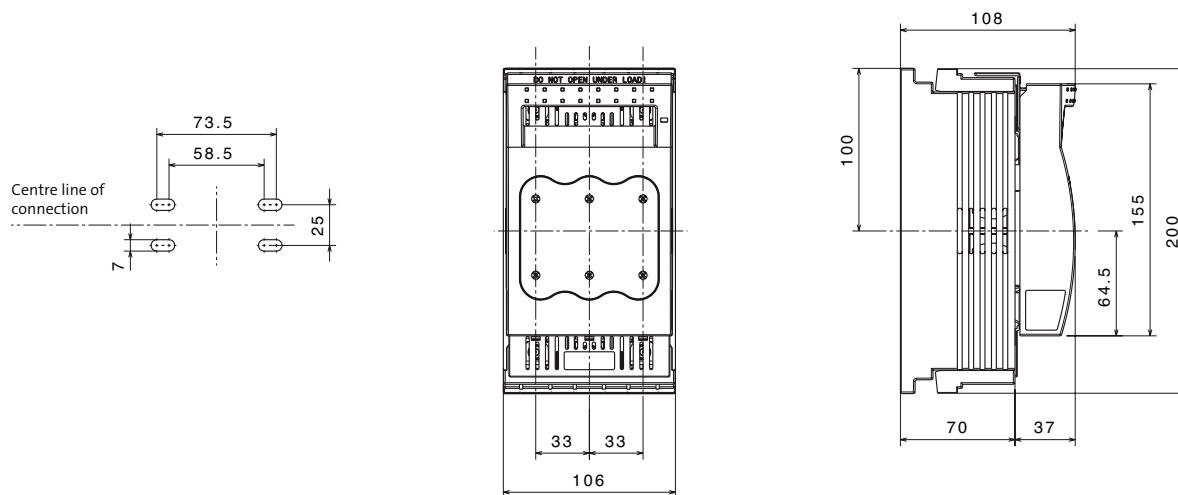
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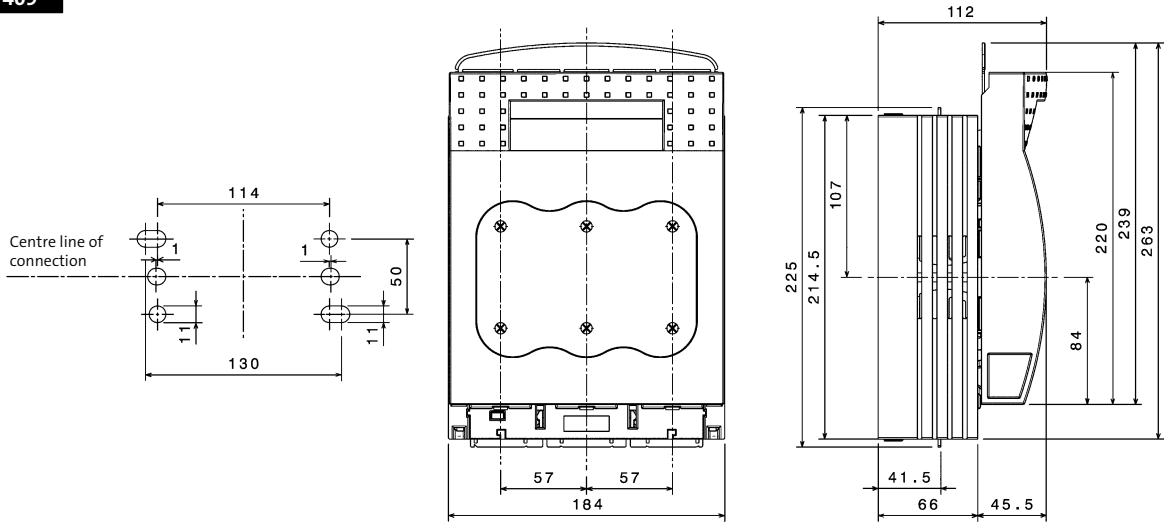
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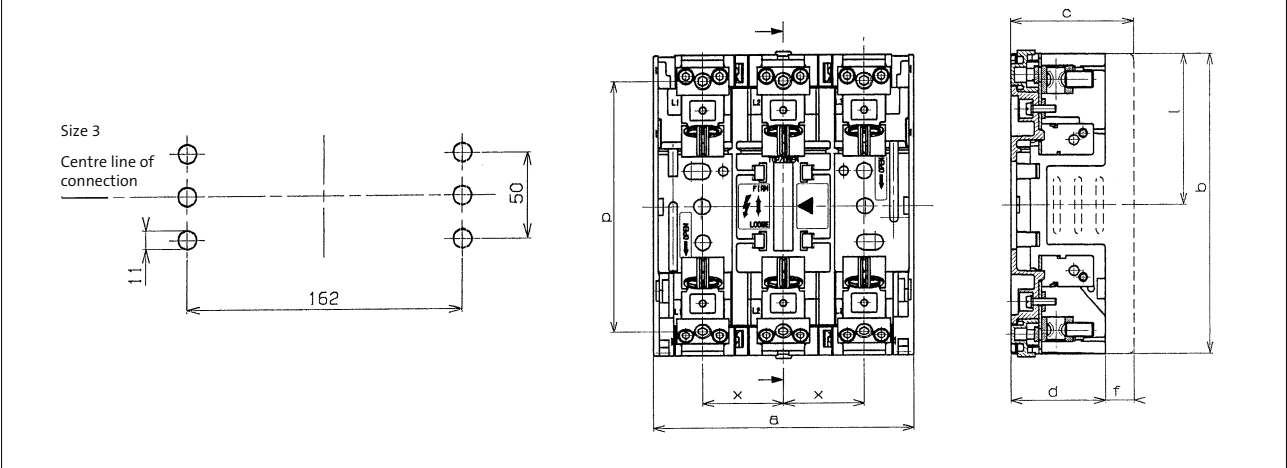
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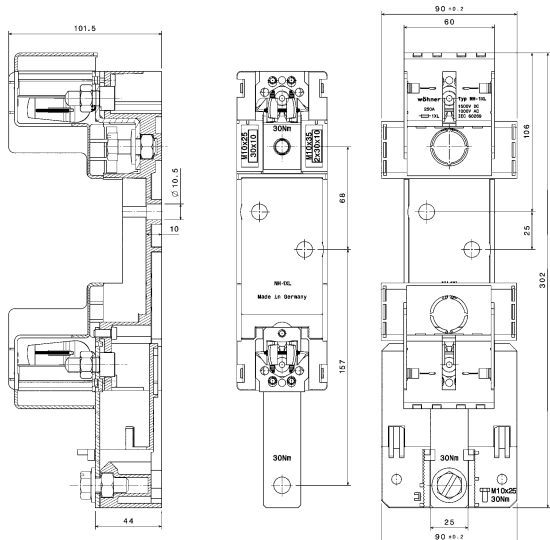
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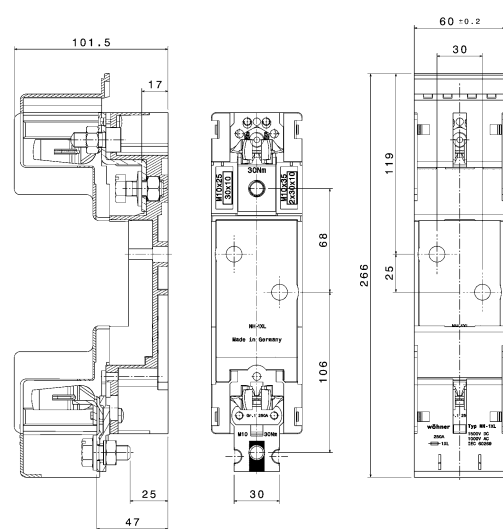
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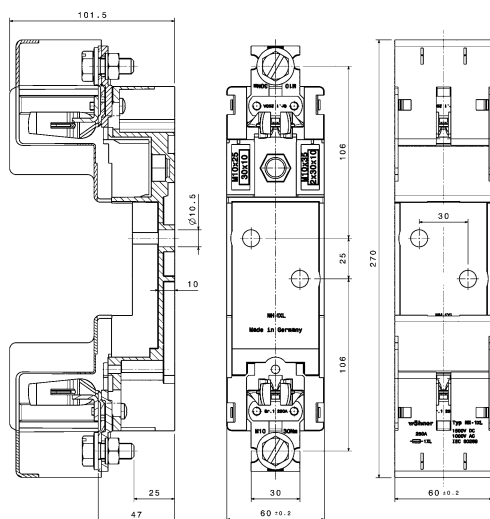
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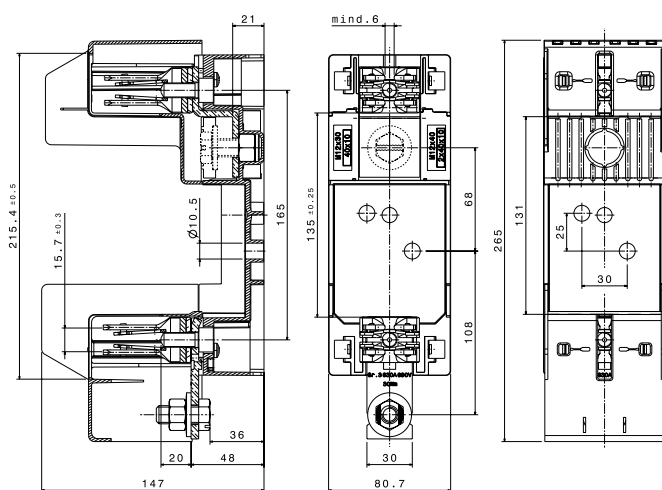
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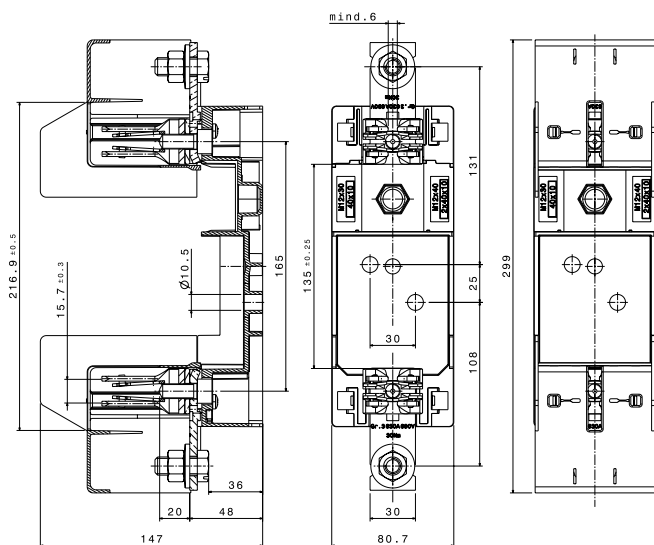
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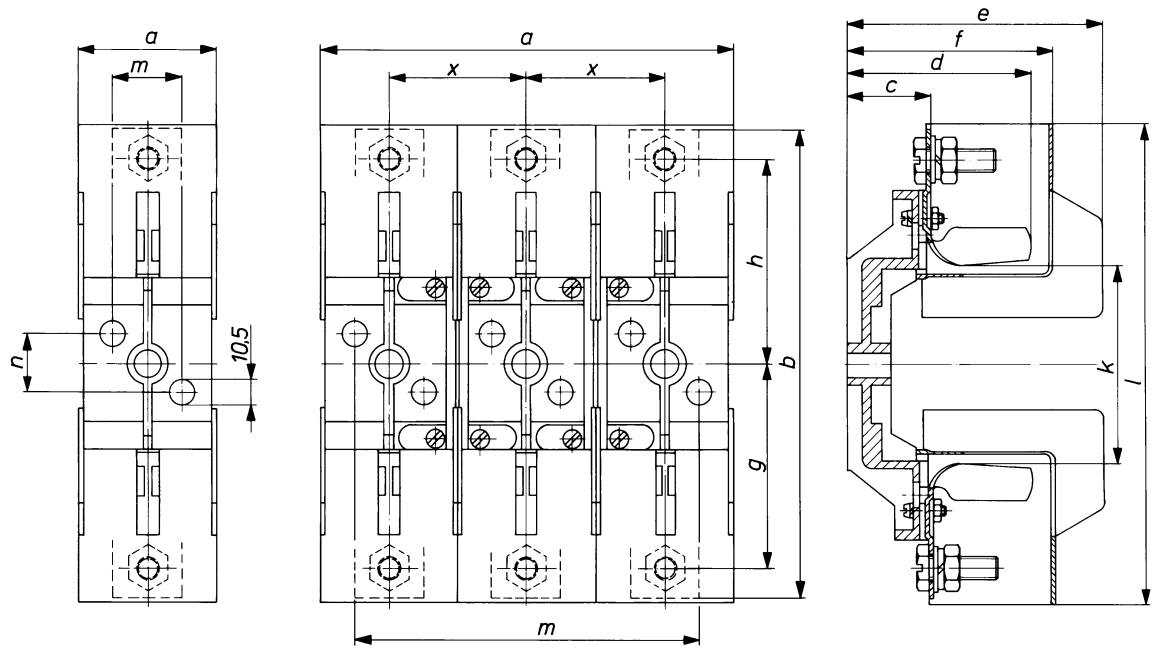
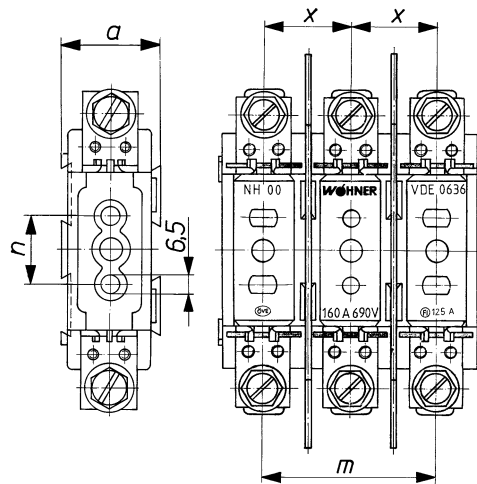
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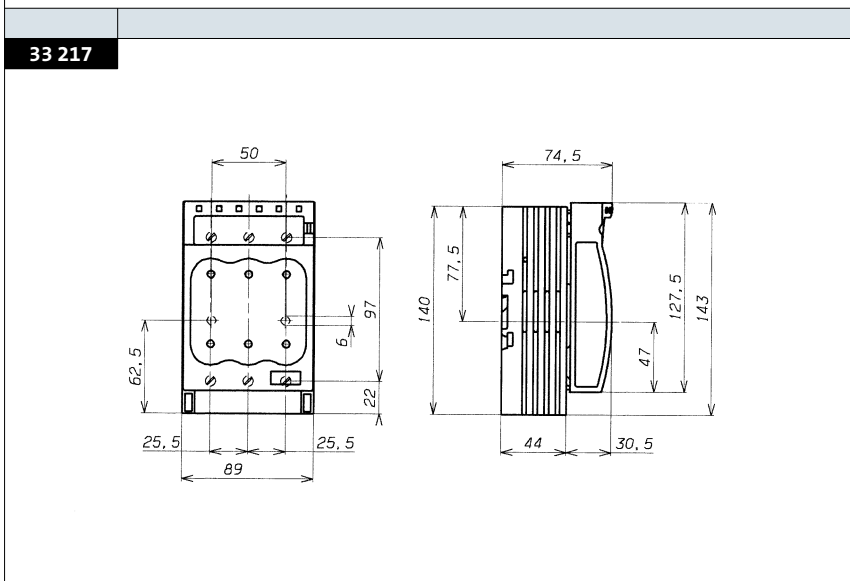


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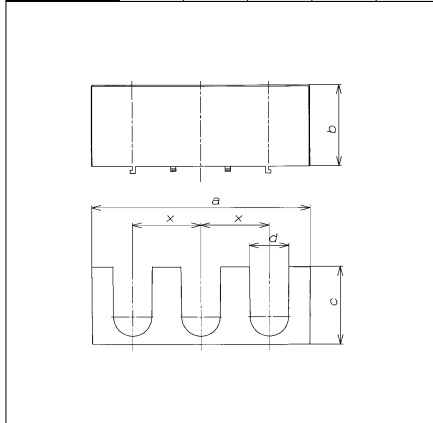


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<b>03 354</b>	35.3	120	28	58	88		50	50	57	145			25
<b>03 355</b>	97	120	28	58	88		50	50	57	145	32	64	25
<b>03 749</b>	97	120	28	58	88	62	50	50	57	147	32	64	25
<b>03 758</b>	35.3	120	28	58	88	62	50	50	57	147			25
<b>03 759</b>	97	120	28	58	88	62	50	50	57	147	32	64	25
<b>03 760</b>	35.3	120	28	58	88	62	50	50	57	147			25
<b>03 761</b>	97	120	28	58	88	62	50	50	57	147	32	64	25
<b>03 762</b>	60	200	37	80	110	89	87.5	87.5	83	205		30	25
<b>03 763</b>	180	200	37	80	110	89	87.5	87.5	83	205	60	150	25
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<b>03 766</b>	64	232	40	98	121	104	100	100	82	237		30	25
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<b>03 768</b>	80	232	40	99	133.5	105	105	105	82	247		30	25
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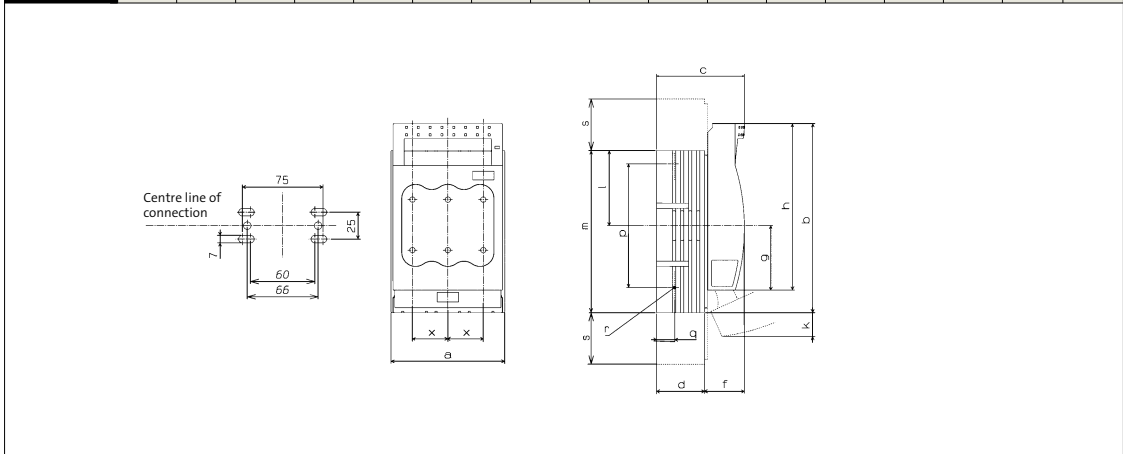




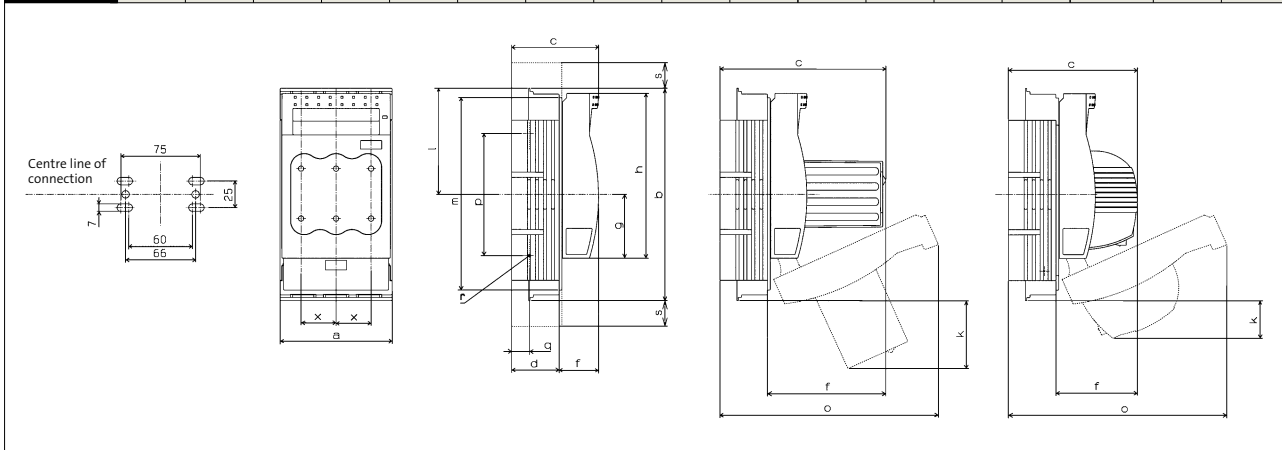
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	<b>33 143</b>	208.5	51.5	79	43	65
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	<b>79 811</b>	105	34	46	22	33



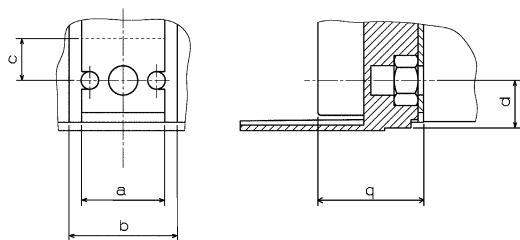
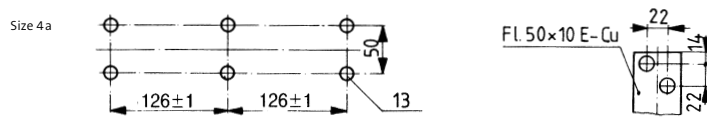
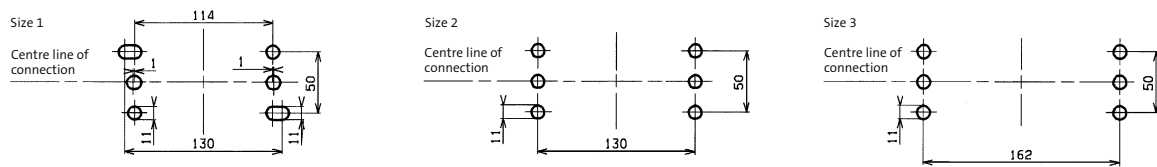
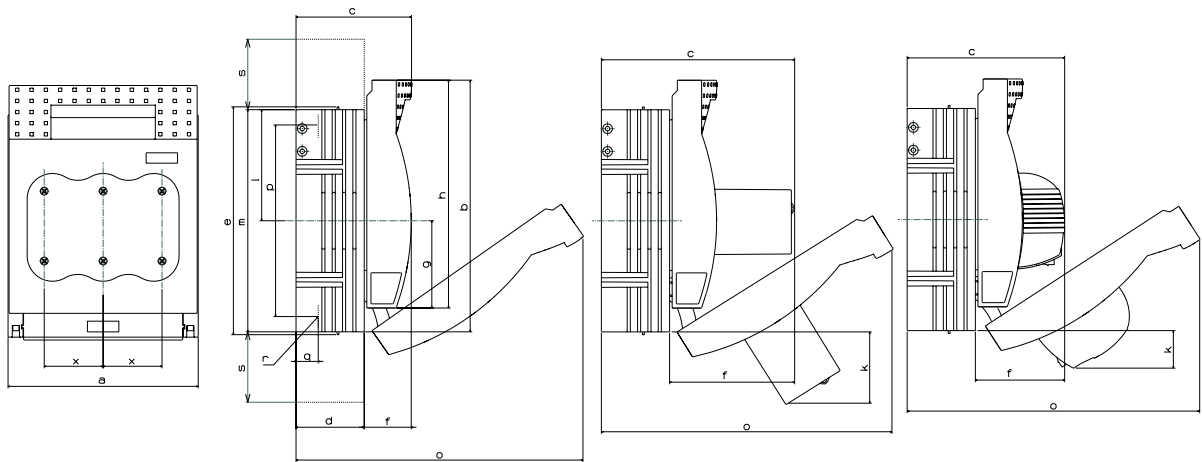
	Size	a	b	c	d	f	g	h	k	l	m	o	p	q	r	s	x	
<b>33 221</b>	00	106	176	82.5	45	37	60	155	22	70	151	206	101	17	2xM5	48	33	<b>33 156</b>
<b>33 222</b>	00	106	176	82.5	45	37	60	155	22	70	151	206	115	17	M8	48	33	



	Size	a	b	c	d	f	g	h	k	l	m	o	p	q	r	x	s
<b>33 199</b>	00	106	200	82.5	45	37	60	155	—	100	181	206	101	17	2xM5	33	24
<b>33 200</b>	00	106	200	82.5	45	37	60	155	—	100	181	206	115	17	M8	33	24
<b>33 207</b>	00	106	200	157	45	112	60	155	64	100	181	206	101	17	2xM5	33	24
<b>33 208</b>	00	106	200	157	45	112	60	155	64	100	181	206	115	17	M8	33	24
<b>33 328</b>	00	106	200	122	45	77	60	155	35	100	181	206	101	17	2xM5	33	24
<b>33 329</b>	00	106	200	122	45	77	60	155	35	100	181	206	115	17	M8	33	24

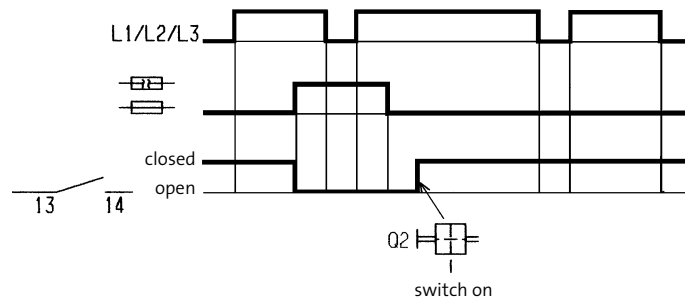
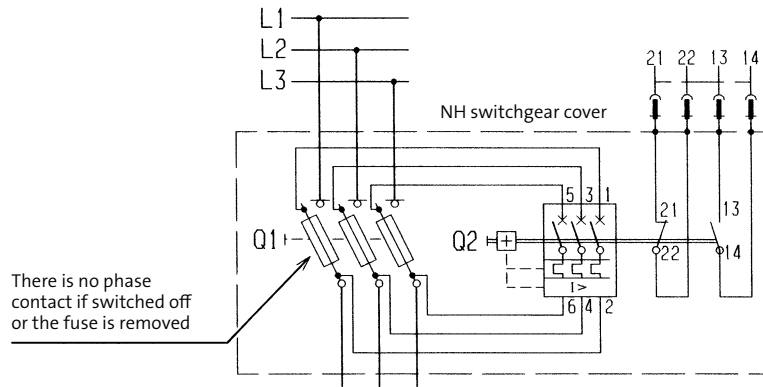


	Size	a	b	c	d	e	f	g	h	l	m	p	q	r	x	s
<b>33 149</b>	1	184	243	186.5	66	220	120.5	84	220	107	214.5	185	21.5	M10	57	68
<b>33 150</b>	2	210	288	203	80	—	123	92	249	124	255	210	25	M10	65	52
<b>33 151</b>	3	256	300	217.5	94.5	—	123	98.5	259	127.5	267	210	30	M12	81	48
<b>33 201</b>	1	184	243	111.5	66	220	45.5	84	220	107	214.5	185	21.5	M10	57	68
<b>33 202</b>	2	210	288	128	80	—	48	92	249	124	255	210	25	M10	65	52
<b>33 203</b>	3	256	300	142.5	94.5	—	48	98.5	259	127.5	267	210	30	M12	81	48
<b>33 204</b>	4a	378	352	233	151	—	75	104	256	192	352	—	39	2xM12	126	—
<b>33 330</b>	1	184	243	152	66	220	86	84	220	107	214.5	185	21.5	M10	57	68
<b>33 331</b>	2	210	288	168.5	80	—	88.5	92	249	124	255	210	25	M10	65	52
<b>33 332</b>	3	256	300	183	94.5	—	88.5	98.5	259	127.5	267	210	30	M12	81	48
<b>33 393</b>	1	184	243	111.5	66	220	45.5	84	220	107	214.5	185	21.5	M10	57	68

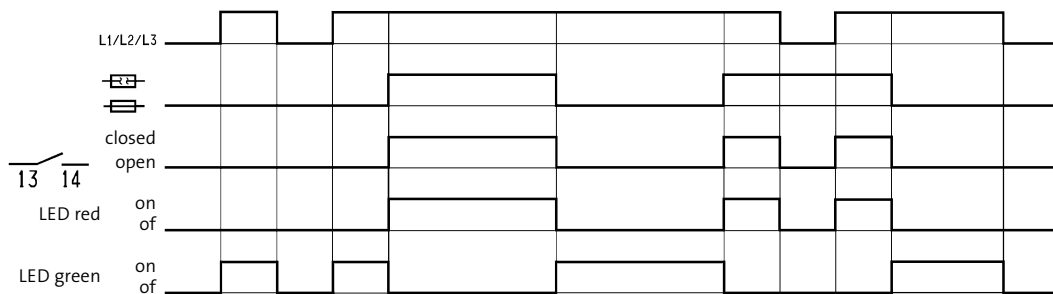
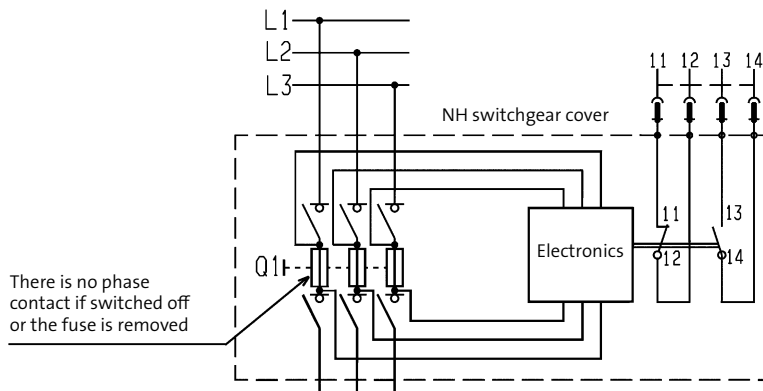


Size	a	b	c	d	q
00	20	25	14.5	10	17
1	30	39	17	17	21
2	33	42	19	19.5	25
3	40	52	20	24	30

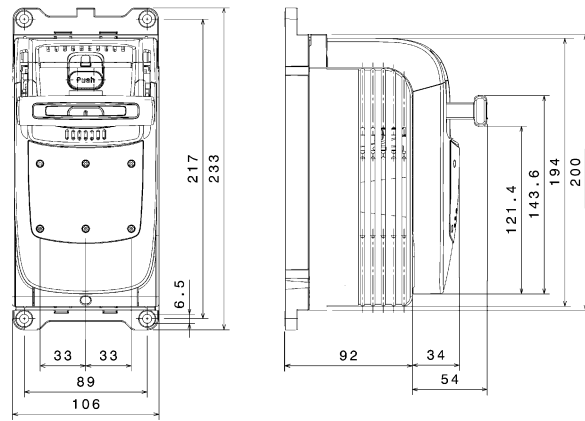
QCB, NH fuse switch disconnecter with electro-mechanical fuse monitoring



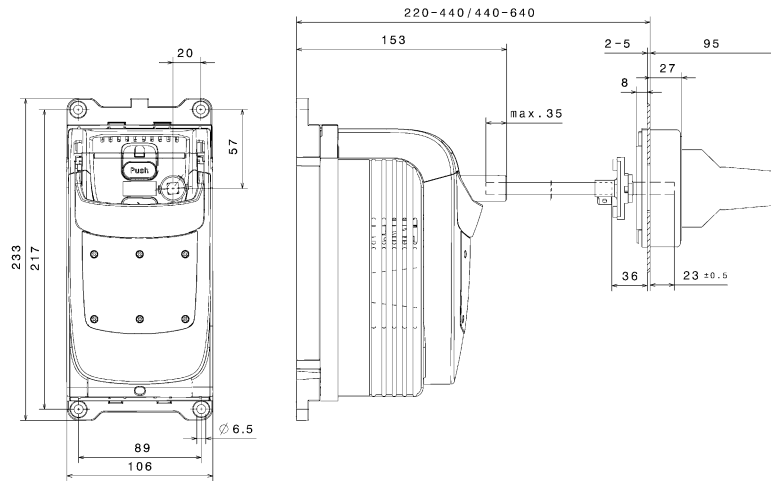
QCS, Switch disconnecter with NH fuses with electronic fuse monitoring



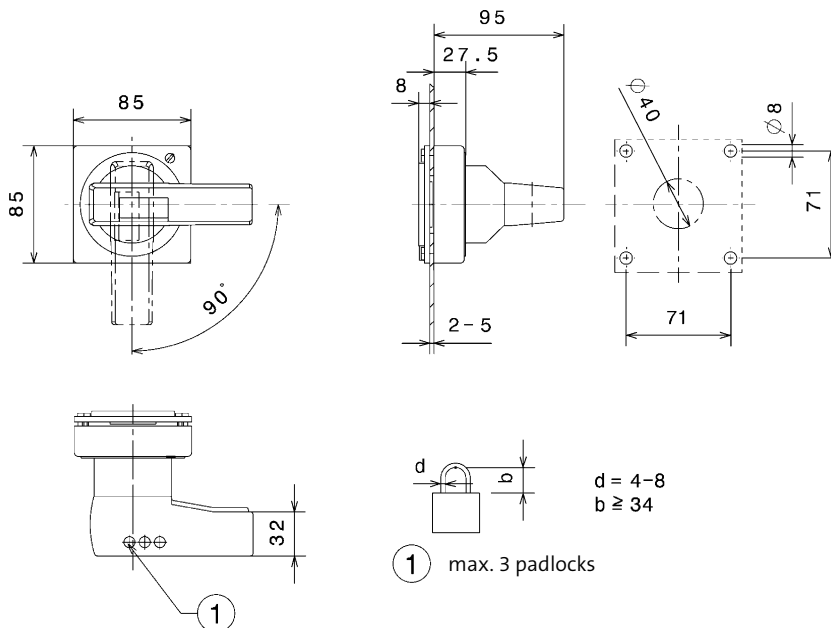
33 502  
33 542



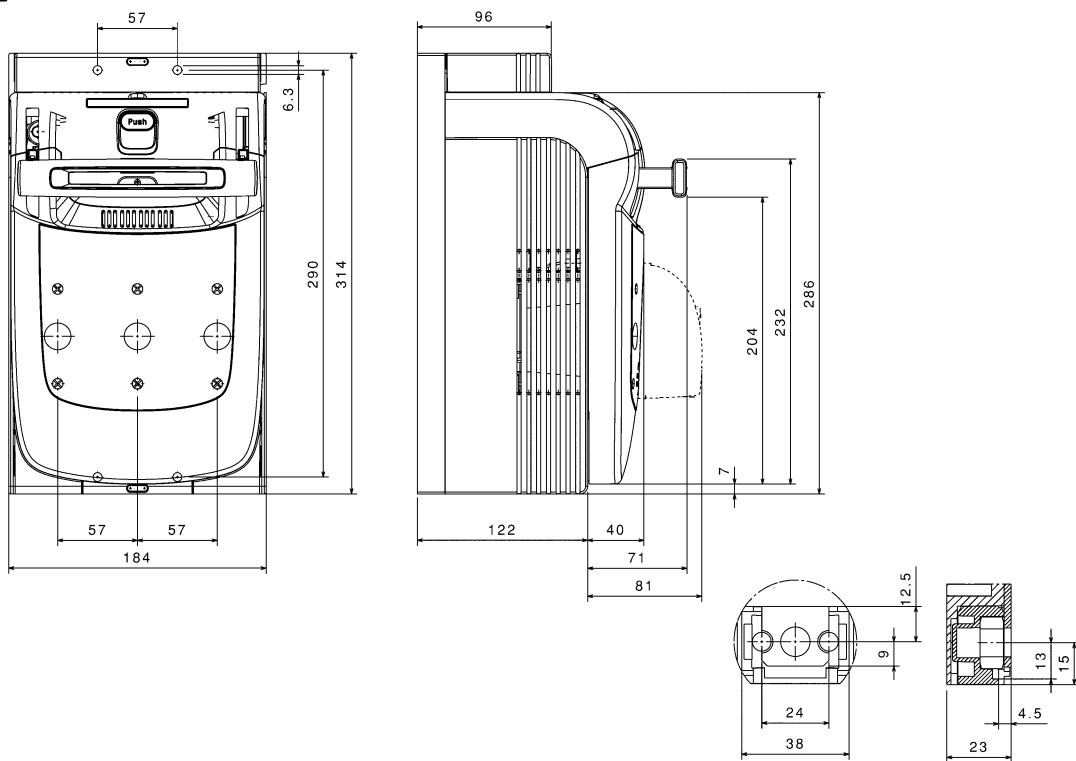
33 505  
33 545  
33 910  
33 911



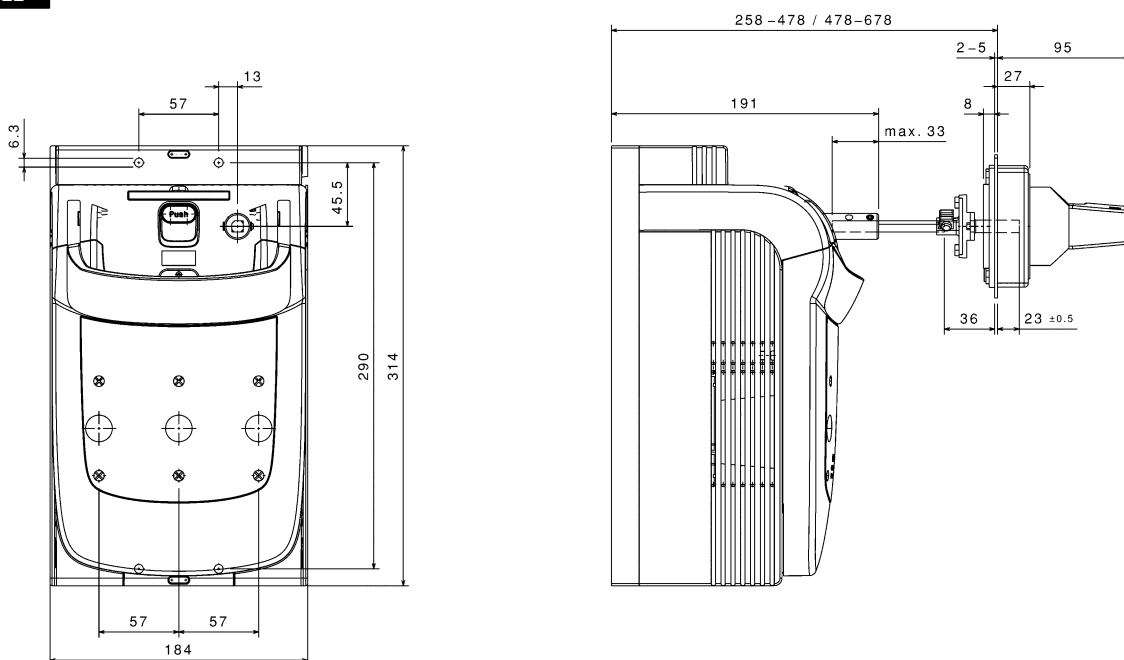
33 910  
33 911



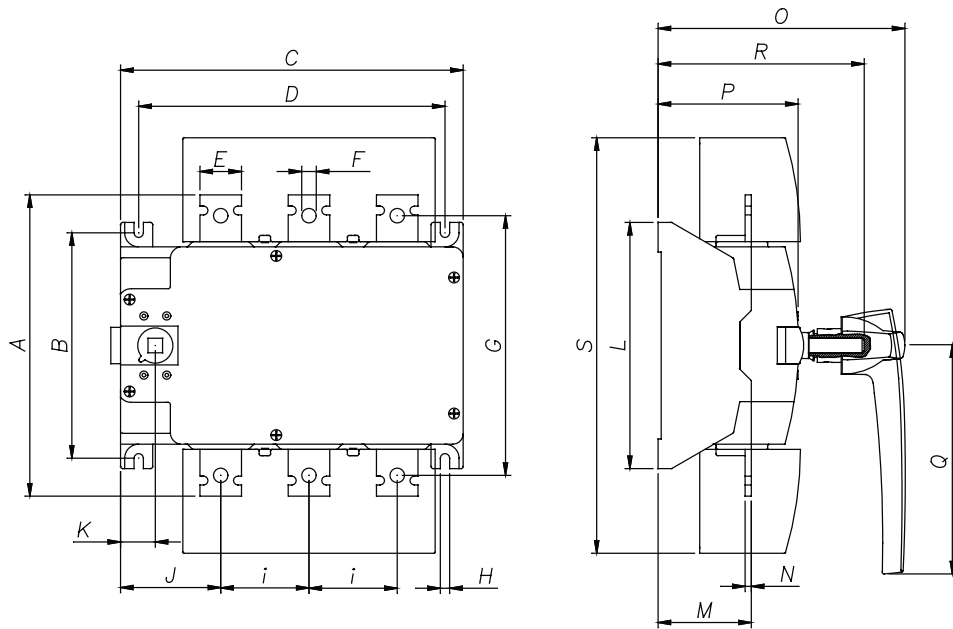
33 512  
33 552



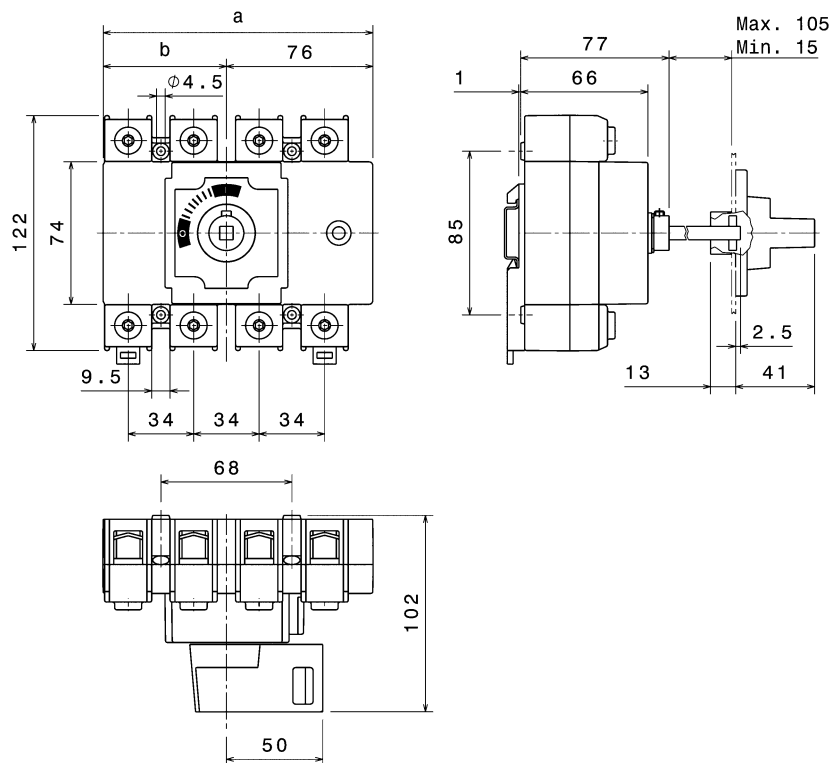
33 515  
33 555  
33 910  
33 911



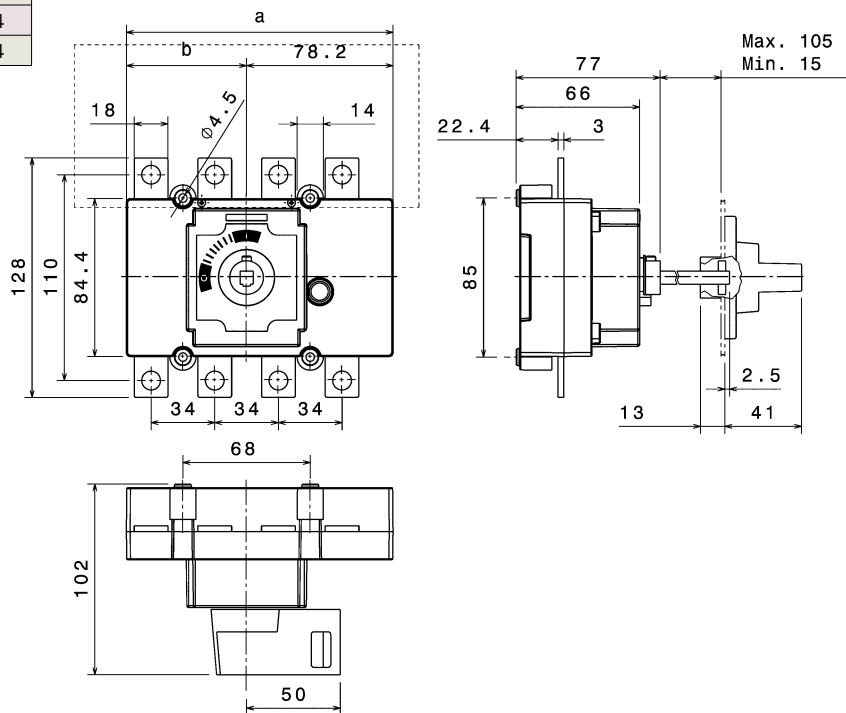
		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	
<b>33 333</b>	<b>33 355</b>	250A	158	108	171	153.5	25	11	133	6.5	40	60.5	24	123	46.5	3	157	68	125	128	192
<b>33 334</b>	<b>33 356</b>	400A	232	181.5	270	241.5	30	10.5	208	7	65	88	29	200	73	5	196.5	106.5	180	165	338
<b>33 335</b>	<b>33 357</b>	630A	238	181.5	270	241.5	35	10.5	208	7	65	88	29	200	73	5	196.5	106.5	180	165	338
<b>33 336</b>	<b>33 358</b>	800A	290	217	330	295	40	14	250	9	85	96.5	33.5	237	90	6	237	135	220	198	400



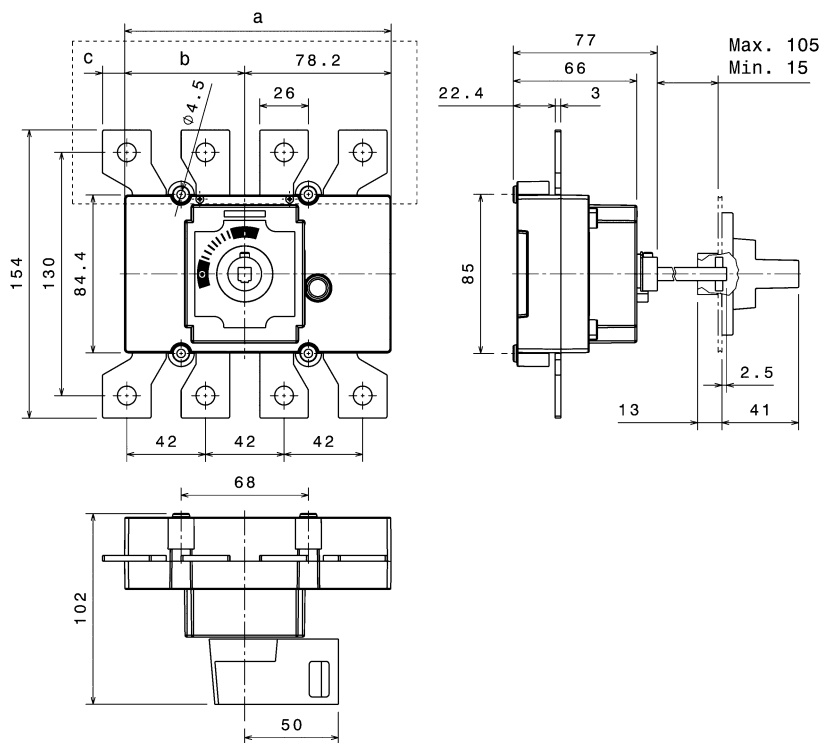
	a	b
<b>33 424</b>	129	53
<b>33 426</b>	129	53
<b>33 440</b>	140	64
<b>33 442</b>	140	64



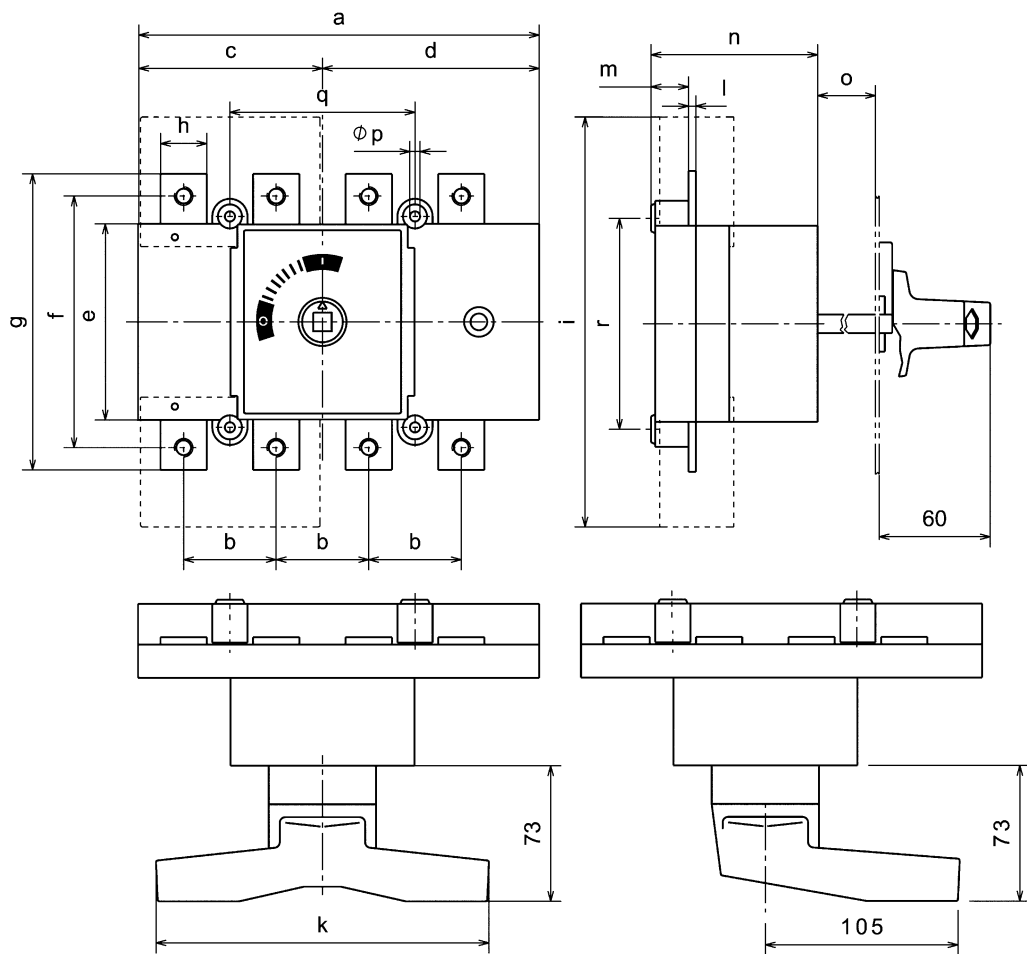
	a	b
33 425	131	53
33 427	131	53
33 441	142	64
33 443	142	64



	a	b	c
33 428	131	53	-
33 429	131	53	-
33 444	142	64	11.8
33 445	142	64	11.8



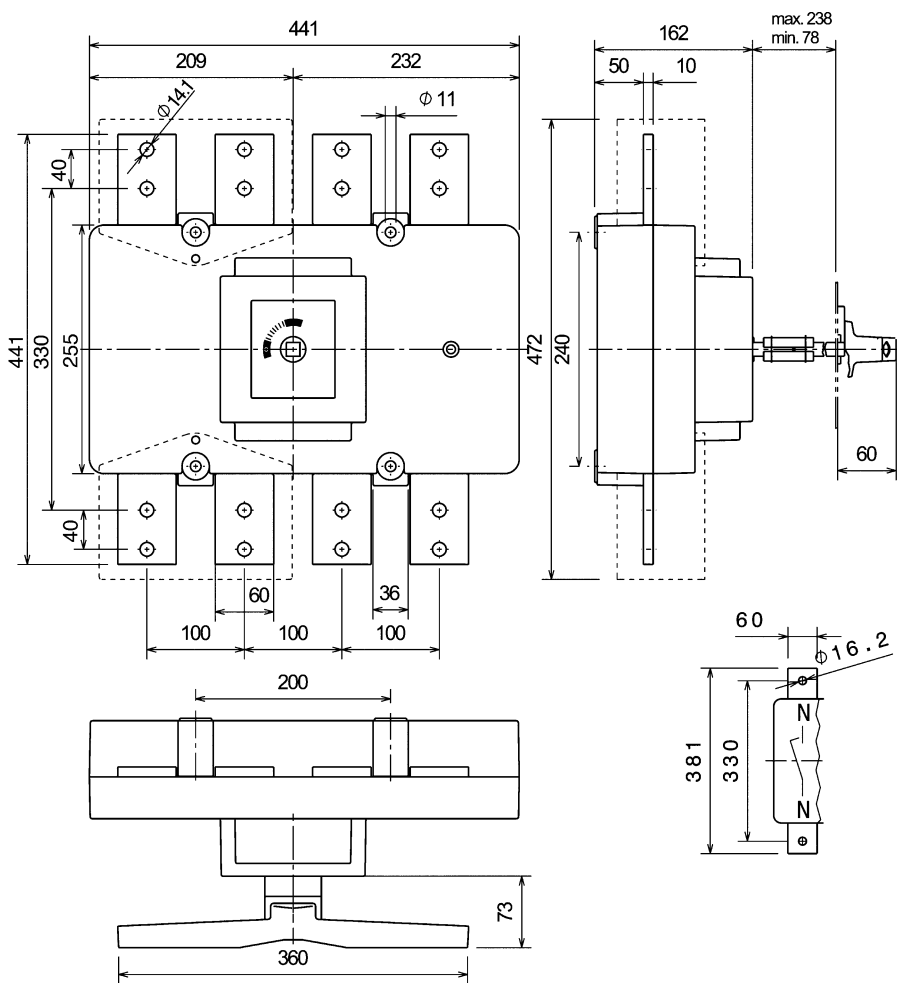
	a	b	c	d	e	f	g	h	i	k	l	m	n	o		p	q	r
														min.	max.			
<b>33 430</b>	217	50	100	117	106	143	167	25	226	–	4	20.5	90	18	150	5.5	100	114
<b>33 431</b>	217	50	100	117	106	143	167	25	226	–	4	20.5	90	18	150	5.5	100	114
<b>33 432</b>	275	65	130	145	160	205	235	30	290	245	5	30	121	18	119	6.5	140	190
<b>33 433</b>	275	65	130	145	160	205	235	30	290	245	5	30	121	18	119	6.5	140	190
<b>33 434</b>	325	75	150	175	190	250	290	40	340	285	8	39	137	18	108	9	140	190
<b>33 446</b>	217	50	100	117	106	143	167	25	226	–	4	20.5	90	18	150	5.5	100	114
<b>33 447</b>	217	50	100	117	106	143	167	25	226	–	4	20.5	90	18	150	5.5	100	114
<b>33 448</b>	275	65	130	145	160	205	235	30	290	245	5	30	121	18	119	6.5	140	190
<b>33 449</b>	275	65	130	145	160	205	235	30	290	245	5	30	121	18	119	6.5	140	190
<b>33 450</b>	325	75	150	175	190	250	290	40	340	285	8	39	137	18	108	9	140	190



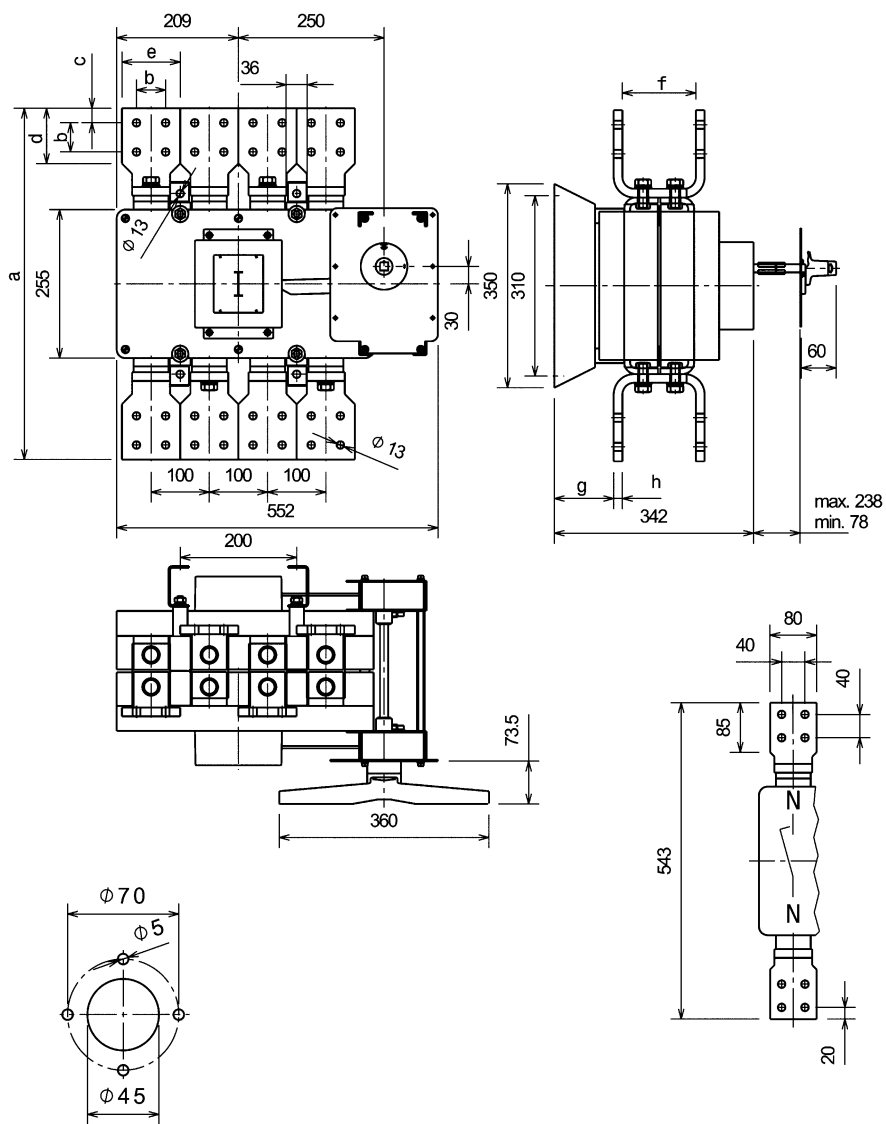
33 432  
33 433  
33 434  
33 448  
33 449  
33 450

33 430  
33 431  
33 446  
33 447

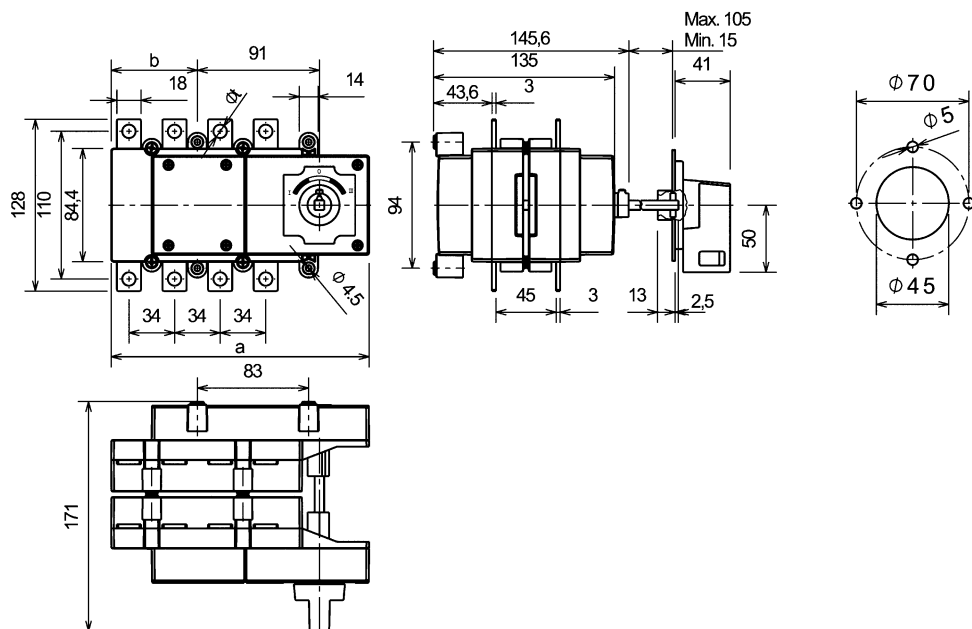
33 435  
33 436  
33 451



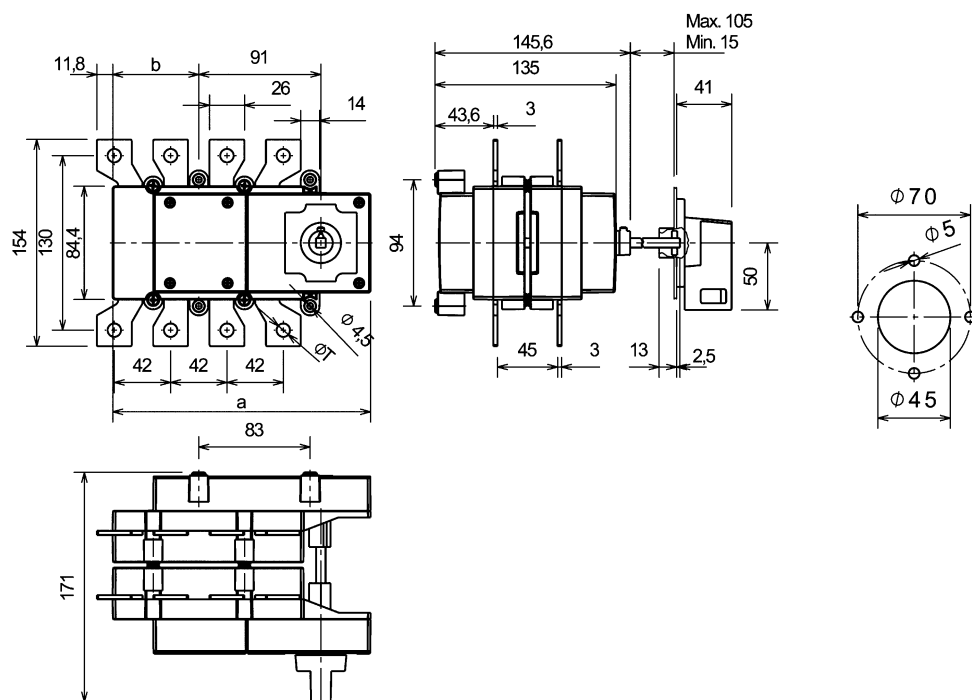
	a	b	c	d	e	f	g	h
<b>33 437</b>	543	40	20	85	80	106	117	10
<b>33 438</b>	543	40	20	85	80	106	117	10
<b>33 439</b>	603	50	25	95	100	126	102	15
<b>33 452</b>	543	40	20	85	80	106	117	10
<b>33 453</b>	543	40	20	85	80	106	117	10
<b>33 454</b>	603	50	25	95	100	126	102 <td 15	



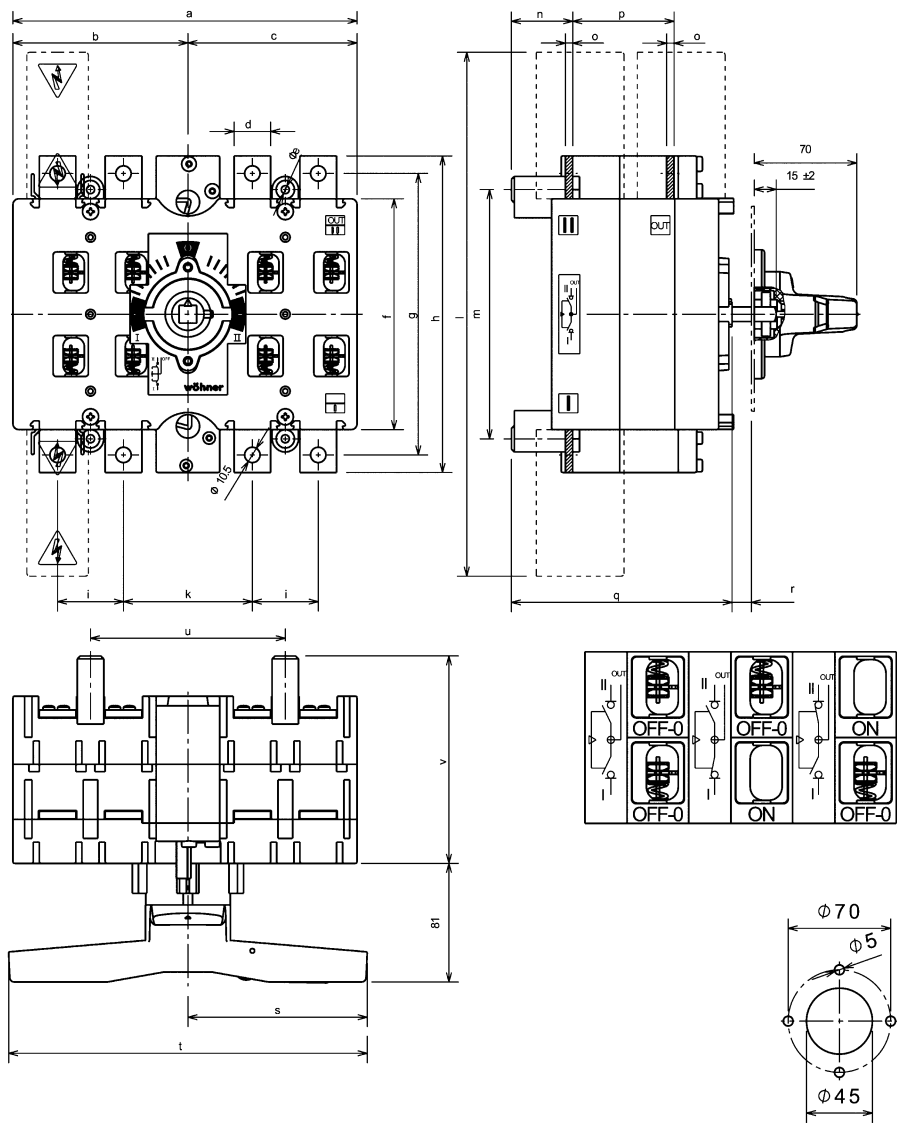
	a	b
<b>33 455</b>	181	53
<b>33 456</b>	181	53
<b>33 464</b>	192	64
<b>33 465</b>	192	64



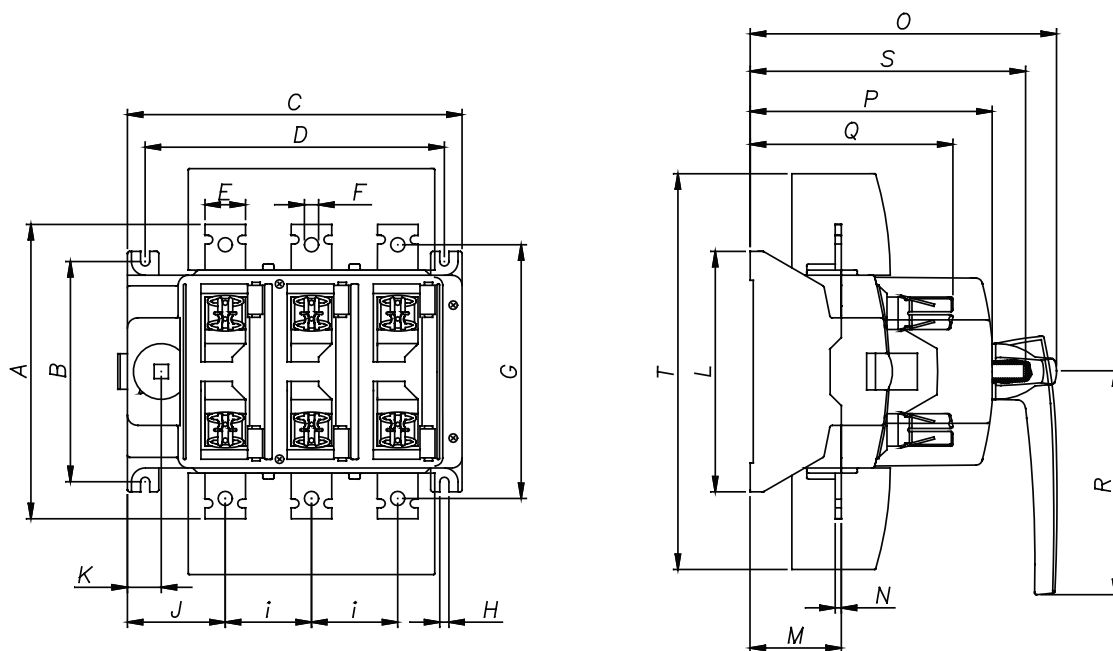
	a	b
<b>33 457</b>	181	53
<b>33 466</b>	192	64



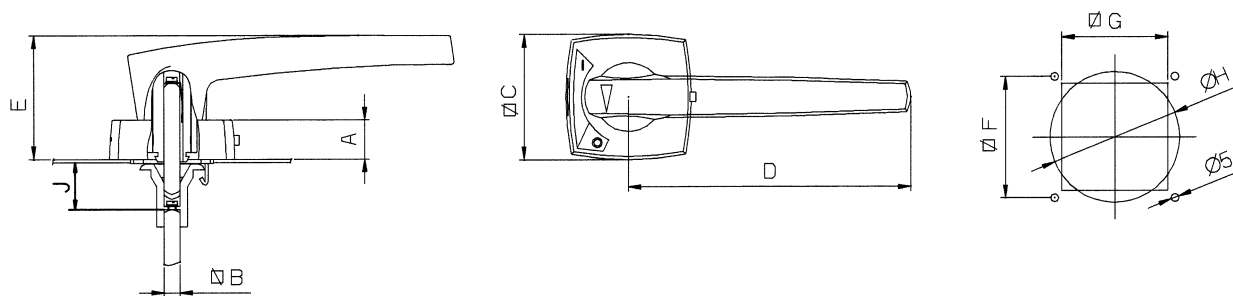
	a	b	c	d	e	f	g	h	i	k	l	m	n	o	p	q	r		s	t	u	v	ø
																	max.	min.					
<b>33 458</b>	235	119.5	115.5	25	5.5	157	192	216	45	88	357	170	42	3	67	151	103	7	105	-	133	142	10.5
<b>33 459</b>	235	119.5	115.5	25	5.5	157	192	216	45	88	357	170	42	3	67	151	103	7	105	-	133	142	10.5
<b>33 460</b>	235	119.5	115.5	25	5.5	157	192	216	45	88	357	170	42	3	67	151	103	7	105	-	133	142	10.5
<b>33 461</b>	321	162	159	40	7	232	282	312	65	121	482	247	46	5	87	180	75	7	-	245	186	171	12.5
<b>33 462</b>	321	162	159	40	7	232	282	312	65	121	482	247	46	5	87	180	75	7	-	245	186	171	12.5
<b>33 463</b>	424	210	214	50	9	295	375	419	85	163	595	315	57	6	88	208	56	7	-	360	248	199	14.5
<b>33 467</b>	235	119.5	115.5	25	5.5	157	192	216	45	88	357	170	42	3	67	151	103	7	105	-	133	142	10.5
<b>33 468</b>	235	119.5	115.5	25	5.5	157	192	216	45	88	357	170	42	3	67	151	103	7	105	-	133	142	10.5
<b>33 469</b>	235	119.5	115.5	25	5.5	157	192	216	45	88	357	170	42	3	67	151	103	7	105	-	133	142	10.5
<b>33 470</b>	321	162	159	40	7	232	282	312	65	121	482	247	46	5	87	180	75	7	-	245	186	171	12.5
<b>33 471</b>	321	162	159	40	7	232	282	312	65	121	482	247	46	5	87	180	75	7	-	245	186	171	12.5
<b>33 472</b>	424	210	214	50	9	295	375	419	85	163	595	315	57	6	88	208	56	7	-	360	248	199	14.5



		Size	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t
<b>33 337</b>	<b>33 359</b>	00	158	108	171	153.5	20	9	128	6.5	40	60.5	24	123	46.5	3	195	140	107	125	166	192
<b>33 338</b>	<b>33 360</b>	1	232	181.5	270	241.5	30	10.5	208	7	65	88	29	200	73	5	253	196	152.5	180	218	338
<b>33 339</b>	<b>33 361</b>	2	238	181.5	270	241.5	35	10.5	208	7	65	88	29	200	73	5	253	196	161	180	218	338
<b>33 340</b>	<b>33 362</b>	3	290	217	330	295	40	14	250	9	85	96.5	33.5	237	90	6	302	238.5	200	220	262	400

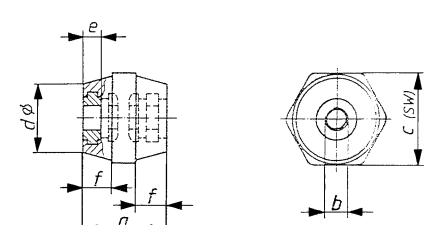
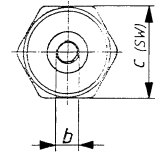


	a	b	c	d	e	f	g	h	j
LTS 250, LTS-F 160	25	10	80	126	76	61	54	65	30
LTS 400/630, LTS-F 250/400	25	10	80	180	79	61	54	65	30
LTS 800, LTS-F 630	30	14	100	220	90	77	68	83	38

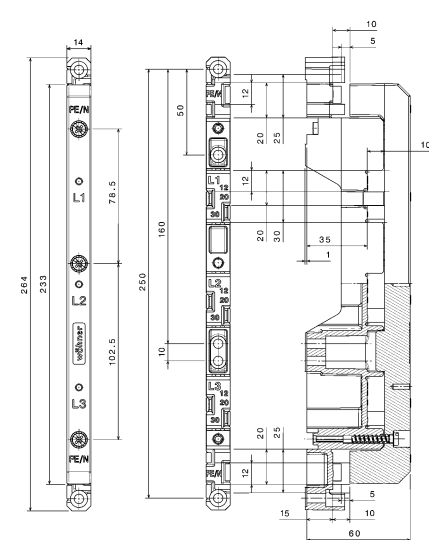


	a	b	c	d	e	f		
<b>05 779</b>	20	M 6	17	15	5	6		<b>01 138</b>
<b>05 780</b>	30	M 6	30	26	6	8		
<b>05 781</b>	35	M 6	32	28	8	10		
<b>05 782</b>	35	M 8	32	28	10	12		
<b>05 783</b>	40	M 8	40	35	10	12		
<b>05 784</b>	40	M 10	40	35	12	14		
<b>05 785</b>	45	M 6	46	38	8	10		
<b>05 786</b>	45	M 8	46	38	10	12		
<b>05 787</b>	45	M 10	46	38	12	14		
<b>05 788</b>	50	M 10	36	29	14	16		
<b>05 789</b>	60	M 10	40	35	14	16		
<b>05 790</b>	50	M 8	36	29	10	12		
<b>05 791</b>	40	M 12	40	35	11	13		
<b>05 792</b>	30	M 8	30	26	8	10		

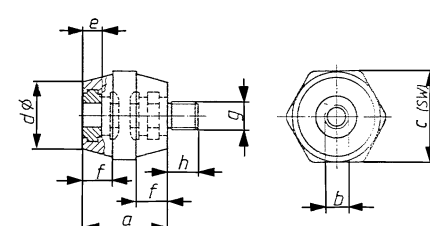
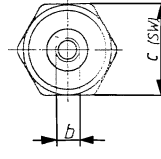



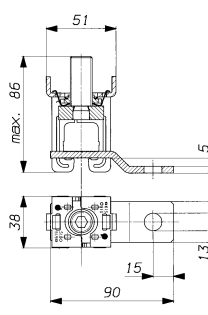
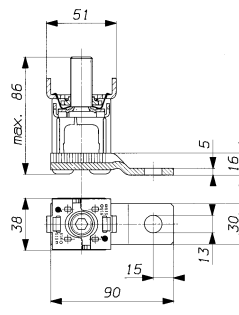


	a	b	c	d	e	f	g	h		
<b>05 800</b>	30	M 6	30	26	6	8	M 6	6	<b>01 888</b>	<b>01 890</b>
<b>05 801</b>	35	M 6	32	25	8	10	M 6	8		
<b>05 802</b>	35	M 8	32	30	10	12	M 8	10		

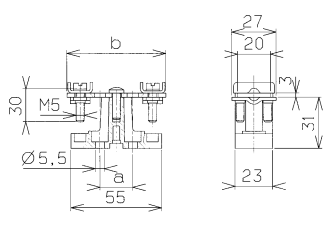
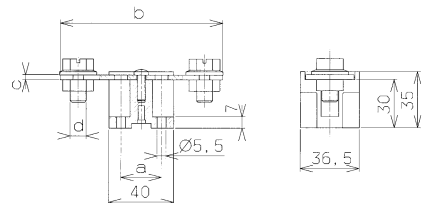



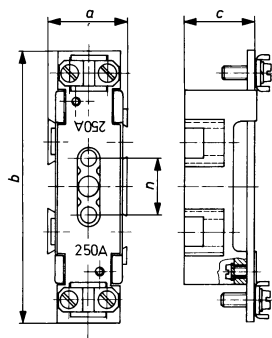
	a	b								
<b>03 173</b>	160A	85	125		<b>03 195</b>	250A	25	100	3	M10x20
<b>03 193</b>	160A	20.5	60			<b>03 196</b>	250A	125	198	3
					<b>03 197</b>	630A	25	100	5	M12x28
					<b>03 198</b>	630A	125	198	5	M12x28

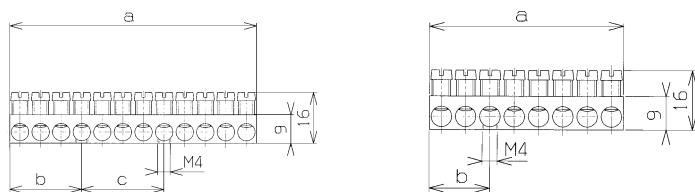



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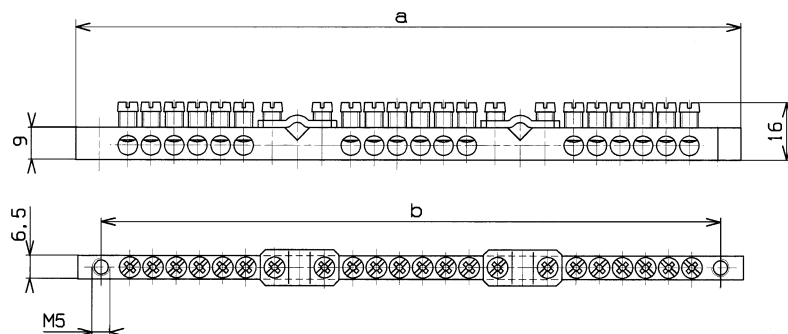
	a	b	c	n
<b>03 213</b>	55	200	40	25
<b>03 519</b>	39	124	27	25
<b>03 620</b>	39	124	27	25
<b>03 668</b>	35	120	28	25
<b>03 757</b>	55	200	40	25
<b>05 188</b>	13	53	38	43



	a	b	c
<b>01 126</b>	52	16	
<b>01 127</b>	78	22.5	26
<b>01 128</b>	104	3	97.5
<b>01 129</b>	156	29	97.5



	a	b	clamp
<b>01 926</b>	61.5	48.5	
<b>01 927</b>	124	111	1
<b>01 928</b>	186.5	173.5	2
<b>01 929</b>	249	236	3
<b>01 930</b>	311.5	298.5	4
<b>01 931</b>	374	361	5
<b>01 932</b>	1000		



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**Beving Elektronik AB** · Box 93 · 127 22 Skärholmen  
Telefon: 08 - 680 11 99 · [info@beving.se](mailto:info@beving.se) · [www.beving.se](http://www.beving.se)

**Wöhner GmbH & Co. KG**  
Elektrotechnische Systeme  
Mönchrödener Straße 10  
96472 Rödental Germany

Phone +49 9563 751-0  
[info@woehner.de](mailto:info@woehner.de)  
[www.woehner.com](http://www.woehner.com)