

wöhner

MANUAL 2018



ALLES MIT SPANNUNG









DEVELOPED IN RÖDENTAL, SUCCESSFUL WORLDWIDE

Wöhner develops system solutions for the electro-technical market.

For over 88 years, the Wöhner name has been synonymous with impressive technical achievements and innovations. Today, the Wöhner Group is established worldwide as a specialist in electro-technical systems in the field of power distribution, control technology and renewable energy. Innovations, short response times and the fastest possible customer service are the challenges by which we make a name for ourselves in the global market. To help us continue this, we are investing in the Rödental site 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 SYSTEM



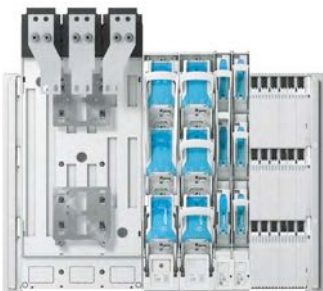
CrossBoard®



30Compact



60Classic



185Power



Panel

PRODUCT FAMILY



AMBUS®
fuse holder



BROOME10
power supply



CAPUS®
switch disconnecter



CRITO®
connection module



CUSTO®
bus-mounting fuse base



EQUES®
busbar adapter



FIBUS®
terminal



MOTUS®
hybrid motor starter



OMUS®
hybrid switch



QUADRON®
NH fuse-switch disconnecter



SECUR®
D0 switch disconnecter
with fuses

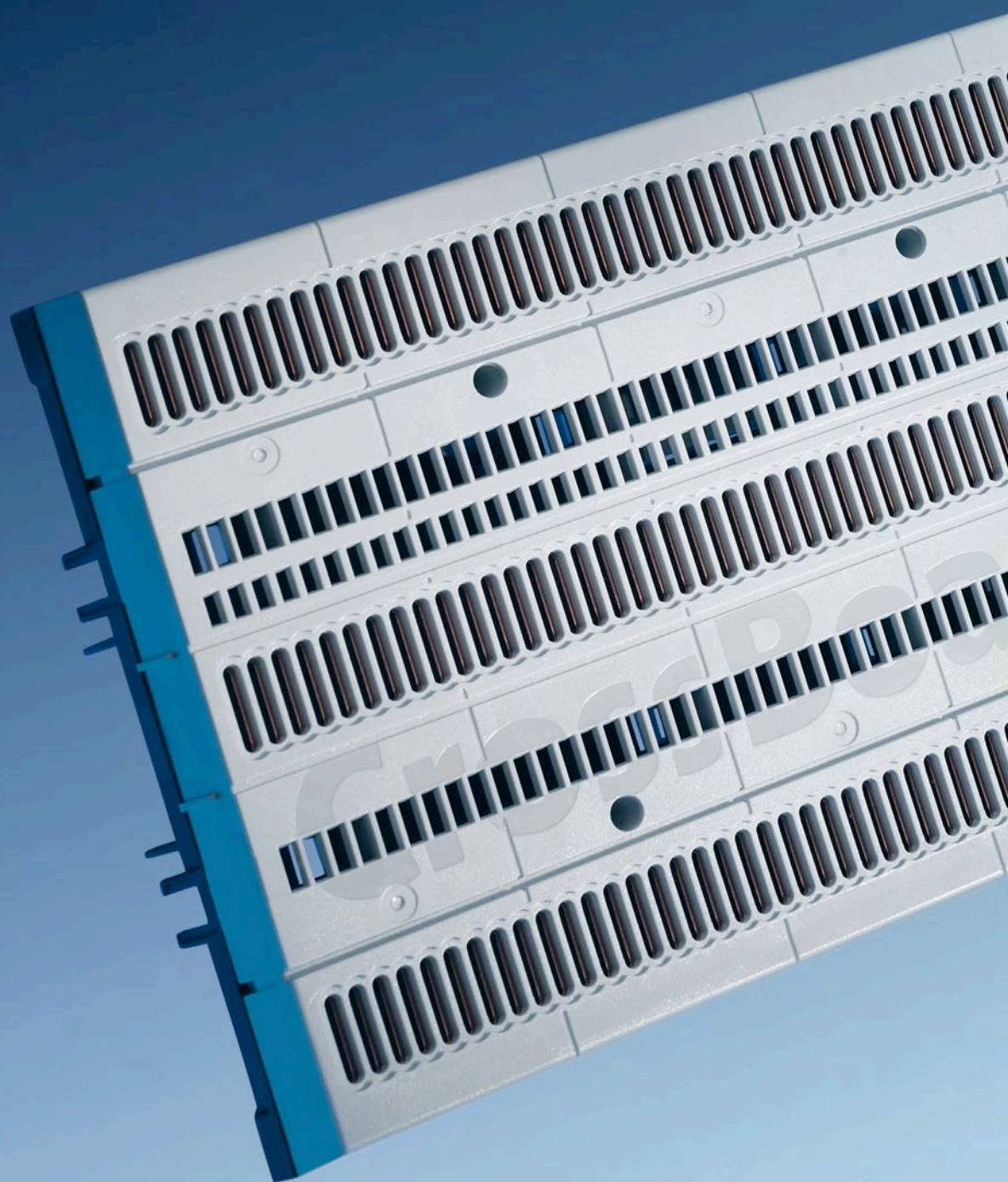


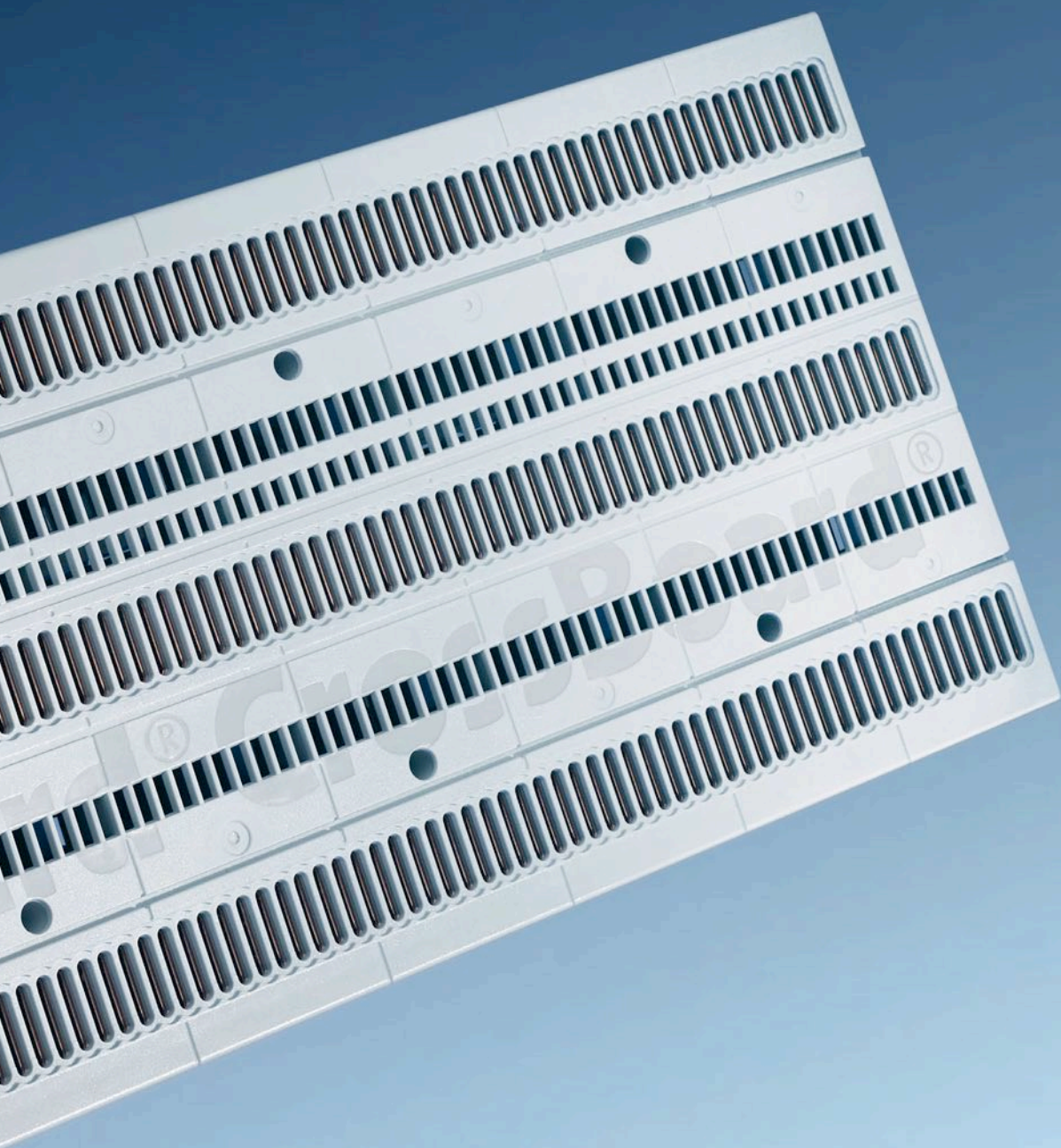
TRITON®
D-fuse base

| | | | | | | |
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CrossBoard®

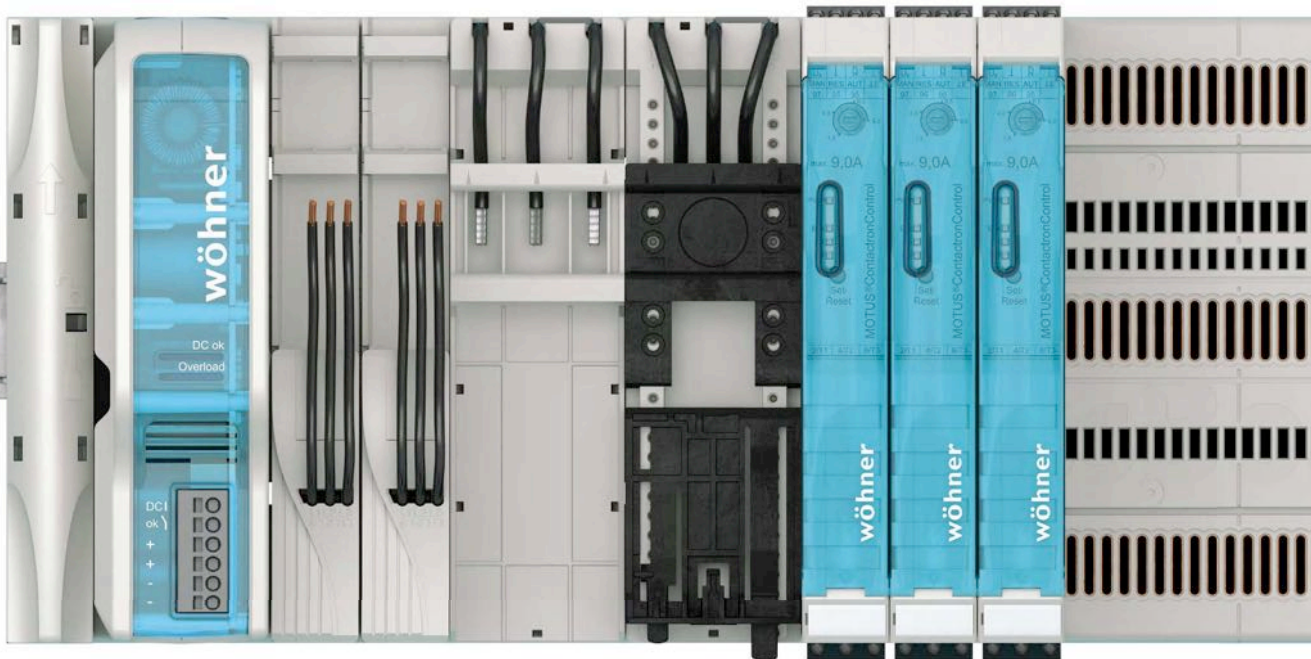
125 A





CrossBoard® TECHNOLOGY

CrossBoard®

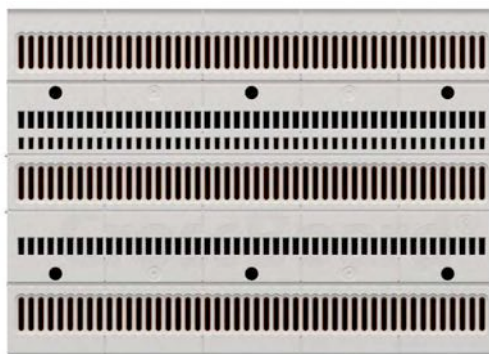


CrossBoard® – the new basic system

Tool-free mounting combined with high safety due to the 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 new base system. CrossBoard® is suitable mainly for applications in machine and plant

engineering. The modular structure ensures that the systems are clearly structured and, when necessary, easy to change or expand. Motors up to 4 KW can be supplied directly from the CrossBoard® using the MOTUS® hybrid motor starter. The OMUS® hybrid switch with its low power dissipation and high life expectancy is available for resistive loads.





CrossBoard®225

Connection and mounting platform for all components.

- Rated current: 125 A
- Equipment width: 225 mm
- Height: 160 mm
- Short-circuit capacity: I_{pk} = 25 kA
- Rated voltage 690 V AC / 600 V DC (IEC), 600 V AC / 600 V DC (UL)
- UL listed



CRITO® CrossBoard

Connection module for CrossBoard®. Particularly safe, simple and comfortable mounting. With spring terminal.

- Rated current: max. 80 A
- Equipment width: 22.5 mm
- Connection area: 1.5 – 16 mm²
- Snap lock technology for tool-free conductor connection
- UL listed



EQUES® CrossBoard Slim

The EQUES® universal adapter in a width of 22.5 mm can be used for mounting measuring and monitoring relays.

- Rated current: 16 A
- Conductor cross-section: 2.5 mm²
- For 1 to 3 pole devices
- Fuse size for 10 × 38
- Class CC fuses up to max. 16 A
- UL listed



OMUS® CrossBoard

Hybrid switch for switching resistive loads. The hybrid switching technology minimises power dissipation.

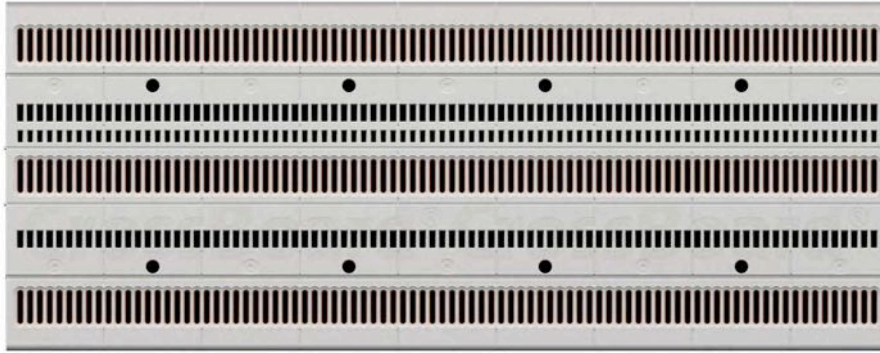
- Up to 25 A continuous current
- Equipment width: 36 mm
- 4 integrated functions: Energy supply, fuse protection, monitoring and switching
- Switchable in a choice of 3-pole or 1-pole
- UL listed



MOTUS® CrossBoard

Hybrid motor starter with additional features. Integrated functions: Direct and reversing starter, overload protection and emergency stop. Space requirement and wiring cost significantly reduced.

- 3 design versions: up to 0.6 A, up to 2.4 A and up to 9 A
- Equipment width: 22.5 mm
- Hybrid switching technology
- Up to 30 mil. switching cycles
- UL listed



CrossBoard®405

Connection and mounting platform for all components.

- Rated current: 125 A
- Equipment width: 405 mm
- Height: 160 mm
- Short-circuit capacity:
I_{pk} = 25 kA
- Rated voltage 690 V AC / 600 V DC (IEC), 600 V AC / 600 V DC (UL)
- UL listed



EQUES® CrossBoard Basic

Busbar adapter for mounting motor protection devices. With a fixed mounting rail.

- Rated current: up to 32 A
- Equipment width: 45 mm
- Connection cables: 2.5 mm², 6 mm²
- UL listed



EQUES® CrossBoard Comfort

In order to simply mount motor starter combinations of different manufacturers, the EQUES® CrossBoard Comfort adapter is available.

- Rated current: up to 45 A
- Equipment width: 45 mm
- Moveable mounting rail
- Connection cables: 2.5 mm², 4 mm², 6 mm² or 10 mm²
- UL listed



BROOME10 CrossBoard

Power supply for direct connection on the CrossBoard®

- Equipment width: 45 mm
- Nominal output current up to 10 A
- Up to 4 devices cascable (40 A)
- Integrated fuse protection

CrossBoard® basic system

3-pole up to 125 A



CrossBoard® modular power distribution system, with touch-safe protection and CrossLink®Technology

| Type | Rated current | Width | Height | Pack size | Weight kg/100 u. | PG | | Part No. |
|----------------|---------------|-------|--------|-----------|------------------|----|--|--------------|
| CrossBoard®225 | 125 A | 225 | 160 | 1 | 79.0 | 06 | | 11225 |
| CrossBoard®405 | | 405 | | 1 | 137.3 | 06 | | 11405 |



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

| 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 ² , AWG 14 - 6 | 80 A | 22.5 | 160 | 1 | 19.0 | 07 | | 01592 |



BROOME10®CrossBoard, with touch-safe protection with Crosslink®Technology

| Type | Nominal output current | Width | Height | Pack size | Weight kg/100 u. | PG | | Part No. |
|-----------------------------|------------------------|-------|--------|-----------|------------------|----|--|--------------|
| 24V, with push-in terminals | 10 A | 45 | 160 | 1 | 54.0 | 21 | | 36200 |

Parallel connection for increased current and series connection for increased voltage possible
Available from 1st quarter 2018



MOTUS®CrossBoard and OMUS®CrossBoard

Hybrid switch for switching of inductive and resistive loads



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

| 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 | 57.1 | 21 | 36109 |
| electronic unit 0.18 - 2.4 A direct and reversing starter | 2.4 A | | | 1 | 57.1 | 21 | 36110 |
| electronic unit 1.5 - 9 A direct and reversing starter | 9 A | | | 1 | 57.1 | 21 | 36111 |

Replacement fuses, 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®Technology

| Type | Rated current | Width | Height | Pack size | Weight kg/100 u. | PG | Part No. |
|-----------------------------|---------------|-------|--------|-----------|------------------|----|--------------|
| electronic unit, 25 A (IEC) | 25 A | 36 | 160 | 1 | 35.7 | 21 | 36154 |
| electronic unit, 20 A (UL) | 20 A | | | 1 | 35.7 | 21 | 36159 |

Supplied with both load and control plug

Replacement components, for OMUS®CrossBoard

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

Replacement fuses, for OMUS®CrossBoard

| | | | | |
|-------------------------------------|----|-----|----|--------------|
| cylindr. fuse link 32 A | 10 | 0.6 | 17 | 31189 |
| cylindr. fuse link 30 A, time delay | 10 | 0.8 | 17 | 31252 |



EQUES®CrossBoard – Adapter 16 A – 45 A

3-pole



Adapter Slim, 16 A, with fuse carrier, with CrossLink®Technology, with leads AWG 14 (2.5 mm²)

| 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 | 18.0 | 05 | | 36009 |



Adapter Basic, with CrossLink®Technology

| 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 ²) | 16 A | 45 | 160 | 1 | 8.8 | 05 | | 32666 |
| 1 fixed mounting rail, with leads AWG 10 (6 mm ²) | 32 A | | | 1 | 12.4 | 05 | | 32682 |



Adapter Comfort, with CrossLink®Technology

| 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 ²) | 16 A | 45 | 160 | 1 | 10.6 | 05 | | 32668 |
| 1 adjustable mounting rail, with leads 160 mm long AWG 14 (2.5 mm ²), for devices with spring terminal technology | 16 A | | | 1 | 10.6 | 05 | | 32669 |
| 1 adjustable mounting rail, with leads AWG 14 (2.5 mm ²) | 25 A | | | 1 | 11.6 | 05 | | 32676 |
| 1 adjustable mounting rail, with leads AWG 10 (6 mm ²) | 32 A | | | 1 | 12.4 | 05 | | 32684 |
| 1 adjustable mounting rail, with leads 160 mm long AWG 10 (6 mm ²), for devices with spring terminal technology | 32 A | | | 1 | 12.4 | 05 | | 32686 |
| 1 adjustable mounting rail, with leads AWG 8 (10 mm ²) | 45 A | | | 1 | 14.8 | 05 | | 32692 |

Article 32669 and 33686 available from 1st quarter 2018

Extention components, for Adapter Comfort

| Article | Type | Width | Pack size | Weight kg/100 u. | PG | | Part No. |
|--------------------------------------|-----------------|-------|-----------|------------------|----|--|--------------|
| extension module for direct starters | 40 mm extension | 45 | 8 | 0.1 | 05 | | 32933 |
| extension set for reversing starters | | 90 | 4 | 0.1 | 05 | | 32934 |

Accessories, for Adapter Comfort

| | | | | | |
|--|----|-----|----|--|--------------|
| mounting rail 45 mm | 10 | 1.4 | 05 | | 32947 |
| positioning piece for Siemens S00 and S0 | 10 | 0.1 | 05 | | 32952 |
| positioning piece for Eaton PKZ | 10 | 0.1 | 05 | | 32979 |



30 Compact

200 A / 360 A





BUSBAR SYSTEM TECHNOLOGY

30 Compact



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

The 30Compact busbar system is the ideal solution for distribution boards with a rated current up to 360 A. With an installation height of just 160 mm a particularly compact system can be realized. 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.





Busbar support 30Compact

Busbar support for easy and safe installation. 3-pole with 60 mm distance between busbar centres, also for use in UL applications.

- 3 to 5 pole busbar support
- For 12×5 and 12×10 mm (3-pole only) busbar
- With end cover
- UL listed, with 3-pole installation



CRITO® 30Compact

Connection module with spring terminals for 30Compact for particularly simple and comfortable mounting.

- Rated current: max. 80 A
- Equipment width: 20 mm
- Connection area: 1.5 – 16 mm²
- Spring loaded technology for tool-free conductor connection
- UL listed



QUADRON® 30Compact

NH fuse-switch disconnector Compact equipment practice, for size NH 000 fuses.

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: up to 125 A
- Equipment width: 90 mm
- Connection area: 2.5 – 50 mm²



EQUES® 30Compact

In order to mount motor starter combinations of different manufacturers, the EQUES® 30Compact busbar adapter is available.

- Rated current: 32 or 63 A
- Equipment width: 45 or 54 mm
- Moveable mounting rail
- Connection cables: 6 or 10 mm²
- Side-mounted module 9 mm wide
- UL listed



CRITO® 30Compact

Connection terminal plates. Comfortable terminals for drill-free connection technology. Integrated touch-safe protection, Compliance with air and creepage distances for UL.

- Rated current: up to 480 A
- Equipment width: 54 or 90 mm
- Connection area: 6 – 150 mm²
- Flexible copper bars
- UL listed



CUSTO® 30Compact

Bus mounting fuse base for D02 fuses

- Rated current: up to 63 A
- Equipment width: 36 mm
- Connection area: 1.5 – 25 mm²



MOTUS® 30Compact

Hybrid motor starter with additional features. Integrated functions: Direct and reversing starter, overload protection and emergency stop. Space requirement and wiring cost significantly reduced.

- 3 design versions: up to 0.6 A, up to 2.4 A and up to 9 A
- Equipment width: 22.5 mm
- Hybrid switching technology
- Up to 30 mil. switching cycles
- UL listed



OMUS® 30Compact

Hybrid switch for switching resistive loads. By means of Hybrid switch technology the power dissipation is minimised

- Up to 25 A continuous current
- Equipment width: 36 mm
- 4 integrated functions: Energy supply, fuse protection, monitoring and switching
- Switchable in a choice of 3-pole or 1-pole
- UL listed

30Compact – busbar system

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 |



Copper busbars, flat busbars, tin-plated

| Type | Length | Cross-section mm ² | 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; partial lengths on request

Cover section, for 3-pole busbar systems

| | | | | |
|-------------|---|------|----|--------------|
| 0.70 m long | 2 | 42.0 | 06 | 01314 |
|-------------|---|------|----|--------------|

Mount for cover sections, for 3-pole busbar systems

| | | | | |
|-----------|----|-----|----|--------------|
| for 01314 | 10 | 1.8 | 06 | 01317 |
|-----------|----|-----|----|--------------|

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 mm²

| 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 ² , AWG 14 - 6 | 7,5 x 7,5 | 180 A | 100 | 2.1 | 07 | | 01284 |
| | 4 - 35 mm ² , AWG 10 - 2 | 10,5 x 11 | 270 A | 50 | 4.6 | 07 | | 01285 |
| | 16 - 70 mm ² , AWG 14 - 2/0 | 14 x 14 | 400 A | 25 | 7.1 | 07 | | 01287 |
| | 16 - 120 mm ² , AWG 4 - MCM 250 | 17 x 15 | 440 A | 25 | 10.6 | 07 | | 01068 |
| flat busbars 10 mm | 1.5 - 16 mm ² , AWG 14 - 6 | 7,5 x 7,5 | 180 A | 100 | 2.3 | 07 | | 01289 |
| | 4 - 35 mm ² , AWG 10 - 2 | 10,5 x 11 | 270 A | 50 | 4.7 | 07 | | 01290 |
| flat busbars 10 mm and section busbars | 16 - 70 mm ² , AWG 14 - 2/0 | 14 x 14 | 400 A | 25 | 7.5 | 07 | | 01292 |
| | 16 - 120 mm ² , AWG 4 - MCM 250 | 17 x 15 | 440 A | 25 | 10.9 | 07 | | 01203 |

Cover cap for universal connection terminal

| | | | | | | | | |
|-------------------------------------|----|-----|----|--|--|--|--|--------------|
| terminal cover, for 01284 and 01289 | 20 | 0.5 | 07 | | | | | 01093 |
|-------------------------------------|----|-----|----|--|--|--|--|--------------|

Brace terminal, up to 150 mm², 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 ² , AWG 2 - MCM 300, lam. Cu. 15x5 ... 20x10 | 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, for 12 x 5 and 12 x 10 busbars, with spring terminals, with cover cap

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

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

| | | | | | | | |
|---|----|-------|---|------|----|--|--------------|
| 6 - 50 mm ² , AWG 10 - 2/0, lam. Cu. 7x4 ... 9x10 | 54 | 300 A | 1 | 20.6 | 07 | | 01401 |
| 35 - 150 mm ² , AWG 2 - MCM 300, lam. Cu. 15x5 ... 20x10 | 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 and OMUS®30Compact

Busbar adapter and hybrid switch for switching of inductive and resistive loads, system height 160 mm



Busbar adapter, 16 A, with fuse carrier, with removable top section, with leads AWG 14 (2.5 mm²)

| 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 mm²)

| | | | | | | |
|----------------------------|----|-----|---|------|----|-------|
| 1 adjustable mounting rail | 45 | 160 | 4 | 19.8 | 05 | 32590 |
|----------------------------|----|-----|---|------|----|-------|

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

| | | | | | | |
|----------------------------|----|-----|---|------|----|-------|
| 1 adjustable mounting rail | 54 | 160 | 4 | 21.8 | 05 | 32591 |
|----------------------------|----|-----|---|------|----|-------|

Busbar adapter, 160 A, connection to system at the top

| | | | | | | |
|----------------------------------|----|-----|---|------|----|-------|
| for Siemens 3VA10, 11 and 3VT160 | 76 | 160 | 1 | 78.0 | 05 | 32661 |
|----------------------------------|----|-----|---|------|----|-------|

Side-mounted module, for busbar adapters 32 A to 63 A

| | | | | | | |
|---------------------|---|-----|----|-----|----|-------|
| for 32590 and 32591 | 9 | 160 | 10 | 2.0 | 05 | 32912 |
|---------------------|---|-----|----|-----|----|-------|

MOTUS®30Compact hybrid motor starter, 3-pole, with reversing function and CrossLink®Technology

| | | | | | | |
|--|------|-----|---|------|----|-------|
| 0.075 - 0.6 A direct and reversing starter | 22.5 | 160 | 1 | 61.9 | 21 | 36101 |
| 0.18 - 2.4 A direct and reversing starter | 22.5 | 160 | 1 | 61.9 | 21 | 36104 |
| 1.5 - 9 A direct and reversing starter | 22.5 | 160 | 1 | 61.9 | 21 | 36107 |

Spare parts, for MOTUS®30Compact

| | | | | |
|---|---|------|----|-------|
| electronic unit 0.075 - 0.6 A direct and reversing starter | 1 | 57.1 | 21 | 36109 |
| electronic unit 0.18 - 2.4 A direct and reversing starter | 1 | 57.1 | 21 | 36110 |
| electronic unit 1.5 - 9 A direct and reversing starter | 1 | 57.1 | 21 | 36111 |
| busbar adapter for MOTUS®30Compact | 1 | 9.3 | 21 | 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 |

OMUS®30Compact hybrid switch, 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 | 45.2 | 21 | 36152 |
| 20 A (UL) | 36 | 160 | 1 | 45.2 | 21 | 36157 |

Spare parts, for OMUS®30Compact

| | | | | |
|--|---|------|----|-------|
| electronic unit, 25 A (IEC) | 1 | 35.7 | 21 | 36154 |
| electronic unit, 20 A (UL) | 1 | 35.7 | 21 | 36159 |
| busbar adapter for OMUS®30Compact | 1 | 10.6 | 21 | 36155 |
| 3-pole plug with spring terminals | 1 | 1.5 | 21 | 36916 |
| 3-pole plug with screw terminals | 1 | 1.4 | 21 | 36918 |
| 12-pole control plug with spring terminals | 1 | 0.6 | 21 | 36917 |

Spare parts fuses, for OMUS®30Compact

| | | | | |
|-------------------------------------|----|-----|----|-------|
| cylindr. fuse link 32 A | 10 | 0.6 | 17 | 31189 |
| cylindr. fuse link 30 A, time delay | 10 | 0.8 | 17 | 31252 |



CUSTO®30Compact and QUADRON®30Compact

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

**D0 bus-mounting 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 bus-mounting fuse base, size 000, 3-pole

| Type | Rated current | Width | Height | Pack size | Weight kg/100 u. | PG | | Part No. |
|--|---------------|-------|--------|-----------|------------------|----|--|--------------|
| box terminal 1.5 - 50 mm ² , outgoing terminal bottom/top | 125 A | 90 | 160 | 1 | 70.3 | 10 | | 03316 |

Accessories for NH bases

| Type | Pack size | Weight kg/100 u. | PG | | Part No. |
|----------------|-----------|------------------|----|--|--------------|
| grip lug cover | 4 | 2.7 | 10 | | 03287 |

NH bus-mounting fuse-switch-disconnector, size 000, 3-pole

| Type | Rated current | Width | Height | Pack size | Weight kg/100 u. | PG | | Part No. |
|---|---------------|-------|--------|-----------|------------------|----|--|--------------|
| connection box terminal 1.5 - 50 mm ² , outgoing terminal bottom/top | 125 A | 90 | 160 | 1 | 90.0 | 09 | | 33416 |

**Accessories for fuse-switch-disconnectors**

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



30Compact – busbar system 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 | 01376 |

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 | 01272 |
|--|----|-----|----|--------------|

Copper busbars, flat busbars, tin-plated

| | | | | |
|---------------|---|-------|----|--------------|
| busbar 12 x 5 | 1 | 128.4 | 06 | 01618 |
|---------------|---|-------|----|--------------|

For current carrying capacity of the busbars visit www.woehner.com

Cover section, for 3 to 5-pole busbar systems

| | | | | |
|-----------|---|------|----|--------------|
| 700 x 160 | 2 | 42.0 | 06 | 01314 |
|-----------|---|------|----|--------------|

Mount for cover section, for 3 to 5-pole busbar systems

| | | | | |
|-----------|----|-----|----|--------------|
| for 01314 | 10 | 1.8 | 06 | 01317 |
|-----------|----|-----|----|--------------|

Base plate

| | | | | |
|-----------|---|------|----|--------------|
| 700 x 160 | 2 | 26.7 | 06 | 01371 |
|-----------|---|------|----|--------------|

Connection set, 10 to 120 mm², 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 | 01370 |
| connection module N | 30 | 160 | 1 | 21.5 | 07 | 01364 |
| connection module PE | 30 | 160 | 1 | 21.5 | 07 | 01367 |
| connection set, 3-pole L1-L2-L3 | 60 | 160 | 1 | 51.5 | 07 | 01426 |
| connection module PE + N | 30 | 160 | 1 | 30.0 | 07 | 01427 |

NH bus-mounting fuse-switch-disconnector, size 000, 3-pole

| Type | Rated current | Width | Height | Pack size | Weight kg/100 u. | PG | Part No. |
|---|---------------|-------|--------|-----------|------------------|----|--------------|
| connection box terminal 1.5 - 50 mm ² , outgoing terminal bottom/top | * 125 A | 90 | 160 | 1 | 90.0 | 09 | 33416 |

* Can only be used in 3-pole systems

Busbar adapter, 160 A, 4-pole

| | | | | | | |
|--|-----|-----|---|------|----|--------------|
| for Schneider Electric INS 100/125/160, top connection to the system | 141 | 160 | 1 | 64.0 | 05 | 32640 |
|--|-----|-----|---|------|----|--------------|



EQUES®30Compact – busbar adapter 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 | | 32629 |

Connection adjustable to L₁, L₂, L₃ or N

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

| | | | | | | | |
|--|----|-----|----|-----|----|--|--------------|
| 1 fixed mounting rail | 18 | 160 | 12 | 6.6 | 05 | | 32630 |
| 1 fixed mounting rail, for Schneider Electric iC60, iC65 and C60 | 18 | 160 | 12 | 7.0 | 05 | | 32628 |

Connection adjustable to L₁, L₂, L₃ or N

Busbar support, without electrical connection

| | | | | | | | |
|-----------------------|----|-----|---|-----|----|--|--------------|
| 1 fixed mounting rail | 18 | 160 | 6 | 3.3 | 05 | | 32631 |
|-----------------------|----|-----|---|-----|----|--|--------------|

PE/N adapter module, with terminal 16 mm²

| | | | | | | | |
|------------|---|-----|----|-----|----|--|--------------|
| module PE | 9 | 160 | 12 | 4.4 | 05 | | 32634 |
| module N * | 9 | 160 | 12 | 4.4 | 05 | | 32632 |

* Without their 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 | | 32633 |
|---------------------------------|---|-----|----|-----|----|--|--------------|

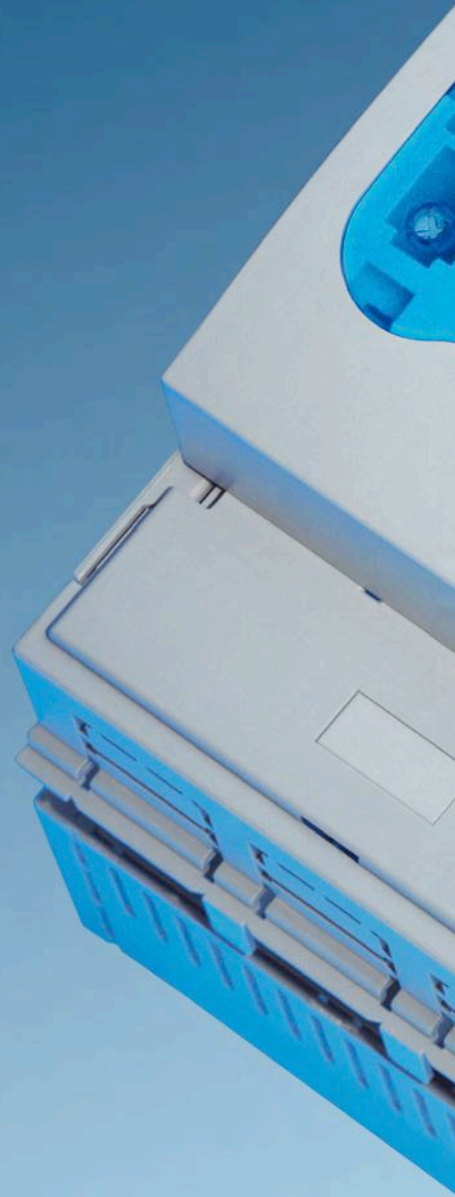
Accessories

| Type | Pack size | Weight kg/100 u. | PG | | Part No. |
|--|-----------|------------------|----|--|--------------|
| connector to create multipole adapters | * 1 | 2.0 | 05 | | 31390 |

* For 50 device connections

60Classic

630 A / 800 A / 2500 A

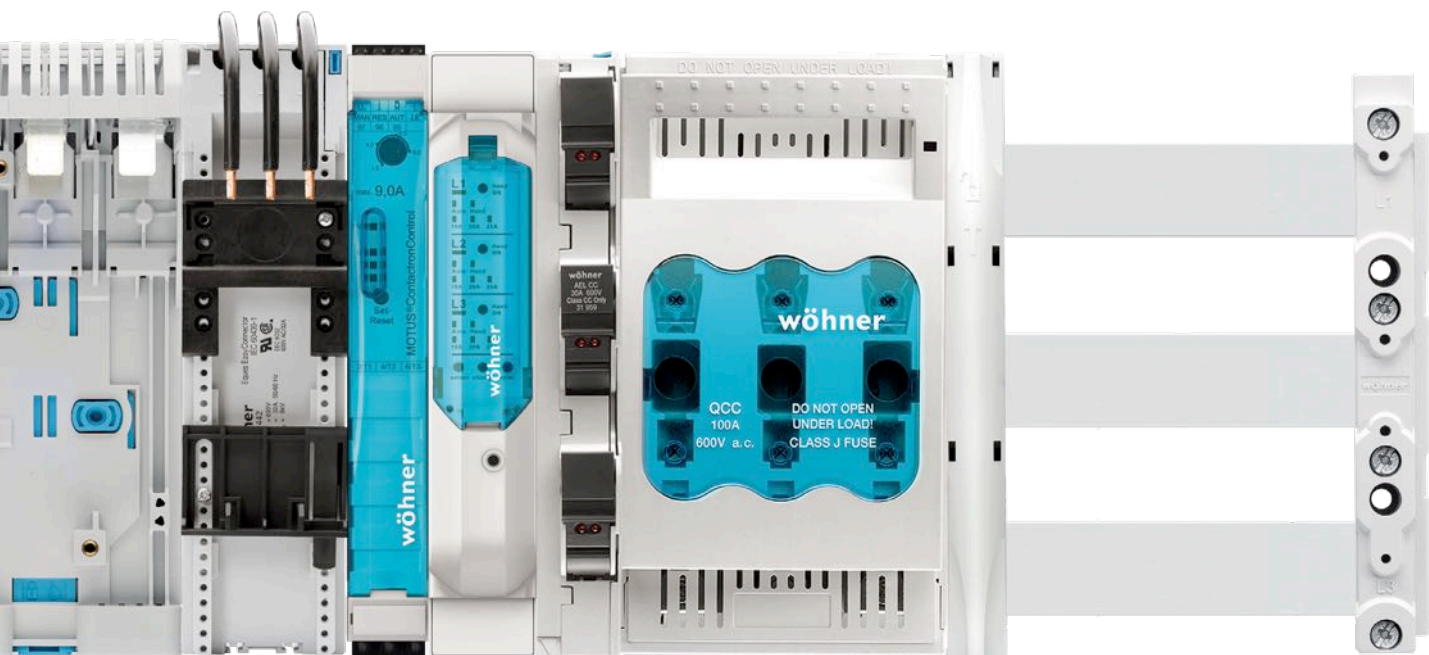




Busbar system with a large selection of components for many applications

A busbar centre distance of 60 mm is the standard in most low-voltage distribution applications today. Developed by Wöhner this standard has been implemented in the 60Classic system and has become the most common busbar system in many sectors. Two main reasons for its success:

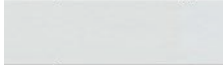
60Classic is particularly space-saving and provides a huge selection of components. Depending on requirements, busbars of various cross sections can be used; currents up to a maximum of 2500 A are possible.





Busbar 60Classic

- 12, 15, 20, 25 and 30×5 and 10 mm
- Double and triple T section busbar for increased current requirements
- Tin-plated versions
- Proven Load current
- Proven short-circuit capacity
- UL listed



Busbar support 60Classic

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



CUSTO® 60Classic

- 3 pole bus-mounting 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 to 57 mm
 - Connection area: 1.5 – 25 mm² / 35 mm²
 - D base option available for gauge ring and screw-in gauge ring



SECUR® 60Classic PowerLiner

- D0 bus-mounting switch disconnector with tried and tested drawer-type method was designed for higher requirements. All phase conductors are comfortably guided downwards.
- Captive fuse carrier for commercial gauge rings
 - Optional side-mounted module, LED display and auxiliary switch
 - 3-pole version



QUADRON® 60Classic

- NH bus-mounting fuse-switch disconnector up to 630 A. With CrossLink® technology: spring-loaded contacts offer safe, tool-free mounting, simple change of outgoing conductor direction.
- For size NH 000 to 3 fuse links
 - Versions with fuse monitoring
 - Various accessories for connections and shrouding



QUADRON® 60Classic

- Class J bus-mounting fuse base. With CrossLink® technology: spring-loaded contacts offer safe, tool-free mounting, simple change of outgoing conductor direction.
- For class J to 30, 60 and 100 A as well as 200 A and 400 A fuses
 - Integrated fuse adaptor for ease of use
 - UL listed



CRITO® 60Classic

Connection module for 60Classic. Particularly simple, safe and comfortable mounting. With spring terminal.

- Rated current: max. 80 A
- Equipment width: 20 mm
- Connection area: 1.5 – 16 mm²
- Spring loaded technology for tool-free conductor connection
- UL listed



CRITO® 60Classic

Connection technology for many different conductor types up to 300 mm² cross-section and up to 32 mm wide flexible copper bars.

- Rated current: up to 800 A
- Connection area from 6 to 300 mm²
- Equipment width: 54, 81, 135, 153, 204 mm
- Flexible copper bars
- UL listed



SECUR® 60Classic EasyLiner

Bus-mounting switch disconnectors for D0 fuses with Snap-Lock Technology. Flat design, especially suitable for use in distribution boards.

- Captive fuse carrier for commercial gauge rings
- Optional side-mounted module, LED indicator and auxiliary switch
- 3-pole version
- Lockable



AMBUS® 60Classic

Bus-mounting fuse holder for class CC fuses or 10×38 to 32 A, snap-on mounting on busbars, easy outgoing conductor connection with spring terminals

- Equipment width: 27 mm
- 2, 3 and 4 pole versions
- Versions with LED indicator
- 1 pole version for photovoltaic applications
- UL listed



QUADRON® 60Classic Speed

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

- CrossLink® technology: Snap-on mounting in the 60Classic system
- Double interruption
- Lockable in off-position
- Versions with rotary drive or fuse monitoring



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 mounting rail
- Connection cables 2.5 to 10 mm², terminals to 16 mm²
- Versions with CrossLink® technology
- UL listed



EQUES® 60Classic

- Busbars adapter for circuit breakers up to 630 A
- 3 and 4-pole versions
 - Versions for all commercial available switching devices
 - Size aligned to circuit breaker
 - Simple and comfortable mounting
 - Integrated connection for the respective switching device
 - UL listed



MOTUS® 60Classic

- Hybrid motor starter with additional features. Integrated functions: Direct and reversing starter, over load protection and emergency stop. Space requirement and wiring cost significantly reduced.
- 3 design versions: up to 0.6 A, up to 2.4 A and up to 9 A
 - Equipment width: 22.5 mm
 - Hybrid switching technology
 - Up to 30 mil. switching cycles
 - UL listed



OMUS® 60Classic

Hybrid switch for switching resistive loads. The hybrid switching technology minimises power dissipation.

- Up to 25 A continuous current
- Equipment width: 36 mm
- 4 integrated functions:
Energy supply, fuse protection, monitoring and switching
- Switchable in a choice of 3-pole or 1-pole
- UL listed



CRITO®

Brace terminals for round or flat conductors. Simple and convenient connection of conductors and busbars.

- Conductor connection possible from above and below
- Looping possible
- For round conductors from 35 to 300 mm²
- For flat conductors up to 100 mm wide
- For UL listed flat conductors

60Classic – busbar system

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 | | 01602 |
| 3-pole with internal screw holes | 12, 15, 20, 25, 30 x 5, 10 | 10 | 12.7 | 06 | | 01495 |
| 3-pole with additional external screw holes | | 10 | 13.7 | 06 | | 01500 |
| 4-pole with internal screw holes | | 10 | 26.6 | 06 | | 01485 |

UL busbar support, without end cover

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

UL spacer, for UL busbar support

| | | | | | | |
|--------------------|--|----|------|----|--|--------------|
| suitable for 01508 | | 10 | 9.1 | 06 | | 01358 |
| suitable for 01357 | | 10 | 13.1 | 06 | | 01359 |

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

| | | | | | | |
|------------|--|---|------|----|--|--------------|
| 240 x 1100 | | 2 | 73.7 | 06 | | 01518 |
| 240 x 700 | | 2 | 46.9 | 06 | | 01515 |

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 | | 01356 |
| 1-pole, indiv. mountable | 12, 20, 30 x 5, 10 | 1 | 5.9 | 06 | | 01601 |

* Stepped busbar



Connection busbar support, without end cover

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

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 | | 01325 |
| for busbar support 01602 | 1 | 1.5 | 06 | | 01363 |
| for busbar supports 01484, 01495, 01500, 01508 and 01603 | 10 | 2.0 | 06 | | 01573 |
| for busbar supports 01357 and 01485 | 5 | 5.6 | 06 | | 01131 |



60Classic – busbar system 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 | 01116 |
| 3-pole, with internal screw holes | 3 | 59.1 | 06 | 01231 |

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

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

Busbar support, for TCC section, without end cover

| | | | | |
|-----------------------------------|---|------|----|--------------|
| 3-pole, with internal screw holes | 2 | 69.7 | 06 | 01422 |
|-----------------------------------|---|------|----|--------------|

End cover, for busbar support for section busbars

| | | | | |
|-------------------------------------|---|-----|----|--------------|
| for busbar supports 01116 and 01132 | 4 | 1.8 | 06 | 01373 |
| for busbar supports 01231 and 01232 | 4 | 4.8 | 06 | 01234 |
| for busbar support 01422 | 4 | 5.3 | 06 | 01425 |



60Classic – busbar system

Standard copper busbars and section busbars



Copper busbars, flat busbars, tin-plated

| Type | Length | Cross-section mm ² | 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; partial lengths on request



Section copper busbar, tin-plated

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

For current carrying capacity of the busbars visit www.woehner.com; partial lengths on request

Section copper busbar, plain

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

For current carrying capacity of the busbars visit www.woehner.com; partial lengths on request



60Classic – covering system

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 |

For individual busbars

Cover section, for 3-pole busbar systems

| | | | | | |
|-----------|---|------|----|--|-------|
| 700 x 195 | 2 | 75.0 | 06 | | 01025 |
|-----------|---|------|----|--|-------|

Mount, for cover sections, 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 |
|--|---|------|----|--|-------|

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 |
|--|---|------|----|--|-------|

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 |



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. |
|--|--------------------|-------|-----------|------------------|----|--|--------------|
| with integrated terminals 1.5 - 16 mm ² | 80 A | 20 | 10 | 25.6 | 06 | | 01484 |

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

| | | | | | | | |
|--|------|----|---|------|----|--|--------------|
| with integrated spring terminals 1.5 - 16 mm ² , AWG 14 - 6 | 80 A | 20 | 8 | 18.1 | 07 | | 01563 |
|--|------|----|---|------|----|--|--------------|

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

| | | | | | | | |
|---|-------|----|---|------|----|--|--------------|
| 6 - 50 mm ² , AWG 10 - 2/0, lam. Cu. 7x4 ... 9x10 | 300 A | 54 | 1 | 45.1 | 07 | | 01240 |
| 35 - 120 mm ² , AWG 2 - MCM 250, lam. Cu. 12x4 ... 15.5x10 | 440 A | 81 | 1 | 53.5 | 07 | | 01243 |

Accessory, for single terminal covers

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



Connection terminal plate, 3-pole, for 20 x 5 – 30 x 10 and double-T 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 ² | * 460 A | 135 | 1 | 132.2 | 07 | | 01199 |
| 95 - 300 mm ² | * 560 A | 135 | 1 | 165.7 | 07 | | 01754 |
| lam. Cu. 20x3 ... 32x15 | ** 800 A | 135 | 1 | 144.7 | 07 | | 01753 |

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

** Observe the minimum terminal space (see specifications at www.woehner.com)

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

| | | | | | | | |
|--|---------|-----|---|-------|----|--|--------------|
| 95 - 300 mm ² , AWG 3/0 - MCM 600 | * 560 A | 153 | 1 | 155.5 | 07 | | 01537 |
| lam. Cu. 20x3 ... 32x15 | 800 A | 153 | 1 | 132.5 | 07 | | 01538 |

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

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

| | | | | | | | |
|--|---------|-----|---|-------|----|--|--------------|
| 95 - 300 mm ² , AWG 3/0 - MCM 600 | * 560 A | 204 | 1 | 210.0 | 07 | | 01147 |
| lam. Cu. 20x3 ... 32x15 | 800 A | 204 | 1 | 180.0 | 07 | | 01162 |

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



CRITO® – conductor connection terminals

1-pole and covers

**Universal connection terminal, 1.5 mm² to 120 mm²**

| 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 ² , AWG 14 - 6 | 7,5 x 7,5 | 180 A | 100 | 2.1 | 07 | | 01284 |
| | 4 - 35 mm ² , AWG 10 - 2 | 10,5 x 11 | 270 A | 50 | 4.6 | 07 | | 01285 |
| | 16 - 70 mm ² , AWG 14 - 2/0 | 14 x 14 | 400 A | 25 | 7.1 | 07 | | 01287 |
| | 16 - 120 mm ² , AWG 4 - MCM 250 | 17 x 15 | 440 A | 25 | 10.6 | 07 | | 01068 |
| flat busbars 10 mm | 1.5 - 16 mm ² , AWG 14 - 6 | 7,5 x 7,5 | 180 A | 100 | 2.3 | 07 | | 01289 |
| | 4 - 35 mm ² , AWG 10 - 2 | 10,5 x 11 | 270 A | 50 | 4.7 | 07 | | 01290 |
| flat busbars 10 mm and section busbars | 16 - 70 mm ² , AWG 14 - 2/0 | 14 x 14 | 400 A | 25 | 7.5 | 07 | | 01292 |
| | 16 - 120 mm ² , AWG 4 - MCM 250 | 17 x 15 | 440 A | 25 | 10.9 | 07 | | 01203 |

Cover cap for universal connection terminal

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

Brace terminal, up to 300 mm², 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 ² , AWG 2 - MCM 300, lam. Cu. 15x5 ... 20x10 | 480 A | 6 | 10.2 | 07 | | 01135 |
| 20, 25, 30 x 5, 10 and section busbars | * Cu / Al 95 - 185 mm ² | 500 A | 6 | 31.2 | 07 | | 01318 |
| 20, 25, 30 x 5, 10 and section busbars | * Cu / Al 95 - 300 mm ² | 600 A | 3 | 42.5 | 07 | | 01760 |

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

Brace terminal, 30 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. |
|--|----------------------|----------|-------------|-----------|------------------|----|--|--------------|
| 20, 25, 30 x 5, 10 and section busbars | 30 x 20 | 630 A | 750 A | 6 | 30.3 | 07 | | 01319 |
| | 32 x 20 | 630 A | 800 A | 3 | 34.7 | 07 | | 01759 |
| 30 x 10 and section busbars | 55 x 10 - 28 | 1600 A | 2000 A | 3 | 50.0 | 07 | | 01069 |
| | 68 x 10 - 28 | 1600 A | 2000 A | 3 | 63.0 | 07 | | 01070 |
| | 105 x 10 - 28 | 1600 A | 2800 A | 3 | 84.0 | 07 | | 01071 |

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 | | 01590 |
| 12, 15, 20, 25, 30 x 5, 10 and section busbars | 84 x 200 x 55 | 10 | 14.9 | 07 | | 01413 |
| 20, 25, 30 x 5, 10 and section busbars | 135 x 200 x 90 | 1 | 29.5 | 07 | | 01756 |
| 12, 15, 20, 25, 30 x 5, 10 and section busbars | 180 x 200 x 90 | 1 | 33.0 | 07 | | 01539 |
| 12, 15, 20, 25, 30 x 5, 10 and section busbars | 228 x 200 x 90 | 1 | 37.3 | 07 | | 01596 |
| 12, 15, 20, 25, 30 x 5, 10 and section busbars | 250 x 200 x 90 | 1 | 39.3 | 07 | | 01540 |
| 20, 25, 30 x 5, 10 and section busbars | 270 x 200 x 90 | 1 | 64.7 | 07 | | 01757 |

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 | | 01597 |



CRITO® – conductor connection terminals

1-pole and busbar connecting terminals



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

| Type | Terminal space W x H | 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 | | 01747 |
| | M8 x 8 | 490 A | 20 | 16.0 | 07 | | 01748 |
| | M10 x 10 | 630 A | 6 | 35.8 | 07 | | 01749 |
| flat busbars 10 mm | M5 x 8 | 360 A | 25 | 5.0 | 07 | | 01512 |
| 12, 15, 20, 25, 30 x 10 and section busbars | M8 x 8 | 490 A | 20 | 16.5 | 07 | | 01514 |
| | M10 x 10 | 630 A | 6 | 36.2 | 07 | | 01047 |

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

| Type | Terminal space W x H | max. height | Pack size | Weight kg/100 u. | PG | | Part No. |
|---|-------------------------|-------------|--------------|---------------------|----|--|--------------|
| connection of busbar 25 wide with lam. Cu 20 wide | 25 x 20 | 45 | 10 | 14.9 | 07 | | 01996 |
| connection of busbar 30 wide with lam. Cu 20 wide | 30 x 20 | 50 | 10 | 16.2 | 07 | | 01997 |
| connection of busbar 30 wide with lam. Cu 30 wide | 30 x 30 | 50 | 10 | 19.8 | 07 | | 01586 |
| connection of busbar 35 wide with lam. Cu 30 wide | 35 x 30 | 55 | 10 | 21.5 | 07 | | 01587 |
| connection of busbar 40 wide with lam. Cu 20 wide | 40 x 20 | 40 | 10 | 17.8 | 07 | | 01206 |
| connection of busbar 40 wide with lam. Cu 32 wide | 40 x 32 | 60 | 6 | 27.6 | 07 | | 01616 |

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 | 21 x 4 - 20 | 3 | 11.0 | 07 | | 01201 |
| 30 x 5, 10 | 150 - 300 | 25 x 5 - 20 | 3 | 13.4 | 07 | | 01202 |

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

| | | | | | | |
|---|-------------|---|------|----|--|--------------|
| the terminal is able to connect flexible copper 32x10 in longitudinal direction | 32 x 1 - 15 | 3 | 50.0 | 07 | | 01069 |
|---|-------------|---|------|----|--|--------------|



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 ² | 1600 A | 1600 A | 41 x 20 - 42 | 3 | 67.0 | 07 | | 01185 |
| 500 - 750 mm ² | 1600 A | 1600 A | 51 x 5 - 28 | 3 | 70.5 | 07 | | 01906 |
| 600 - 900 mm ² | 1600 A | 1600 A | 64 x 5 - 28 | 3 | 84.0 | 07 | | 01907 |
| 500 - 1000 mm ² | 1600 A | 2000 A | 51 x 20 - 42 | 3 | 73.5 | 07 | | 01936 |
| 600 - 1200 mm ² | 1600 A | 2000 A | 64 x 20 - 42 | 3 | 85.9 | 07 | | 01911 |
| 800 - 1600 mm ² | 1600 A | 2500 A | 81 x 20 - 42 | 3 | 101.1 | 07 | | 01934 |
| 1000 - 2000 mm ² | 1600 A | 2800 A | 101 x 20 - 42 | 3 | 113.7 | 07 | | 01935 |

For the connection of flat busbars and flexible copper busbars

Profile terminal, for triple-T section busbars

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

For the connection of flat busbars and flexible copper busbars

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

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

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 ² | 3 | 85.7 | 07 | | 01094 |
| 30 x 10 and section busbars | 1250 A | 40 x 25 | 3 | 81.7 | 07 | | 01092 |

Flexible copper busbars, plain Cu., 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 ² | Pack size | Weight kg/100 u. | PG | | Part No. |
|--|-----------------------------|-----------------------------|----------------------------------|--------------|---------------------|----|--|--------------|
| 10 x 40 x 1 | 774 A | 1053 A | 400 | 1 | 746.0 | 06 | | 01615 |
| 10 x 50 x 1 | 914 A | 1244 A | 500 | 1 | 932.0 | 06 | | 01509 |
| 10 x 63 x 1 | 1088 A | 1481 A | 630 | 1 | 1180.0 | 06 | | 01510 |
| 10 x 80 x 1 | 1305 A | 1777 A | 800 | 1 | 1490.0 | 06 | | 01061 |
| 10 x 100 x 1 | 1550 A | 2110 A | 1000 | 1 | 1870.0 | 06 | | 01273 |

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 busbar

| 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 | | 01166 |
| | 150 | 100 - 110 mm | 520 A | 3 | 52.4 | 07 | | 01193 |
| 20, 25, 30 x 5, 10 | 40 | 9 - 20 mm | 630 A | 6 | 23.3 | 07 | | 01990 |
| | 40 | 13 - 20 mm | 630 A | 6 | 25.2 | 07 | | 01823 |
| | 95 | 50 - 60 mm | 630 A | 3 | 54.4 | 07 | | 01141 |
| | 150 | 100 - 110 mm | 630 A | 3 | 86.6 | 07 | | 01886 |
| double-T section | 50 | 9 - 20 mm | 1600 A | 6 | 49.4 | 07 | | 01827 |
| | 95 | 50 - 60 mm | 1600 A | 3 | 94.3 | 07 | | 01145 |
| | 150 | 100 - 110 mm | 1600 A | 3 | 146.1 | 07 | | 01829 |
| | 42 | 5 - 10 mm | 1600 A | 2 | 57.0 | 07 | | 01102 |
| triple-T section | 95 | 50 - 60 mm | 2500 A | 3 | 120.6 | 07 | | 01274 |
| | 150 | 100 - 110 | 2500 A | 3 | 178.0 | 07 | | 01275 |

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 connectors

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

* 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 | | 30322 |
| double-T section | * 130 mm, flexible corner connection | | 1 | 638.0 | 07 | | 30473 |
| triple-T section | * 200 mm, flexible longitudinal connection | 2500 A | 1 | 940.0 | 07 | | 01295 |

* Supplied as a 3-pole connection set



EQUES® 60Classic with CrossLink® busbar adapter 16 A – 45 A

with removable top section with CrossLink® interface. The base is touch-protected and remains on the busbar system

**Busbar adapter, 16 A, with removable top section, with lead 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 | 42.7 | 05 | | 32401 |

Busbar adapter, 16 A, with fuse holder, with removable top section, with lead AWG 12 (4 mm²)

| | | | | | | | |
|---|------|-----|---|------|----|--|-------|
| 1 fixed mounting rail, with fuse carrier 10x38 / Class CC | 22.5 | 200 | 1 | 20.0 | 05 | | 36003 |
|---|------|-----|---|------|----|--|-------|

Busbar adapter, 16 A, with removable top section, with lead AWG 12 (4 mm²)

| | | | | | | | |
|-----------------------------|----|-----|---|------|----|--|-------|
| 2 adjustable mounting rails | 45 | 200 | 4 | 42.7 | 05 | | 32400 |
| 2 adjustable mounting rails | | 260 | 4 | 45.0 | 05 | | 32402 |

Busbar adapter, 32 A, with removable top section, with lead AWG 10 (6 mm²)

| | | | | | | | |
|-----------------------------|----|-----|---|------|----|--|-------|
| 2 adjustable mounting rails | 54 | 200 | 4 | 49.2 | 05 | | 32404 |
| 2 adjustable mounting rails | | 260 | 4 | 54.4 | 05 | | 32408 |

Busbar adapter, 45 A, with removable top section, with lead AWG 8 (10 mm²)

| | | | | | | | |
|-----------------------------|----|-----|---|------|----|--|-------|
| 2 adjustable mounting rails | 54 | 200 | 4 | 52.9 | 05 | | 32412 |
| 2 adjustable mounting rails | | 260 | 4 | 56.7 | 05 | | 32416 |

Busbar adapter, with removable top section, without electrical connection

| | | | | | | | |
|-----------------------------|----|-----|---|------|----|--|-------|
| 2 adjustable mounting rails | 45 | 200 | 4 | 34.9 | 05 | | 32420 |
| 2 adjustable mounting rails | 54 | | 4 | 38.8 | 05 | | 32421 |
| 2 adjustable mounting rails | 45 | 260 | 4 | 36.2 | 05 | | 32425 |
| 2 adjustable mounting rails | 54 | | 4 | 42.1 | 05 | | 32426 |

Side-mounted module, for CrossLink® busbar adapters

| | | | | | | | |
|--------------------------|---|-----|----|-----|----|--|-------|
| attachable to both sides | 9 | 200 | 10 | 4.3 | 05 | | 32964 |
|--------------------------|---|-----|----|-----|----|--|-------|

Accessory, for CrossLink® busbar adapters

| 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 |
| micro switch for CrossLink adapter | 10 | 0.9 | 05 | | 32956 |

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



EQUES®60Classic – busbar adapter 25 A – 80 A

Universal version



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

| 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 | | 2 | 57.1 | 05 | | 32432 |
| 2 adjustable mounting rails | 45 | 260 | 4 | 35.7 | 05 | | 32433 |

Busbar adapter, 25 A, without leads, with screw terminals 6 mm² from rear

| | | | | | | | |
|-----------------------------|----|-----|---|------|----|--|-------|
| 2 adjustable mounting rails | 45 | 200 | 4 | 32.2 | 05 | | 32436 |
| | | 260 | 4 | 35.2 | 05 | | 32439 |

UL terminal cap

| | | | | | | | |
|-------------------------------------|----|----|---|-----|----|--|-------|
| for busbar adapters 32436 and 32439 | 45 | 15 | 4 | 0.7 | 05 | | 32973 |
|-------------------------------------|----|----|---|-----|----|--|-------|

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

| | | | | | | | |
|-----------------------------|----|-----|---|------|----|--|-------|
| 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 mm²)

| | | | | | | | |
|-----------------------------|----|-----|-----|------|------|----|-------|
| 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 mm² from rear

| | | | | | | | |
|-----------------------------|----|-----|---|------|----|--|-------|
| 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 | | 4 | 45.0 | 05 | | 32469 |
| 2 adjustable mounting rails | 54 | 260 | 4 | 43.8 | 05 | | 32472 |

UL terminal cap

| | | | | | | | |
|---|----|----|---|-----|----|--|-------|
| 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 adapter 32 A – 80 A

Universal version

**Busbar adapter, 32 A, without leads, with spring terminal 1.5 - 6 mm² 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 mm² from front

| | | | | | | | |
|-----------------------------|----|-----|---|------|----|--|--------------|
| 1 adjustable mounting rail | 54 | 200 | 4 | 37.3 | 05 | | 32464 |
| 2 adjustable mounting rails | | 260 | 4 | 41.2 | 05 | | 32465 |

Busbar support, without electrical connection

| | | | | | | | |
|--|----|-----|---|------|----|--|--------------|
| 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

| | | | | | | | |
|--------------------------|---|-----|----|-----|----|--|-------|
| attachable to both sides | 9 | 200 | 10 | 2.3 | 05 | | 32963 |
|--------------------------|---|-----|----|-----|----|--|-------|

PE/N adapter module, with connection terminal 16 mm², top and bottom, without leads

| | | | | | | | |
|--|----|-----|---|------|----|--|-------|
| attachable to busbar adapter to both sides | 18 | 242 | 4 | 14.1 | 05 | | 32146 |
|--|----|-----|---|------|----|--|-------|

Accessory, 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 ²), 105 mm long | * 24 | 0.3 | 05 | | 32921 |
| lead AWG 10 (6 mm ²), 130 mm long | * 24 | 0.7 | 05 | | 32907 |
| lead AWG 4 (25 mm ²), 210 mm long | * 24 | 5.1 | 05 | | 32914 |
| double-lead 2x AWG 10 (2x 6 mm ²), 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 adapter 16 A – 100 A

tailored to the products of the switchgear manufacturers



Busbar adapter, 16A, 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)

| | | | | | | | |
|--|----|-----|---|------|----|--|-------|
| for direct starter Eaton PKZO/BG1 | 45 | 200 | 4 | 33.0 | 05 | | 32450 |
| for reversing starter Eaton PKZO/BG1 | 90 | | 2 | 54.6 | 05 | | 32452 |
| for direct starter Siemens S00 with screw connection | 45 | | 4 | 33.0 | 05 | | 32445 |
| for direct starter Siemens S00 with spring terminal connection | 45 | 260 | 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 | | 4 | 33.0 | 05 | | 32650 |

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

| | | | | | | | | |
|---|----|-----|-----|------|------|----|-------|-------|
| for direct starter ABB MS116/132 | 45 | 200 | 4 | 36.4 | 05 | | 32498 | |
| for direct starter Eaton PKZO/BG2 | 45 | | 4 | 36.4 | 05 | | 32451 | |
| for reversing starter Eaton PKZO/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 | | 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 | | 260 | 4 | 36.2 | 05 | | 32438 |
| for direct starter Schneider Electric LUB12/32 | 45 | 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 | 4 | | 33.3 | 05 | | 32639 | |
| for direct starter Siemens S0 with spring terminal connection | 45 | 4 | | 32.1 | 05 | | 32638 | |
| for direct starter Siemens S0 with spring terminal connection | 45 | 200 | | 4 | 32.1 | 05 | | 32659 |
| for direct starter Siemens 3RA6 | 45 | | | 4 | 44.0 | 05 | | 32588 |

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

| | | | | | | | |
|---|----|-----|---|------|----|--|-------|
| 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)

| | | | | | | | |
|---|-----|-----|---|------|----|--|-------|
| 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 | 260 | 1 | 59.1 | 05 | | 32663 |
| for Siemens Sirius reversing starter frame size S2, 260 mm long | 117 | | 1 | 87.3 | 05 | | 32664 |
| for Siemens NGG, HGG, LGG (up to 80 A) | 72 | 200 | 1 | 66.0 | 05 | | 32029 |

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

| | | | | | | | |
|---|----|-----|---|------|----|--|-------|
| 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 adapter 160 A – 250 A

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

**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 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

| | | | | | | | | |
|---|-------|-----|-----|-----|-------|-------|----|--------------|
| for ABB Tmax T4, Siemens 3VM/3VA * | 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 | | 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, OEG BD250 | 250 A | 105 | | 240 | 1 | 102.0 | 05 | |
| for Siemens 3VA12, 20, 21, 22, 52, 61, 62 | 250 A | 105 | 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

| | | | | | | | | |
|---------------------------------------|-------|-----|-----|---|-------|----|--|--------------|
| 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 |

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

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

Accessory, slide nut, for universal busbar adapters

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

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



EQUES®60Classic – busbar adapter 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 and Allen-Bradley 140G-K | 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 | 222.6 | 05 | | 32157 |
| for Eaton NZM3-XKR13O and NZM3-XKR13U | 630 A | | 300 | 1 | 250.0 | 05 | | 32978 |
| for Siemens 3VL4 | 400 A | | 295 | 1 | 222.4 | 05 | | 32975 |
| for Siemens 3VA23, 24, 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 |
|------------------|-------|-----|-----|---|-------|----|--|-------|

Busbar adapter, 650 A, 3-pole, phase pitch 70 mm, connection to system at the top

| | | | | | | | | |
|---|-------|-----|-----|---|-------|----|--|-------|
| for ABB T-max T6 and Allen-Bradley 140G-M | 650 A | 238 | 300 | 1 | 285.6 | 05 | | 32064 |
|---|-------|-----|-----|---|-------|----|--|-------|

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-XKR13O | 500 A | | 300 | 1 | 350.0 | 05 | | 32581 |
| for Siemens 3VA23, 24, 63, 64 | 590 A | | 1 | 1 | 350.0 | 05 | | 32033 |
| for Siemens 3VL400 | 400 A | | 1 | 1 | 350.0 | 05 | | 32579 |

Universal busbar adapter, 630 A, 3-pole

| | | | | | | | | |
|--------------------------------------|-------|-----|-----|---|-------|----|--|-------|
| connection screws M12 (top / bottom) | 630 A | 184 | 320 | 1 | 278.0 | 05 | | 32004 |
|--------------------------------------|-------|-----|-----|---|-------|----|--|-------|

Accessory, metal plate, adjustable

| | | | | | | | | |
|-------------------|--|-----|-----|---|------|----|--|-------|
| for adapter 32004 | | 180 | 315 | 1 | 82.0 | 05 | | 32982 |
|-------------------|--|-----|-----|---|------|----|--|-------|

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



MOTUS®Classic hybrid motor starter, 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 | 62.6 | 21 | | 36102 |
| 0.18 - 2.4 A direct and reversing starter | | | | 1 | 62.6 | 21 | | 36105 |
| 1.5 - 9 A direct and reversing starter | | | | 1 | 62.6 | 21 | | 36108 |

Replacement components, 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 | 57.1 | 21 | | 36109 |
| electronic unit 0.18 - 2.4 A direct and reversing starter | 1 | 57.1 | 21 | | 36110 |
| electronic unit 1.5 - 9 A direct and reversing starter | 1 | 57.1 | 21 | | 36111 |
| busbar adapter for MOTUS®60Classic | 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 |

OMUS®60Classic hybrid switch, 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 components, for OMUS®60Classic

| Type | Pack size | Weight kg/100 u. | PG | | Part No. |
|--|-----------|------------------|----|--|----------|
| electronic unit, 25 A (IEC) | 1 | 35.7 | 21 | | 36154 |
| electronic unit, 20 A (UL) | 1 | 35.7 | 21 | | 36159 |
| busbar adapter for OMUS®60Classic | 1 | 10.8 | 21 | | 36156 |
| 3-pole plug with spring terminals | 1 | 1.5 | 21 | | 36916 |
| 3-pole plug with screw terminals | 1 | 1.4 | 21 | | 36918 |
| 12-pole control plug with spring terminals | 1 | 0.6 | 21 | | 36917 |

Replacement fuses, for OMUS®60Classic

| | | | | | |
|-------------------------------------|----|-----|----|--|-------|
| cylindr. fuse link 32 A | 10 | 0.6 | 17 | | 31189 |
| cylindr. fuse link 30 A, time delay | 10 | 0.8 | 17 | | 31252 |

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



CUSTO®60Classic – D bus-mounting fuse base

3-pole DII and DIII fuse holder



D bus-mounting 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 | | 31946 |
| E 33 / 3P | 57 | 200 | 6 | 39.8 | 01 | | 31947 |

D bus-mounting fuse base with touch-safe protection incl. strip cover, for screw-in gauge rings

| | | | | | | | |
|-----------|----|-----|---|------|----|--|--------------|
| E 27 / 3P | 42 | 200 | 8 | 28.7 | 01 | | 31950 |
| E 33 / 3P | 57 | 200 | 6 | 38.7 | 01 | | 31951 |

D bus-mounting fuse base without strip cover, for gauge rings

| | | | | | | | |
|-----------|--|--|----|------|----|--|--------------|
| E 27 / 3P | | | 10 | 23.3 | 01 | | 31918 |
| E 33 / 3P | | | 10 | 32.0 | 01 | | 31919 |

D bus-mounting fuse base without strip cover, for screw-in gauge rings

| | | | | | | | |
|-----------|--|--|----|------|----|--|--------------|
| E 27 / 3P | | | 10 | 22.3 | 01 | | 31441 |
| E 33 / 3P | | | 10 | 30.9 | 01 | | 31442 |

D strip cover

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

Touch-safe protection, for all strip covers

| | | | | | | | |
|--------------------|--|--|----|-----|----|--|--------------|
| lateral attachable | | | 10 | 1.3 | 01 | | 79663 |
|--------------------|--|--|----|-----|----|--|--------------|

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 disconnecter and D0 fuse holder

**Bus-mounting switch disconnecter** with fuses, SECUR®60Classic **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 | 31158 |
| for fuses 10x38 | * | 32 A | 690 V | AC-23A (400 V) AC-22A (690 V) | 104 | 1 | 76.0 | 01 | 31232 |

* For continuous loads above 35 A the use of side-mounted module 31901 is recommended; fuse links not included

Bus-mounting switch disconnecter with fuses, SECUR®60Classic **PowerLiner**, tall version, 3-pole, 1-pole switching

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

* For continuous loads above 35 A the use of side-mounted module 31901 is recommended; fuse links not included

Accessory for SECUR®60Classic **PowerLiner**

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

D0 bus-mounting fuse base, CUSTO®60Classic, touch-safe protection incl. strip cover

| Type | Width | Height | Pack size | Weight kg/100 u. | PG | | Part No. |
|-------------|-------|--------|-----------|------------------|------|----|--------------|
| E 18 / 63 A | * | 27 | 200 | 8 | 14.4 | 01 | 31935 |
| E 18 / 63 A | | 36 | | 6 | 16.1 | 01 | 31936 |

* The 36 mm-wide version allows optimal cable routing and heat removal

D0 bus-mounting fuse base, CUSTO®60Classic, **without** strip cover

| Type | Width | Height | Pack size | Weight kg/100 u. | PG | | Part No. |
|-----------|-------|--------|-----------|------------------|------|----|--------------|
| E 18 / 3P | * | 27 | 200 | 10 | 14.7 | 01 | 01647 |
| E 18 / 3P | | 36 | | 10 | 15.5 | 01 | 01498 |

* The 36 mm-wide version allows optimal cable routing and heat removal

D0 strip cover

| Type | Width | Height | Pack size | Weight kg/100 u. | PG | | Part No. |
|------|-------|--------|-----------|------------------|----|--|--------------|
| E 18 | 27 | 200 | 10 | 2.6 | 01 | | 01980 |
| | 36 | | 10 | 3.1 | 01 | | 01424 |
| | 54 | | 10 | 4.0 | 01 | | 01981 |

Touch-safe protection, for all strip covers

| Type | Pack size | Weight kg/100 u. | PG | | Part No. |
|--------------------|-----------|------------------|----|--|--------------|
| lateral attachable | 10 | 1.3 | 01 | | 79663 |

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 bus-mounting switch disconnecter with fuses, 3-pole, 3-pole switching, **EasyLiner**, flat version, 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 | 31574 |
| for D01 and D02 fuses, with LED | * | 63 A | 400 V | AC-22B (400V) | 80 | 1 | 33.0 | 01 | 31575 |

Fuse links not included

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

D0 bus-mounting switch disconnecter with fuses, 3-pole, 3-pole switching, **EasyLiner**, flat version, for the 5-pole busbar system, with Snaplock connection technology

| | | | | | | | | | |
|---|---|------|-------|---------------|----|---|------|----|--------------|
| for D01 and D02 fuses | * | 63 A | 400 V | AC-22B (400V) | 80 | 1 | 33.0 | 01 | 31578 |
| for D01 and D02 fuses, for busbar systems 250A, 400A and 630A of company Hensel | * | 63 A | 400 V | AC-22B (400V) | 80 | 1 | 33.0 | 01 | 31588 |
| for D01 and D02 fuses, with LED | * | 63 A | 400 V | AC-22B (400V) | 80 | 1 | 33.0 | 01 | 31579 |

Fuse links not included

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

Accessories for SECUR®60Classic, EasyLiner

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

NH bus-mounting fuse-switch disconnecter, size 00 to 1, 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. |
|---|-------|-------|--------|-----------|------------------|----|--|--------------|
| connection box terminal, outgoing terminal bottom / top | NH 00 | 106 | 200 | 1 | 100.0 | 09 | | 33075 |
| connection screw M8, outgoing terminal bottom / top | NH 00 | 106 | 200 | 1 | 100.0 | 09 | | 33079 |
| connection screw M10, outgoing terminal bottom / top | NH 1 | 184 | 220 | 1 | 357.0 | 09 | | 33194 |



Busbar support, 60mm 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 | | 01138 |

Reducer, for 5 mm busbars

| | | | | | |
|----------------------------------|-----|-----|----|--|--------------|
| reducer for busbar support 01138 | 100 | 0.1 | 06 | | 01170 |
|----------------------------------|-----|-----|----|--|--------------|

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



AMBUS®60Classic – fuse holder

for cylindrical fuses



Bus-mounting 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 | 5.0 | 01 | | 31570 |
| for fuses 10x38 IEC 60269-6 | 30 x 5, 10 | | | 22.5 | 12 | 5.0 | 01 | | 31571 |
| for fuses 10x38 IEC 60269-6 | 20 x 5, 10 | | | 22.5 | 12 | 5.0 | 01 | | 31572 |

Bus-mounting fuse holder, 2-pole, 2-pole disconnecting, with spring terminals

| | | | | | | | | | |
|-----------------------------|--|------|-------|----|---|------|----|--|-------|
| 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 | | 31961 |
|-----------------------------|--|------|-------|----|---|------|----|--|-------|

Bus-mounting fuse holder, 3-pole, 3-pole disconnecting, with spring terminals

| | | | | | | | | | |
|---|--|------|-------|----|---|------|----|--|-------|
| 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 | | 31954 |
| for fuses 10x38 IEC 60269-2, with LED 110 - 690 V AC/DC | | | | 27 | 4 | 18.7 | 01 | | 31955 |

Bus-mounting fuse holder, 3-pole +N, all-pole disconnecting, with spring terminals

| | | | | | | | | | |
|---|--|------|-------|----|---|------|----|--|-------|
| 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 | | 31963 |
| for fuses 10x38 IEC 60269-2, with LED 110 - 690 V AC/DC | | | | 27 | 4 | 25.2 | 01 | | 31964 |

Bus-mounting switch disconnecter with fuses, 3-pole, PowerLiner, tall version, 3-pole, 3-pole/1-pole switching

| | | | | | | | | | |
|-----------------|--|------|-------|----|---|------|----|--|-------|
| for fuses 10x38 | 12, 15, 20, 25, 30 x 5, 10 and section busbars | 32 A | 690 V | 27 | 1 | 76.0 | 01 | | 31232 |
|-----------------|--|------|-------|----|---|------|----|--|-------|

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



AMBUS®60Classic – fuse holder

for fuse links in accordance with UL248



Bus-mounting fuse holder, 30 A Class CC, 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 UL248-4 | 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

Bus-mounting fuse holder base, 30 A – 200 A Class J, 3-pole, 3-pole disconnecting, connection at bottom / top

| Type | Rated current | Rated voltage | Width | Pack size | Weight kg/100 u. | PG | | Part No. |
|---|---------------|---------------|-------|-----------|------------------|----|--|----------|
| for fuse links Class J 1 - 30 A (21 x 57) | 30 A | 600 V | 106 | 1 | 138.0 | 16 | | 33421 |
| for fuse links Class J 35 - 60 A (27 x 60) | 60 A | | | 1 | 135.0 | 16 | | 33422 |
| for fuse links Class J 70 - 100 A (29 x 117) | * 100 A | | | 1 | 129.0 | 16 | | 33402 |
| for fuse links Class J 110 - 200 A (41 x 146) | * 200 A | | | 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

Bus-mounting fuse holder, 30 A / 60 A Class J, 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 (21 x 57), with LED | 30 A | 600 V | 108 | 1 | 110.0 | 16 | | 31968 |
| for fuse links Class J 35 - 60 A (27 x 60), with LED | 60 A | 600 V | 126 | 1 | 131.0 | 16 | | 31970 |

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

Bus-mounting fuse base, 400 A Class CC, 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 (54 x 181) | 400 A | 600 V | 256 | 1 | 690.0 | 16 | | 33311 |

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

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



QUADRON®60Classic – NH bus-mounting fuse base, size 00 to 2

for snapping onto the busbar system

**NH bus-mounting fuse base, size 00 to 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 |
| connection screw M8 | | | | | 1 | 87.0 | 10 | | 03299 |
| box terminal | 250 A | NH 1 | 184 | 210 | 1 | 210.5 | 10 | | 03300 |
| connection screw M10 | | | | | 1 | 198.5 | 10 | | 03301 |

NH bus-mounting 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 ² | 160 A | NH 00 | 99 | 200 | 4 | 66.5 | 10 | | 03654 |
| connection screw M8 | | | | 200 | 4 | 64.5 | 10 | | 03656 |

NH bus-mounting 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. |
|----------------------|---------------|------|-------|--------|-----------|------------------|----|--|--------------|
| connection screw M10 | 400 A | NH 2 | 206 | 195 | 1 | 291.2 | 10 | | 03693 |

Accessory, for NH 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, attachable top / bottom | | 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 10 and section busbars

QUADRON®60Classic – NH fuse-switch disconnecter, size 000 to 3

for snapping onto the busbar system



NH bus-mounting fuse-switch disconnecter, size 000 to 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 | 89 | 200 | 1 | 113.0 | 09 | | 33216 |
| box terminal | 160 A | NH 00 | 106 | | 1 | 100.0 | 09 | | 33198 |
| connection screw M8 | 160 A | NH 00 | | | 1 | 103.0 | 09 | | 33398 |
| box terminal | 250 A | NH 1 | 184 | 243 | 1 | 266.0 | 09 | | 33600 |
| connection screw M10 | 250 A | NH 1 | | | 1 | 266.0 | 09 | | 33601 |
| connection screw M10 | * | 400 A | NH 2 | 210 | 288 | 1 | 522.0 | 09 | 33602 |
| connection screw M12 | ** | 630 A | NH 3 | 256 | 300 | 1 | 756.0 | 09 | 33603 |

NH bus-mounting fuse-switch disconnecter, size 00 and 1 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

NH bus-mounting fuse-switch disconnecter, size 00 to 3, connection at top / bottom, 3-pole, with electronic fuse monitoring

| | | | | | | | | | |
|----------------------|-------|-------|------|-----|-----|-------|-------|----|-------|
| box terminal | 160 A | NH 00 | 106 | 200 | 1 | 117.0 | 09 | | 33324 |
| connection screw M8 | 160 A | NH 00 | | | 1 | 117.0 | 09 | | 33394 |
| connection screw M10 | 250 A | NH 1 | 184 | 243 | 1 | 223.0 | 09 | | 33325 |
| connection screw M10 | * | 400 A | NH 2 | 210 | 288 | 1 | 572.0 | 09 | 33326 |
| connection screw M12 | ** | 630 A | NH 3 | 256 | 300 | 1 | 796.0 | 09 | 33327 |

Circuit diagram for fuse monitoring can be found online at 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 bus-mounting fuse-switch disconnecter, size 00 to 3, connection at top / bottom, 3-pole, with electromechanical fuse monitoring

| | | | | | | | | | |
|----------------------|-------|-------|------|-----|-----|-------|-------|----|-------|
| box terminal | 160 A | NH 00 | 106 | 200 | 1 | 180.0 | 09 | | 33206 |
| connection screw M8 | 160 A | NH 00 | | | 1 | 180.0 | 09 | | 33420 |
| connection screw M10 | 250 A | NH 1 | 184 | 243 | 1 | 333.0 | 09 | | 33160 |
| connection screw M10 | * | 400 A | NH 2 | 210 | 288 | 1 | 574.0 | 09 | 33161 |
| connection screw M12 | ** | 630 A | NH 3 | 256 | 300 | 1 | 824.0 | 09 | 33162 |

Circuit diagram for fuse monitoring can be found online at 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

Accessory, CrossLink® busbar adapter, 3-pole

| Type | Width | Height | Pack size | Weight kg/100 u. | PG | | Part No. |
|-------------------------------------|-------|--------|-----------|------------------|----|--|----------|
| module width 106 mm, for size NH 00 | 106 | 200 | 2 | 36.5 | 09 | | 32594 |
| module width 184 mm, for size NH 1 | 184 | 210 | 2 | 75.5 | 09 | | 32595 |

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



QUADRON®60Classic – accessories

for NH fuse-switch disconnecter, size 000 to 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 | 000-3 | 1 | 1.1 | 09 | | 33156 |
| changeover 250 V AC / 5 A; 30 V DC / 4 A | 1 | 1 | 1.3 | 09 | | 33917 |

33156 not suitable for size 1 fuse-switch disconnectors

Disconnecter lid interlock

| | | | | | | |
|---|-----|----|-----|----|--|--------------|
| for sealing wire | 000 | 10 | 0.1 | 09 | | 33051 |
| | 00 | 10 | 0.2 | 09 | | 03849 |
| for sealing wire or 3 padlocks with shackle of 4 - 7 mm | 1-3 | 10 | 0.5 | 09 | | 33157 |

Barrier for handle

| | | | | | | |
|--------------------------------------|-----|----|-----|----|--|--------------|
| for closing of handle area from rear | 1-3 | 10 | 2.2 | 09 | | 33155 |
|--------------------------------------|-----|----|-----|----|--|--------------|

Arc chamber

| | | | | | | |
|--|---|---|------|----|--|--------------|
| retrofit package for higher utilisation category | 1 | 3 | 10.7 | 09 | | 33918 |
|--|---|---|------|----|--|--------------|

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

| | | | | | | |
|------------------|---|---|-----|----|--|--------------|
| for 5 mm busbars | 2 | 1 | 6.5 | 09 | | 33148 |
|------------------|---|---|-----|----|--|--------------|

**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 | | 33915 |
| box terminal for Cu cables | 35 - 185 / lam. Cu | 1 | 3 | 10.0 | 09 | | 33909 |
| clamp connector for Cu cables | 70 - 150 / 18 x 2 - 14 | 1 | 1 | 6.3 | 09 | | 33163 |
| clamp connector for Cu cables | 120 - 240 / 21 x 1 - 14 | 2 | 1 | 10.6 | 09 | | 33164 |
| clamp connector for Cu cables | 150 - 300 / 25 x 1 - 13 | 3 | 1 | 12.5 | 09 | | 33165 |
| prism terminal, single, for Cu and Al cables | * 16 - 70 | 00 | 3 | 3.0 | 09 | | 33224 |
| prism terminal, single, for Cu and Al cables | * 35 - 150 | 1 | 1 | 11.6 | 09 | | 33166 |
| prism terminal, single, for Cu and Al cables | * 50 - 240 | 2 | 1 | 19.9 | 09 | | 33167 |
| prism terminal, single, for Cu and Al cables | * 150 - 300 | 3 | 1 | 24.7 | 09 | | 33168 |
| prism terminal, double, for Cu cables | 2x 35 - 70 | 1 | 1 | 16.6 | 09 | | 33145 |
| prism terminal, double, for Cu cables | 2x 70 - 120 | 2 | 1 | 27.8 | 09 | | 33146 |
| prism terminal, double, for Cu cables | 2x 150 | 3 | 1 | 36.8 | 09 | | 33147 |
| prism terminal, double, for Cu cables | 2x 185 | 3 | 1 | 36.8 | 09 | | 33385 |
| tunnel terminal for screw connection M8 | 1x 2.5 - 16 + 2x 2.5 - 25 | 00 | 3 | 4.2 | 09 | | 01182 |

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

QUADRON®60Classic – accessories

for NH fuse-switch disconnecter, size 00 to 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 | | 33315 |
| trim strip, attachable at side | 20 x 350 x 35 | 00 | 2 | 6.0 | 09 | | 33317 |
| cover for cable lugs, top / bottom attachable | 183 x 65 x 68 | 1 | 2 | 10.7 | 09 | | 33142 |
| trim cover, 2 parts | 210 x 350 x 83 | 2 | 1 | 21.1 | 09 | | 33316 |

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, attachable top / bottom | 00 | 1 | 2.8 | 09 | | 79811 |
| cover for cable lugs, top / bottom attachable | 1 | 2 | 10.7 | 09 | | 33142 |
| | 2 | 2 | 10.9 | 09 | | 33143 |
| | 3 | 2 | 15.6 | 09 | | 33144 |
| connection shroud | 2 | 2 | 4.0 | 09 | | 33418 |
| | 3 | 2 | 5.4 | 09 | | 33419 |

QUADRON®60Classic Speed – NH fuse-switch disconnecter 125 A / 160 A

with snap-action switch mechanism

**NH bus-mounting switch disconnecter with fuses, 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 | | 33500 |
| box terminal, connection top | | | | 1 | 219.0 | 15 | | 33501 |
| box terminal, connection bottom, with electronic fuse monitoring | | | | 1 | 236.0 | 15 | | 33506 |

Fuses not included

Circuit diagram for fuse monitoring can be found online at www.woehner.com**NH bus-mounting switch disconnecter, size 00, 3-pole, with door coupling 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 | 125 A | 106 | 200 | 1 | 208.0 | 15 | | 33503 |
| box terminal, connection top, for door coupling | | | | 1 | 208.0 | 15 | | 33504 |

Fuses not included

Additional extension shaft and door coupling rotary handle required

Additional QCS for door coupling rotary handle with lateral actuation on request

Bus-mounting switch disconnecter, 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 | | 33540 |
| box terminal, connection top | | | | 1 | 216.0 | 14 | | 33541 |

* As main switch or emergency off switch only with the following maximum operating current: 125 A / 690 V DC

Bus-mounting switch disconnecter, 3-pole, for door coupling 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 | 160 A | 106 | 200 | 1 | 208.0 | 14 | | 33543 |
| box terminal, connection top, for door coupling | | | | 1 | 208.0 | 14 | | 33544 |

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 DC

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

QUADRON® 60 Classic Speed – NH switch disconnecter with fuses 250 A to 320 A

with snap-action switch mechanism



NH bus-mounting switch disconnecter with fuses, 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 | | 33510 |
| screw M10, connection top | 250 A | 184 | 314 | 1 | 589.0 | 15 | | 33511 |
| screw M10, connection bottom, with electronic fuse monitoring | 250 A | 184 | 286 | 1 | 625.0 | 15 | | 33516 |

Fuses not included

Circuit diagram for fuse monitoring can be found online at www.woehner.com

NH bus-mounting switch disconnecter with fuses, size 1, 3-pole, for door coupling rotary handle (snap-action switch mechanism)

| | | | | | | | | |
|---|-------|-----|-----|---|-------|----|--|--------------|
| screw M10, connection bottom, for door coupling | 250 A | 184 | 286 | 1 | 555.0 | 15 | | 33513 |
| screw M10, connection top, for door coupling | 250 A | 184 | 314 | 1 | 577.0 | 15 | | 33514 |

Fuses not included

Additional extension shaft and door coupling rotary handle required

Bus-mounting switch disconnecter, 3-pole, with multifunction handle (snap-action switch mechanism)

| | | | | | | | | | |
|---|---|-------|-----|-----|---|-------|----|--|--------------|
| connection screw M10, connection bottom | * | 320 A | 184 | 286 | 1 | 565.0 | 14 | | 33550 |
| connection screw M10, connection top | * | 320 A | 184 | 314 | 1 | 587.0 | 14 | | 33551 |

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

Bus-mounting switch disconnecter, 3-pole, with door coupling rotary handle (snap-action switch mechanism)

| | | | | | | | | | |
|--|---|-------|-----|-----|---|-------|----|--|--------------|
| connection screw M10, connection bottom, for door coupling | * | 320 A | 184 | 286 | 1 | 543.0 | 14 | | 33553 |
| connection screw M10, connection top, for door coupling | * | 320 A | 184 | 314 | 1 | 565.0 | 14 | | 33554 |

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 module width 106

**Accessories**

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

* 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 - 150 mm ² | QCB-NH1, QCS-NH1, QCS 320 A | 3 | 10.0 | 09 | | 33909 |
| prism terminal, single, for Cu and Al cables | 35 - 150 mm ² | | 1 | 11.6 | 09 | | 33166 |
| prism terminal, double, for Cu cables | 2x 35-70 mm ² | | 1 | 16.6 | 09 | | 33145 |
| clamp connector for Cu cables | 70 - 150 mm ² | QCB-NH1, QCS-NH1, LTS-F 250, LTS 400 | 1 | 6.3 | 09 | | 33163 |

QUADRON®60Classic – in-line fuse disconnectors, size 00

for snapping onto the busbar system



NH in-line fuse 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 ² | 160 A | NH 00 | 50 | 455 | 1 | 146.0 | 12 | | 33234 |

With terminal compartment cover

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

| | | | | | | | | | |
|--|-------|-------|----|-----|---|-------|----|--|--------------|
| screw M8 / clamp 70 mm ² , with fuse monitoring | 160 A | NH 00 | 50 | 610 | 1 | 146.0 | 12 | | 33285 |
|--|-------|-------|----|-----|---|-------|----|--|--------------|

with terminal compartment cover

Circuit diagram for fuse monitoring can be found online at www.woehner.com



Accessory, pilot switch, for monitoring of the lid position

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

Flat push-on connector 2.8 x 0.5 (DIN 46244-A)

Connection accessories

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

* 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 | 01138 |

Reducer, for 5 mm busbars

| | | | | |
|----------------------------------|-----|-----|----|--------------|
| reducer for busbar support 01138 | 100 | 0.1 | 06 | 01170 |
|----------------------------------|-----|-----|----|--------------|

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 | 01603 |
| 1-pole, attachable to 01603 or individual mounting, with integrated end cover | | 1 | 4.1 | 06 | 01355 |

End cover

| | | | | |
|--|----|-----|----|--------------|
| for busbar supports 01484, 01495, 01500, 01508 and 01603 | 10 | 2.0 | 06 | 01573 |
|--|----|-----|----|--------------|

QUADRON®60Classic, NH bus-mounting fuse-switch disconnecter, 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. |
|---|-------|---------------|-----------|------------------|----|--------------|
| connection box terminal, outgoing terminal bottom / top | NH 00 | 160 A | 1 | 100.0 | 09 | 33075 |
| connection screw M8, outgoing terminal bottom / top | NH 00 | 160 A | 1 | 100.0 | 09 | 33079 |
| connection screw M10, outgoing terminal bottom / top | NH 1 | 250 A | 1 | 357.0 | 09 | 33194 |

Cover frame

| | | | | |
|---------------|----|------|----|--------------|
| for boxes VMS | 10 | 16.6 | 06 | 01139 |
|---------------|----|------|----|--------------|

Reserve section cover, for use only with cover frame 01139

| | | | | |
|-------------------------------------|----|-----|----|--------------|
| 54 x 195, pitch 3 x 18 mm | 10 | 4.5 | 06 | 79738 |
| variable, 36-64 x 195 with 2 pieces | 10 | 3.2 | 06 | 79859 |

Connection strap with brace terminal, for device connections

| Type | For use up to max. | Pack size | Weight kg/100 u. | PG | Part No. |
|--|--------------------|-----------|------------------|----|--------------|
| for flat busbars up to 30 x 20 | 630 A | 3 | 32.3 | 07 | 01888 |
| for cables Cu and Al 120 - 300 mm ² | * 600 A | 3 | 36.6 | 07 | 01890 |

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

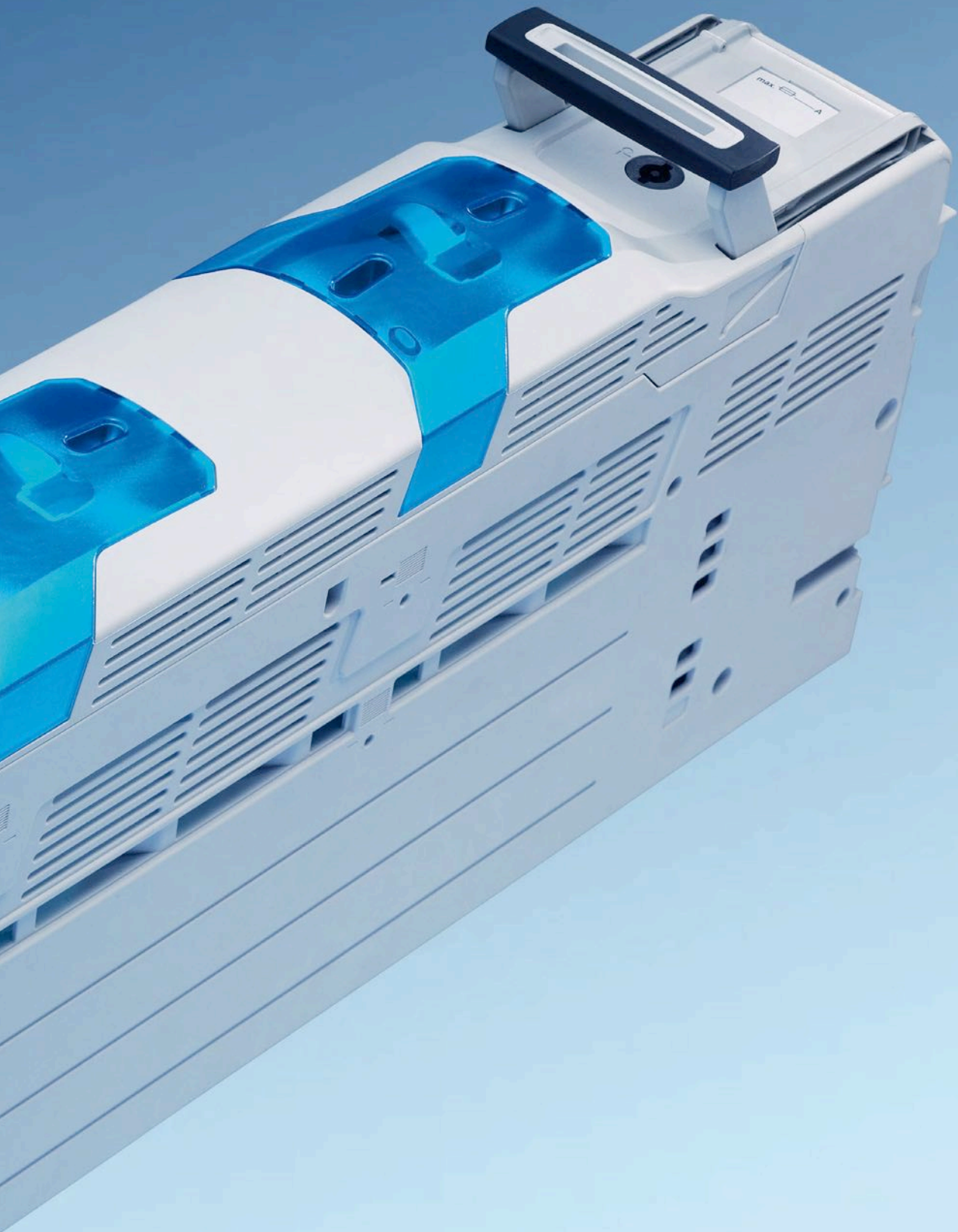
All devices can be mounted directly on busbars 12, 15, 20, 25, 30 x 5, 10 and section busbars



185Power

2500 A





BUSBAR SYSTEM TECHNOLOGY

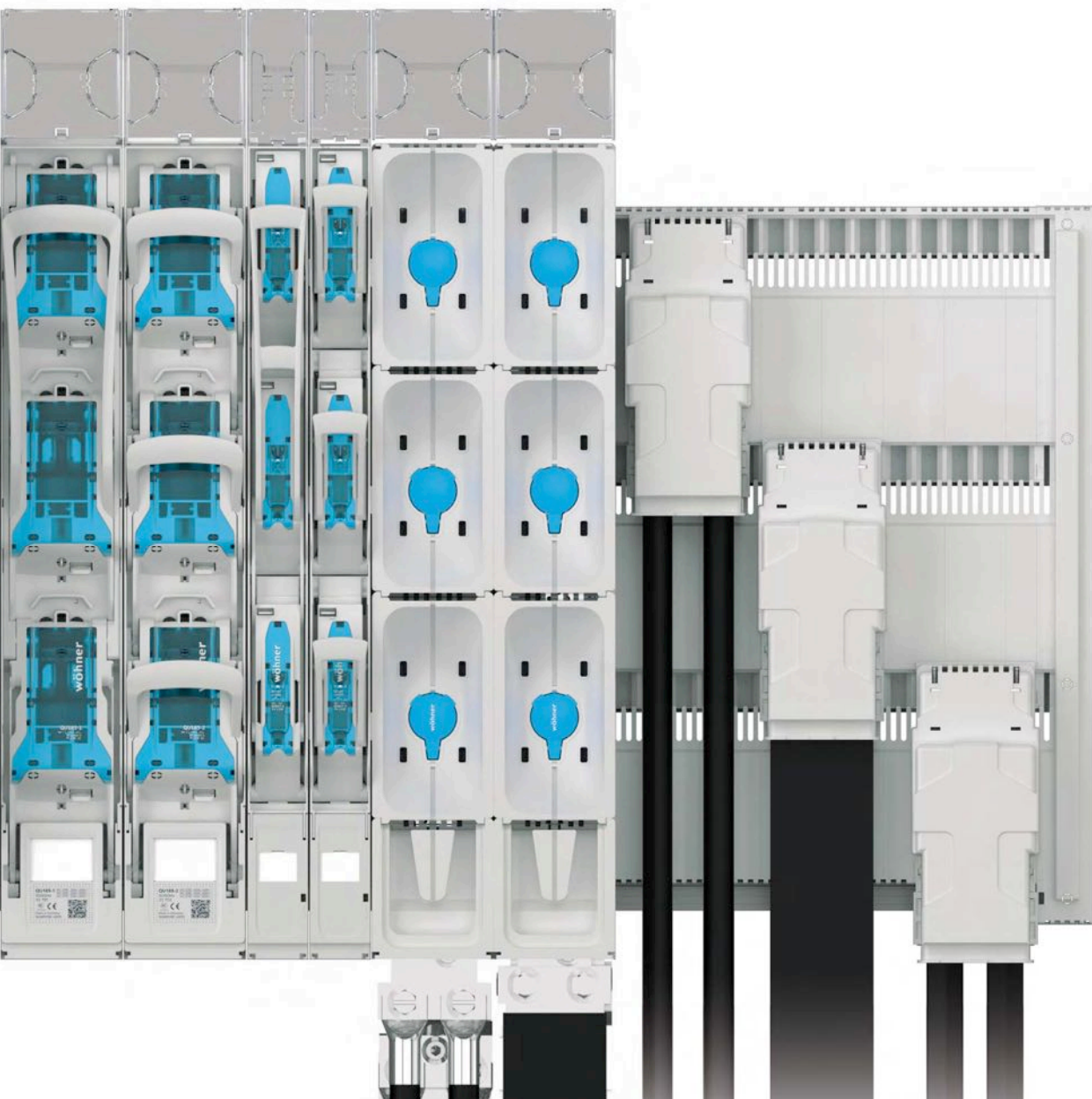
185Power



High-performance system solution with 185 mm busbar spacing

The 185Power busbar system by Wöhner is a modular system for low-voltage distribution with 185 mm spacing of the busbars. All the components (i.e. busbar supports, CrossLink® covers, NH in-line switch disconnectors, switch-disconnectors fitted with NH fuses, busbar adapters for circuit breakers, connection rails and connection modules) fit together perfectly. The switch disconnector with NH fuses is the special highlight. This version, with the "Speed" suffix, allows reliable and operator-independent switching.

Circuit breakers from 400 A to 1600 A can easily be integrated into the system by means of EQUES® adapters. The 185Power allows the user quick and cost-efficient realization of low voltage distribution systems. The modular structure and compatibility of the components among each other contribute to efficient use of space within the cabinet. Systems on the basis of 185Power can easily be expanded or modified.





Busbar 185Power

30, 40, 60, 80, 100,
120×10 mm

- Tin-plated versions
- Proven Load current
- Proven short-circuit capacity
- UL listed



Busbar support

Busbar support for easy and safe installation of systems with 185 mm distance between busbar centres

- Can be aligned with busbars 30, 40, 60, 80, 100, 120×10
- End and centre cover as accessories



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 possible using terminal clamps on the CrossLink® touch-safe protection modules, or by using bolts directly on the busbar.



QUADRON® 185Power

Coming 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 direct bolt mounting
- Integrated current transformer
- Innovative ventilation duct



CrossLink® 185Power Covering system

In the 185Power system the CrossLink®185Power covering modules, base plate profiles as well as the busbar support cover provide optimum all-around touch-safe protection of the busbar system

- Versions in 50 and 100 mm width
- Reliable connection to each other and to the middle and end cover



CRITO®185Power Connection modules

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



QUADRON® 185Power Speed

In-line switch-disconnector with fuses NH in sizes 00 to 3 allow operator-independent switching

- Snap-action switch mechanism with double interruption
- Safer fuse technology
- Faster and safer mounting with terminal clamp and insulated screw extension
- Traditional bolt mounting



EQUES® 185Power Adapter

The busbar adapter serves the purpose of quickly and easily mounting any commercially available circuit breaker. The busbar mounting is done via screw type terminal or drill-free terminal clamps on the touch-safe protection system.

- 400 to 630 A, 150 mm wide
- 630 to 1600 A, 300 mm wide

185Power – busbar system

3-pole systems



Busbar support and 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

Copper Busbar, tin-plated, length 2.40 m

| Article | Cross-section mm ² | Pack size | Weight kg/100 u. | PG | | Part No. |
|-----------------|-------------------------------|-----------|------------------|----|--|----------|
| busbar 30 x 10 | 300 | 1 | 643.2 | 06 | | 01625 |
| busbar 40 x 10 | 400 | 1 | 856.8 | 06 | | 01626 |
| busbar 60 x 10 | 600 | 1 | 1294.0 | 06 | | 01628 |
| busbar 80 x 10 | 800 | 1 | 1728.0 | 06 | | 01765 |
| busbar 100 x 10 | 1000 | 1 | 2174.0 | 06 | | 01766 |
| busbar 120 x 10 | 1200 | 1 | 2572.8 | 06 | | 01767 |

Partial lengths on request

CrossLink®185Power, system cover at front

| Article | Type | 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

| | | | | | | |
|------------------------|---|---|-------|----|--|-------|
| 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 distance pieces 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 busbar

| | | | | | | |
|--|---|---|------|----|--|-------|
| 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 | 07 | | 01482 |
| touch-safe protection shroud for longitudinal connectors | 3-pole, front and rear mounting, cover width 150 mm | 1 | 45.0 | 07 | | 01416 |

* Two longitudinal Busbar connecting terminal 01480 are required for the connection of 80 x 10 mm bars; One longitudinal Busbar connecting terminal 01480 and 01481 each is required for the connection of 100 x 10 mm bars; Two longitudinal Busbar connecting terminal 01481 are required for the connection of 120 x 10 mm bars

System mounting instruction: www.woehner.de/en/products/01430.html



CRITO®185Power – connection technology

1-pole and 3-pole



Connection rail, 3-pole, screw connection for drilled busbars

| Article | Type | Rated current | Width | Pack size | Weight kg/100 u. | PG | | Part No. |
|---------|---|---------------|-------|-----------|------------------|----|--|--------------|
| 3-pole | * screw M12 | 800 A | 100 | 1 | 484.0 | 07 | | 01438 |
| 3-pole | ** for 3 cable lugs 300mm ² (offset arrangement), for 4 cable lugs 240 mm ² or flex. copper 80x10 | 1400 A | 100 | 1 | 1050.0 | 07 | | 01439 |

Terminal clamps for drill-free mounting with CrossLink® – touch-safe protection cover, see accessories

* Transformer, can be integrated into connection rail, see 4.12

** Current carrying capacity 1400 A with screw connection, 1200 A with terminal clamp connection, see product description at www.woehner.com



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

| Article | Type | Size | Pack size | Weight kg/100 u. | PG | | Part No. |
|-------------------------------------|--|------|-----------|------------------|----|--|--------------|
| terminal clamp for QUADRON®185Power | for busbar systems with CrossLink® touch-safe protection | 1-3 | 3 | 15.0 | 12 | | 33738 |
| terminal clamp for QUADRON®185Power | for busbar systems without system covers | 1-3 | 3 | 10.0 | 12 | | 33740 |



Current transformer module, for connection rails

| 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 |

Can only be used with connection rail 01438; for matching transformers see 4.16

Connection module, 1-pole, clamp connection for drill-free mounting on undrilled busbars

| | | | | | | |
|-------------------|--|---|-------|----|--|--------------|
| connection module | for direct cable connection | 1 | 133.0 | 07 | | 01441 |
| connection module | for flex. copper min. 1 / 2x 50 x 10 mm for flex. copper max. 1 / 2x 80 x 10 mm central position | 1 | 94.5 | 07 | | 01442 |
| connection module | for 4 cable lugs M12 | 1 | 165.0 | 07 | | 01443 |

Accessory, cover for Connection module

| | | | | | |
|---|---|------|----|--|--------------|
| cover cap incl. rear touch protection cover | 1 | 28.0 | 07 | | 01437 |
|---|---|------|----|--|--------------|

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



EQUES®185Power – busbar adapter 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

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

| | | | | | | |
|---|---|---|-------|----|--|-------|
| 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 disconnecter

* For rated currents see product description at www.woehner.com

Busbar adapter, 630 A, screw connection for drilled busbars

| | | | | | | |
|--|---|---|-------|----|--|-------|
| connection at top / bottom, screw connection | * | 1 | 620.0 | 05 | | 32743 |
|--|---|---|-------|----|--|-------|

* For rated currents see product description at www.woehner.com

Accessory, current transformer, accuracy class 1

| Article | Rated apparent power | Pack size | Weight kg/100 u. | PG | | Part No. |
|---------------------------------|----------------------|-----------|------------------|----|--|----------|
| current transformer 300 A / 5 A | 2.50 VA | 1 | 20.9 | 05 | | 32988 |
| current transformer 400 A / 5 A | 2.50 VA | 1 | 21.0 | 05 | | 32989 |
| current transformer 600 A / 5 A | 1.25 VA | 1 | 19.0 | 05 | | 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



EQUES®185Power – busbar adapter 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

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

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

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

Socomec

| | | | | | | |
|------------------------------------|--------|---|--------|----|--|-------|
| for Socomec Sirco 1250 A or 1600 A | 1550 A | 1 | 3350.0 | 05 | | 32752 |
|------------------------------------|--------|---|--------|----|--|-------|

For rated currents see product description at 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



EQUES®185Power – busbar adapter 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

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

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

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

Socomec

| | | | | | | |
|------------------------------------|--------|---|--------|----|--|-------|
| for Socomec Sirco 1250 A or 1600 A | 1500 A | 1 | 3350.0 | 05 | | 32764 |
|------------------------------------|--------|---|--------|----|--|-------|

For rated currents see product description at 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



EQUES®185Power – busbar adapter 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

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

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

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

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



EQUES®185Power – busbar adapter 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

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

Legrand

| | | | | | | | |
|--|---|--------|---|--------|----|--|-------|
| for Legrand DPX ³ 1600 or GE FK1600 | * | 1440 A | 1 | 2950.0 | 05 | | 32809 |
|--|---|--------|---|--------|----|--|-------|

For rated currents see product description at 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

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

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



EQUES®185Power – busbar adapter 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; 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; 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; 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; 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 ³ 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 |

Accessory, 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 | 05 | 32983 |
| current transformer 800 A / 5 A | 5.00 VA | 1 | 14.0 | 05 | 32984 |
| current transformer 1000 A / 5 A | 5.00 VA | 1 | 14.0 | 05 | 32985 |
| current transformer 1250 A / 5 A | 5.00 VA | 1 | 14.0 | 05 | 32986 |
| current transformer 1600 A / 5 A | 5.00 VA | 1 | 14.0 | 05 | 32987 |

Depending on the adapter type, 1 or 2 current transformers can be used per phase. See adapter product description at www.woehner.comAll 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

QUADRON®185Power – NH in-line fuse switch disconnecter, size 00

3-pole, 1-pole switchable and open version



NH in-line fuse disconnecter, size 00, 3-pole switchable, screw connection

for drilled busbars, 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 | | 33700 |
| box terminal 70 mm ² , high version * | NH 00 | 160 A | 1 | 261.8 | 12 | | 33770 |
| screw M8, flat version | NH 00 | 160 A | 1 | 218.2 | 12 | | 33704 |
| box terminal 70 mm ² , flat version | NH 00 | 160 A | 1 | 217.4 | 12 | | 33773 |

Terminal clamps for drill-free mounting with or without CrossLink® – touch-safe protection cover, see accessories
* Current transformer (can be integrated)

NH in-line fuse disconnecter, size 00, 3-pole switchable, screw connection

for drilled busbars, connection at bottom / top, with fuse monitoring

| | | | | | | | |
|--|-------|-------|---|-------|----|--|--------------|
| screw M8, high version * | NH 00 | 160 A | 1 | 270.0 | 12 | | 33720 |
| box terminal 70 mm ² , high version * | NH 00 | 160 A | 1 | 270.0 | 12 | | 33771 |
| screw M8, flat version | NH 00 | 160 A | 1 | 220.0 | 12 | | 33724 |
| box terminal 70 mm ² , flat version | NH 00 | 160 A | 1 | 220.0 | 12 | | 33774 |

Terminal clamps for drill-free mounting with or without CrossLink® – touch-safe protection cover, see accessories
* Current transformer (can be integrated)

NH in-line fuse disconnecter, size 00, 1-pole switchable, screw connection

for drilled busbars, connection at bottom / top

| | | | | | | | |
|--|-------|-------|---|-------|----|--|--------------|
| screw M8, high version * | NH 00 | 160 A | 1 | 255.5 | 12 | | 33715 |
| box terminal 70 mm ² , high version * | NH 00 | 160 A | 1 | 256.3 | 12 | | 33772 |
| screw M8, flat version | NH 00 | 160 A | 1 | 211.4 | 12 | | 33719 |
| box terminal 70 mm ² , flat version | NH 00 | 160 A | 1 | 212.0 | 12 | | 33775 |

Terminal clamps for drill-free mounting with or without CrossLink® – touch-safe protection cover, see accessories
* Current transformer (can be integrated)

NH fuse base, size 00, open version, screw connection

for drilled busbars, connection at bottom / top

| | | | | | | | |
|------------------------|-------|-------|---|-------|----|--|--------------|
| screw M8, flat version | NH 00 | 160 A | 1 | 190.0 | 12 | | 33705 |
|------------------------|-------|-------|---|-------|----|--|--------------|

Terminal clamps for drill-free mounting with or without CrossLink® – touch-safe protection cover, see accessories



Accessory for clamp connection, 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 with touch-safe protection | 00 | 3 | 4.0 | 12 | | 33737 |
| terminal clamp IP20 | for busbar systems with touch-safe protection | 00 | 3 | 4.4 | 12 | | 33765 |
| terminal clamp | for busbar systems without system covers | 00 | 3 | 14.0 | 12 | | 33739 |

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 ² | 00 | 3 | 1.5 | 09 | | 33755 |
| wedge clamp terminal | * for Cu and Al 10 - 95 mm ² | 00 | 3 | 3.0 | 09 | | 33734 |
| terminal compartment cover | for 33700, 33770, 33720, 33771, 33715, 33772 and QUADRON®185Power Speed size 00 | 00 | 1 | 18.2 | 12 | | 33732 |
| terminal compartment cover, flat version, connection bottom | for 33704, 33773, 33724, 33774, 33719, 33775, 33705 | 00 | 1 | 13.4 | 12 | | 33725 |
| terminal compartment cover, high version, connection top | for 33700, 33770, 33720, 33771, 33715, 33772 | 00 | 1 | 13.4 | 12 | | 33726 |
| terminal compartment cover, flat version, connection top | for 33704, 33773, 33724, 33774, 33719, 33775 | 00 | 1 | 13.4 | 12 | | 33727 |
| pilot switch | changeover 250 V AC/5 A, 30 V DC/4 A | 000-3 | 1 | 1.1 | 09 | | 33156 |
| lateral bearing strip | for front covers | 00-3 | 2 | 10.7 | 12 | | 33758 |
| lateral cover support | for front covers | 00-3 | 4 | 0.5 | 12 | | 33113 |
| grip lug cover | ** for NH base and 33705 | 00 | 30 | 1.2 | 10 | | 79448 |
| plug support with mounting rail | for CT wiring | 00 | 1 | 2.8 | 12 | | 33766 |
| component support with mount. rails | for fuse monitoring and CT wiring | 00 | 1 | 5.5 | 12 | | 33767 |

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

* Can only be used for size 00, connection screws M8

** 1 piece required per fuse

Current transformer (can be integrated), accuracy class 1

| Type | Rated apparent power | Size | Pack size | Weight kg/100 u. | PG | | Part No. |
|---------------------------------|----------------------|------|-----------|------------------|----|--|--------------|
| current transformer 80 A / 5 A | 2.50 VA | 00 | 1 | 14.0 | 12 | | 33741 |
| current transformer 150 A / 5 A | 2.50 VA | 00 | 1 | 14.0 | 12 | | 33742 |

Current transformer (can be integrated), accuracy class 0.5

| | | | | | | | |
|---------------------------------|---------|----|---|------|----|--|--------------|
| current transformer 100 A / 5 A | 1.50 VA | 00 | 1 | 28.0 | 12 | | 33749 |
| current transformer 150 A / 5 A | 2.50 VA | 00 | 1 | 28.0 | 12 | | 33751 |

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

| | | | | | | | |
|---|---------|----|---|------|----|--|--------------|
| current transformer 100 A / 5 A, with declar. of conformity | 1.50 VA | 00 | 1 | 28.0 | 12 | | 33750 |
| current transformer 150 A / 5 A, with declar. of conformity | 2.50 VA | 00 | 1 | 28.0 | 12 | | 33752 |

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: Transformers up to 500 A: EUR 37; transformers from 500 A to 1000 A: EUR 54

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

| | | | | | | | |
|---|--|----|---|------|----|--|--------------|
| for 2 in-lin NH-fuse switch disconnectors size 00 | | 00 | 1 | 55.0 | 12 | | 33728 |
|---|--|----|---|------|----|--|--------------|

Current transformer for double adapter, accuracy class 1

| | | | | | | | |
|---------------------------------|---------|------|---|------|----|--|--------------|
| current transformer 150 A / 5 A | 1.50 VA | 00-3 | 1 | 14.0 | 12 | | 33744 |
|---------------------------------|---------|------|---|------|----|--|--------------|

Current transformer for double adapter, accuracy class 0.5

| | | | | | | | |
|---------------------------------|---------|------|---|------|----|--|--------------|
| current transformer 150 A / 5 A | 1.50 VA | 00-3 | 1 | 28.0 | 12 | | 33753 |
|---------------------------------|---------|------|---|------|----|--|--------------|

Current transformer for double adapter, accuracy class 0.5; tested in accordance with the conformity procedure

| | | | | | | | |
|---|---------|------|---|------|----|--|--------------|
| current transformer 150 A / 5 A, with declar. of conformity | 1.50 VA | 00-3 | 1 | 28.0 | 12 | | 33754 |
|---|---------|------|---|------|----|--|--------------|

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: Transformers up to 500 A: EUR 37; transformers from 500 A to 1000 A: EUR 54

QUADRON®185Power – NH in-line fuse switch disconnecter, size 1-3

3-pole, 1-pole switchable and open version



NH in-line fuse disconnectors, size 1-3, 3-pole switchable, screw connection

for drilled busbars, 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 | | 33701 |
| screw M12 | NH 2 | 400 A | 1 | 480.0 | 12 | | 33702 |
| screw M12 | NH 3 | 630 A | 1 | 582.3 | 12 | | 33703 |

Terminal clamps for drill-free mounting with or without CrossLink® – touch-safe protection modules available under accessories

NH in-line fuse disconnectors, size 1-3, 3-pole switchable, screw connection

for drilled busbars, connection at top / bottom, with fuse monitoring

| | | | | | | | |
|-----------|------|-------|---|-------|----|--|--------------|
| screw M12 | NH 1 | 250 A | 1 | 540.0 | 12 | | 33721 |
| screw M12 | NH 2 | 400 A | 1 | 540.0 | 12 | | 33722 |
| screw M12 | NH 3 | 630 A | 1 | 640.0 | 12 | | 33723 |

Terminal clamps for drill-free mounting with or without CrossLink® – touch-safe protection modules available under accessories

NH in-line fuse disconnectors, size 1-3, 1-pole switchable, screw connection

for drilled busbars, connection at top / bottom

| | | | | | | | |
|-----------|------|-------|---|-------|----|--|--------------|
| screw M12 | NH 1 | 250 A | 1 | 495.0 | 12 | | 33716 |
| screw M12 | NH 2 | 400 A | 1 | 502.0 | 12 | | 33717 |
| screw M12 | NH 3 | 630 A | 1 | 574.0 | 12 | | 33718 |

Terminal clamps for drill-free mounting with or without CrossLink® – touch-safe protection modules available under accessories

Double NH in-line fuse disconnectors, 1250 A, 3-pole switchable, screw connection

for drilled busbars

| | | | | | | | |
|---|------|--------|---|--------|----|--|--------------|
| screw M12, incl. terminal compartment cover | NH 3 | 1250 A | 1 | 1556.0 | 12 | | 33731 |
|---|------|--------|---|--------|----|--|--------------|

Terminal clamps for drill-free mounting with or without CrossLink® – touch-safe protection modules available under accessories

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

| | | | | | | | |
|-----------|------|-------|---|-------|----|--|--------------|
| screw M12 | NH 1 | 250 A | 1 | 365.0 | 12 | | 33706 |
| screw M12 | NH 2 | 400 A | 1 | 375.1 | 12 | | 33707 |
| screw M12 | NH 3 | 630 A | 1 | 450.0 | 12 | | 33708 |

Terminal clamps for drill-free mounting with or without CrossLink® – touch-safe protection modules available under accessories



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

| Article | Type | Size | Pack size | Weight kg/100 u. | PG | | Part No. |
|-------------------------------------|--|------|-----------|------------------|----|--|--------------|
| terminal clamp for QUADRON®185Power | for busbar systems with CrossLink® touch-safe protection | 1-3 | 3 | 15.0 | 12 | | 33738 |
| terminal clamp for QUADRON®185Power | for busbar systems without system covers | 1-3 | 3 | 10.0 | 12 | | 33740 |

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

QUADRON®185Power – accessories size 1-3

3-pole, 1-pole switchable and open version



Accessories

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

* 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 200 A / 5 A | 1.50 VA | 1-3 | 1 | 14.0 | 12 | | 33745 |
| current transformer 250 A / 5 A | 2.50 VA | 1-3 | 1 | 14.0 | 12 | | 33746 |
| current transformer 400 A / 5 A | 2.50 VA | 1-3 | 1 | 14.0 | 12 | | 33747 |
| current transformer 600 A / 5 A | 2.50 VA | 1-3 | 1 | 14.0 | 12 | | 33748 |

Can also be used for connection rail 01438

Current transformer (can be integrated), accuracy class 0.5

| | | | | | | | |
|---------------------------------|---------|-----|---|------|----|--|--------------|
| current transformer 200 A / 5 A | 1.50 VA | 1-3 | 1 | 28.0 | 12 | | 33292 |
| current transformer 250 A / 5 A | 2.50 VA | 1-3 | 1 | 28.0 | 12 | | 33294 |
| current transformer 400 A / 5 A | 2.50 VA | 1-3 | 1 | 28.0 | 12 | | 33298 |

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 200 A / 5 A, with declaration of conformity | 1.50 VA | 1-3 | 1 | 28.0 | 12 | | 33293 |
| current transformer 250 A / 5 A, with declaration of conformity | 2.50 VA | 1-3 | 1 | 28.0 | 12 | | 33295 |
| current transformer 400 A / 5 A, with declaration of conformity | 2.50 VA | 1-3 | 1 | 28.0 | 12 | | 33299 |

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

Current transformer module 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 | | 33762 |
|--------------------------------------|--|-----|---|-------|----|--|--------------|

For matching transformer see page 4.16

QUADRON®185Power Speed – NH fuse-switch disconnecter, size 00

with snap-action switch mechanism



In-line switch-disconnector with fuses 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, outgoing terminals at the bottom | * | NH 00 | 160 A | 1 | 504.0 | 18 | | 33614 |
| high version, outgoing terminals at the top | * | NH 00 | 160 A | 1 | 459.0 | 18 | | 33616 |
| flat version, outgoing terminals at the bottom | | NH 00 | 160 A | 1 | 455.3 | 18 | | 33610 |
| flat version, outgoing terminals at the top | | NH 00 | 160 A | 1 | 467.0 | 18 | | 33612 |

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 with fuses NH, size 00, 3-pole switchable

clamp connection for drill-free mounting **with and without CrossLink® touch-safe, with fuse monitoring, protection modules**, connection screw M8

| | | | | | | | | |
|--|---|-------|-------|---|-------|----|--|--------------|
| high version, outgoing terminals at the bottom | * | NH 00 | 160 A | 1 | 481.5 | 18 | | 33624 |
| high version, outgoing terminals at the top | * | NH 00 | 160 A | 1 | 480.0 | 18 | | 33626 |
| flat version, outgoing terminals at the bottom | | NH 00 | 160 A | 1 | 449.0 | 18 | | 33620 |
| flat version, outgoing terminals at the top | | NH 00 | 160 A | 1 | 454.0 | 18 | | 33622 |

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 with fuses NH, size 00, 3-pole switchable

screw connection for drilled busbars, connection screw M8

| | | | | | | | | |
|--|---|-------|-------|---|-------|----|--|--------------|
| high version, outgoing terminals at the bottom | * | NH 00 | 160 A | 1 | 462.5 | 18 | | 33615 |
| high version, outgoing terminals at the top | * | NH 00 | 160 A | 1 | 450.0 | 18 | | 33617 |
| flat version, outgoing terminals at the bottom | | NH 00 | 160 A | 1 | 409.0 | 18 | | 33611 |
| flat version, outgoing terminals at the top | | NH 00 | 160 A | 1 | 415.5 | 18 | | 33613 |

With three screws for mounting on the busbar system

* Current transformer, can be integrated; combinable with sizes 1–3

In-line switch-disconnector with fuses NH, size 00, 3-pole switchable

screw connection for drilled busbars, connection screw M8, with fuse monitoring,

| | | | | | | | | |
|--|---|-------|-------|---|-------|----|--|--------------|
| high version, outgoing terminals at the bottom | * | NH 00 | 160 A | 1 | 485.0 | 18 | | 33625 |
| high version, outgoing terminals at the top | * | NH 00 | 160 A | 1 | 483.5 | 18 | | 33627 |
| flat version, outgoing terminals at the bottom | | NH 00 | 160 A | 1 | 443.0 | 18 | | 33621 |
| flat version, outgoing terminals at the top | | NH 00 | 160 A | 1 | 448.0 | 18 | | 33623 |

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 – accessories, size 00



Accessories

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

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

* Can only be used for size 00, connection screws M8

Current transformer (can be integrated), precision class 1

| Article | Rated apparent power | Size | Pack size | Weight kg/100 u. | PG | | Part No. |
|---------------------------------|----------------------|------|-----------|------------------|----|--|--------------|
| current transformer 80 A / 5 A | 2.50 VA | 00 | 1 | 14.0 | 12 | | 33741 |
| current transformer 150 A / 5 A | 2.50 VA | 00 | 1 | 14.0 | 12 | | 33742 |

Current transformer (can be integrated), accuracy class 0.5

| | | | | | | | |
|---------------------------------|---------|----|---|------|----|--|--------------|
| current transformer 150 A / 5 A | 2.50 VA | 00 | 1 | 14.0 | 12 | | 33742 |
| current transformer 150 A / 5 A | 2.50 VA | 00 | 1 | 28.0 | 12 | | 33751 |

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

| | | | | | | | |
|---|---------|----|---|------|----|--|--------------|
| current transformer 100 A / 5 A, with declar. of conformity | 1.50 VA | 00 | 1 | 28.0 | 12 | | 33750 |
| current transformer 150 A / 5 A, with declar. of conformity | 2.50 VA | 00 | 1 | 28.0 | 12 | | 33752 |

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: Transformers up to 500 A: EUR 37; transformers from 500 A to 1000 A: EUR 54

Double adapter for QUADRON®185Power Speed – NH fuse-switch disconnecter, size 00

| | | | | | | | |
|---|--|----|---|------|----|--|--------------|
| for 2 in-lin NH-fuse switch disconnectors size 00 | | 00 | 1 | 55.0 | 12 | | 33728 |
|---|--|----|---|------|----|--|--------------|

Current transformer for double adapter, accuracy class 1

| | | | | | | | |
|---------------------------------|---------|------|---|------|----|--|--------------|
| current transformer 150 A / 5 A | 1.50 VA | 00-3 | 1 | 14.0 | 12 | | 33744 |
|---------------------------------|---------|------|---|------|----|--|--------------|

Current transformer for double adapter, accuracy class 0.5

| | | | | | | | |
|---------------------------------|---------|------|---|------|----|--|--------------|
| current transformer 150 A / 5 A | 1.50 VA | 00-3 | 1 | 28.0 | 12 | | 33753 |
|---------------------------------|---------|------|---|------|----|--|--------------|

Current transformer for double adapter, accuracy class 0.5; tested in accordance with the conformity procedure

| | | | | | | | |
|---|---------|------|---|------|----|--|--------------|
| current transformer 150 A / 5 A, with declar. of conformity | 1.50 VA | 00-3 | 1 | 28.0 | 12 | | 33754 |
|---|---------|------|---|------|----|--|--------------|

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: Transformers up to 500 A: EUR 37; transformers from 500 A to 1000 A: EUR 54

QUADRON®185Power Speed – NH fuse-switch disconnecter, size 1-3

with snap-action switch mechanism



In-line switch-disconnector with fuses NH, size 1-3, 3-pole switchable

screw connection for drilled busbars, connection screw M12

| Type | Size | Rated current | Pack size | Weight kg/100 u. | PG | | Part No. |
|----------------------------------|------|---------------|-----------|------------------|----|--|--------------|
| outgoing terminals at the bottom | NH 1 | 250 A | 1 | 1176.0 | 18 | | 33630 |
| outgoing terminals at the top | NH 1 | 250 A | 1 | 1194.0 | 18 | | 33631 |
| outgoing terminals at the bottom | NH 2 | 400 A | 1 | 1250.0 | 18 | | 33632 |
| outgoing terminals at the top | NH 2 | 400 A | 1 | 1361.0 | 18 | | 33633 |
| outgoing terminals at the bottom | NH 3 | 630 A | 1 | 1421.0 | 18 | | 33634 |
| outgoing terminals at the top | NH 3 | 500 A | 1 | 1481.0 | 18 | | 33635 |

Terminal clamps for mounting on CrossLink® touch-safe protection modules or screws for mounting on the busbar system are required – available under accessories

In-line switch-disconnector with fuses NH, size 1-3, 3-pole switchable

screw connection for drilled busbars **with fuse monitoring**, connection screw M12

| | | | | | | | |
|----------------------------------|------|-------|---|--------|----|--|--------------|
| outgoing terminals at the bottom | NH 1 | 250 A | 1 | 1267.0 | 18 | | 33636 |
| outgoing terminals at the top | NH 1 | 250 A | 1 | 1285.0 | 18 | | 33637 |
| outgoing terminals at the bottom | NH 2 | 400 A | 1 | 1420.0 | 18 | | 33638 |
| outgoing terminals at the top | NH 2 | 400 A | 1 | 1452.0 | 18 | | 33639 |
| outgoing terminals at the bottom | NH 3 | 630 A | 1 | 1512.0 | 18 | | 33640 |
| outgoing terminals at the top | NH 3 | 500 A | 1 | 1572.0 | 18 | | 33641 |

Terminal clamps for mounting on CrossLink® touch-safe protection modules or screws for mounting on the busbar system are required – available under accessories

Accessories for 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 | | 33651 |
| mounting set with 3 bolts | for busbar connection on drilled busbars, including positioner | 1-3 | 1 | 31.4 | 18 | | 33650 |
| insulated screw extension for terminal clamp | for safe live working with standard tools | 1-3 | 3 | 5.8 | 18 | | 33652 |

Accessories

| | | | | | | | |
|---|---|------|---|------|----|--|--------------|
| terminal compartment cover | universal for NH-rails size 1-3 and connection rail 800 A | 1-3 | 1 | 30.0 | 12 | | 33733 |
| rear cover for terminal compartment cover | | 1-3 | 1 | 16.0 | 18 | | 33647 |
| connection set box terminal 70 mm ² – 240 mm ² | including rear cover | 1-3 | 1 | 86.8 | 18 | | 33648 |
| connection set box terminal 120 mm ² – 300 mm ² | including rear cover | 1-3 | 1 | 88.2 | 18 | | 33649 |
| bearing area extension, top | | 1-3 | 1 | 1.7 | 18 | | 33646 |
| lateral bearing strip | for front covers | 00-3 | 2 | 10.7 | 12 | | 33758 |
| lateral cover support | for front covers | 00-3 | 4 | 0.5 | 12 | | 33113 |
| pilot switch | changeover 250 V AC / 5 A, 30 V DC / 4 A | 00-3 | 1 | 2.9 | 18 | | 33642 |

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 1-3



Current transformer module, for QUADRON®185Power Speed – NH fuse-switch disconnecter, size 1-3

| 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 |

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 | 12 | | 33782 |
| current transformer 400 A / 5 A | 5.00 VA | 1 | 28.0 | 12 | | 33785 |
| current transformer 600 A / 5 A | 5.00 VA | 1 | 28.0 | 12 | | 33788 |
| current transformer 750 A / 5 A | 5.00 VA | 1 | 28.0 | 12 | | 33791 |

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

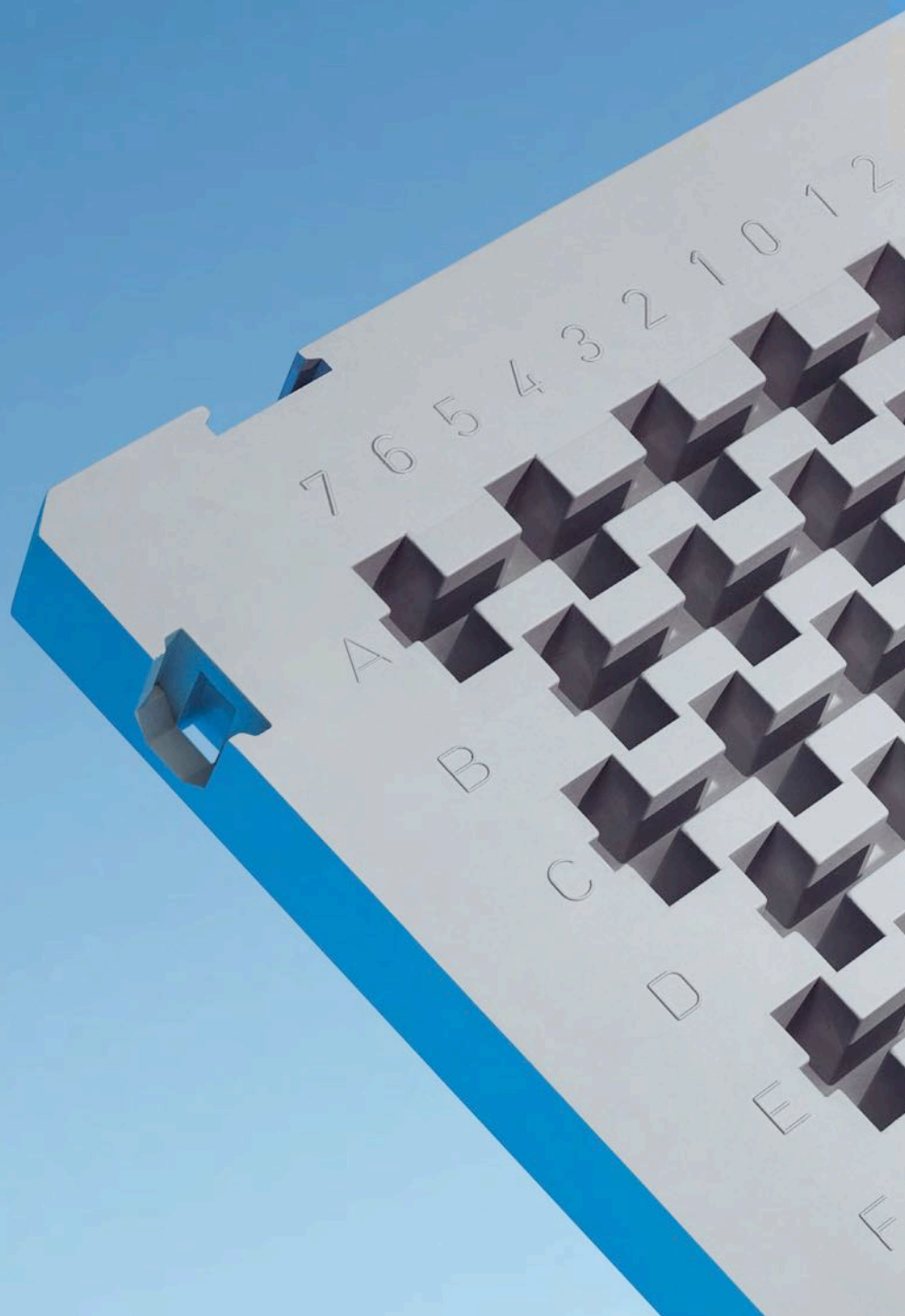
| | | | | | | |
|---------------------------------|---------|---|------|----|--|--------------|
| current transformer 250 A / 5 A | 5.00 VA | 1 | 28.0 | 12 | | 33780 |
| current transformer 400 A / 5 A | 5.00 VA | 1 | 28.0 | 12 | | 33783 |
| current transformer 600 A / 5 A | 5.00 VA | 1 | 28.0 | 12 | | 33786 |
| current transformer 750 A / 5 A | 5.00 VA | 1 | 28.0 | 12 | | 33789 |

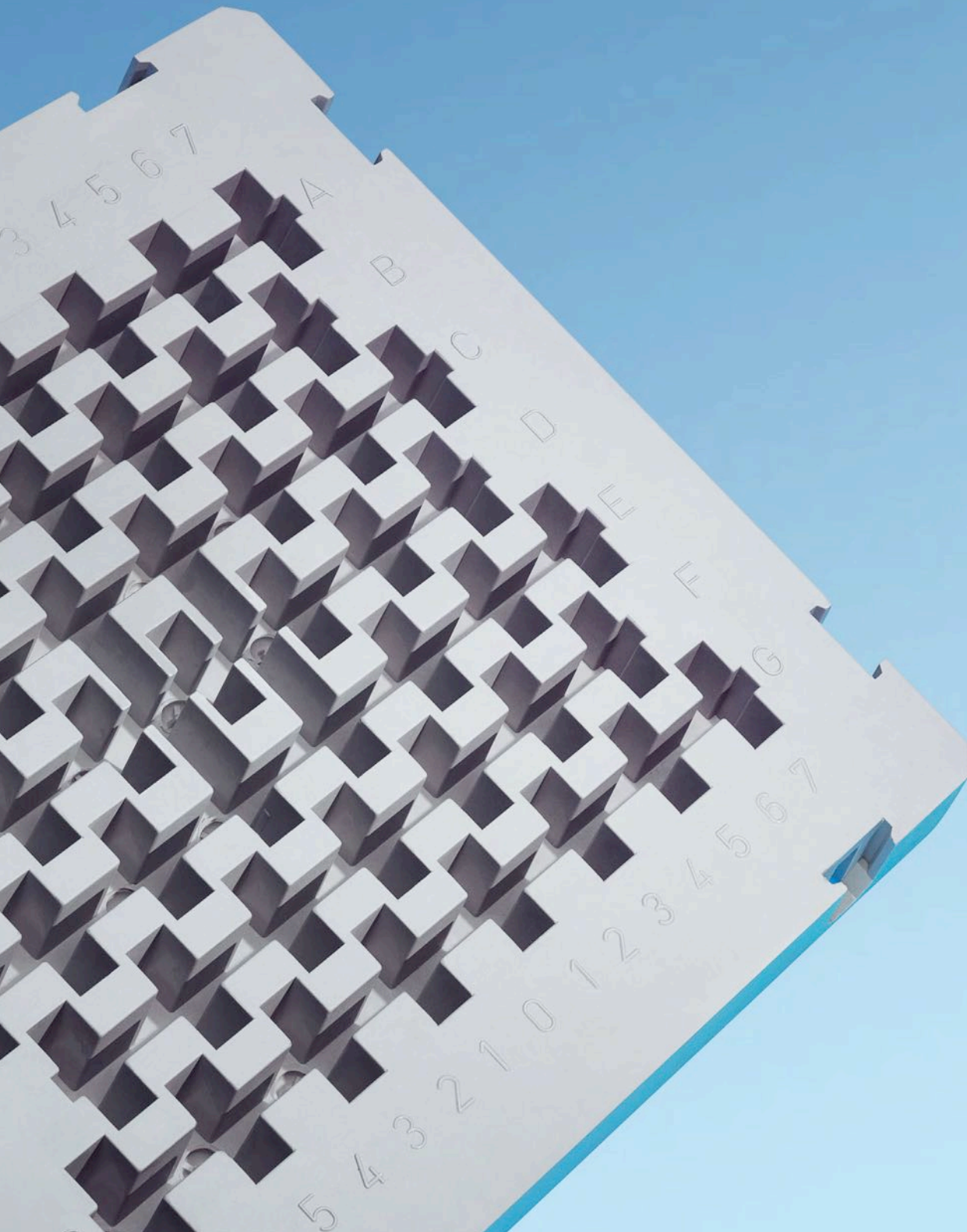
Current transformer (can be integrated into transformer module), accuracy class 0.5; tested in accordance with the conformity procedure

| | | | | | | |
|---|---------|---|------|----|--|--------------|
| current transformer 250 A / 5 A, with declaration of conformity | 5.00 VA | 1 | 28.0 | 12 | | 33781 |
| current transformer 400 A / 5 A, with declaration of conformity | 5.00 VA | 1 | 28.0 | 12 | | 33784 |
| current transformer 600 A / 5 A, with declaration of conformity | 5.00 VA | 1 | 28.0 | 12 | | 33787 |
| current transformer 750 A / 5 A, with declaration of conformity | 5.00 VA | 1 | 28.0 | 12 | | 33790 |

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: Transformers up to 500 A: EUR 37; transformers from 500 A to 1000 A: EUR 54

Centre feed unit



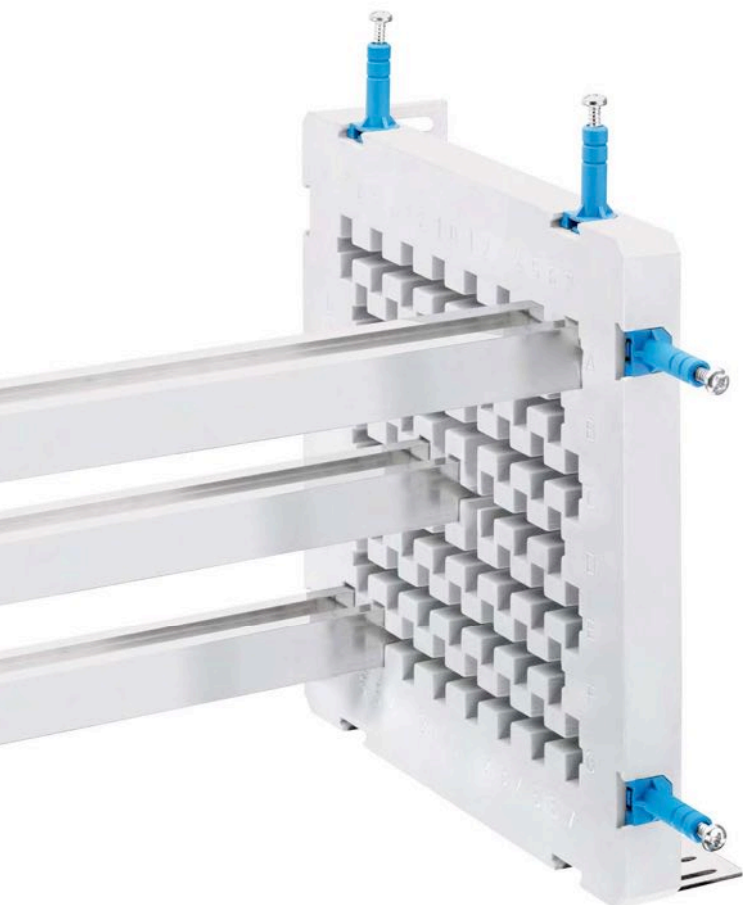


Centre feed unit



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

connection options for copper and aluminium conductors, no matter if they are round conductors or laminated or large 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 by means of the type test meet the high requirements put on this system.





Double and triple T and TCC section busbars

The profiled section busbars offer safe distribution of currents up to 4000 A, double T and triple T section busbars can be connected on both sides.

Versions:

- Double T section busbars
- Triple T section busbars
- TCC section busbars



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, sectored and flat conductors
- UL listed



Busbar support multi-pole

The busbar supports are suitable for 3 or 4 pole installations. Busbars from 300 to 1140 mm² can be used.

- Variable build up
- 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 mm² can be used

- Variable build up
- Double-T, Triple-T, and TCC section busbars can be used

Centre feed unit

TT and TTT section busbars



Centre feed unit

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

Universal conductor connection terminal 16 mm² to 300 mm²

| 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 ² , AWG 4 - MCM 250 | 17 x 15 | 440 A | 25 | 10.9 | 07 | | 01203 |
| 30 x 10 and section busbars | 95 - 300 mm ² | 41 x 25 | 630 A | 3 | 85.7 | 07 | | 01094 |

Brace terminals for round conductors up to 300 mm²

| 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 ² | 500 A | 6 | 31.2 | 07 | | 01318 |
| 20, 25, 30 x 5, 10 and section busbars | * Cu / Al 95 - 300 mm ² | 600 A | 3 | 42.5 | 07 | | 01760 |

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

Profile terminal, for double-T section busbars, 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 ² | 1600 A | 1600 A | 41 x 20 - 42 | 3 | 67.0 | 07 | | 01185 | |
| 500 - 750 mm ² | | | 51 x 5 - 28 | 3 | 70.5 | 07 | | 01906 | |
| 600 - 900 mm ² | | | 64 x 5 - 28 | 3 | 84.0 | 07 | | 01907 | |
| 500 - 1000 mm ² | | 2000 A | 51 x 20 - 42 | 3 | 73.5 | 07 | | 01936 | |
| 600 - 1200 mm ² | | | 64 x 20 - 42 | 3 | 85.9 | 07 | | 01911 | |
| 800 - 1600 mm ² | | | 2500 A | 81 x 20 - 42 | 3 | 101.1 | 07 | | 01934 |
| 1000 - 2000 mm ² | | 2800 A | 101 x 20 - 42 | 3 | 113.7 | 07 | | 01935 | |
| 320 - 800 mm ² | | | 1600 A | 41 x 23 - 45 | 3 | 105.0 | 07 | | 01513 |
| 500 - 1260 mm ² | | | 2000 A | 2500 A | 64 x 23 - 45 | 3 | 124.0 | 07 | 01008 |
| 1200 - 3600 mm ² | 2500 A | 3200 A | 101 x 23 - 45 | 3 | 172.7 | 07 | | 01186 | |

For the connection of flat busbars and laminated copper busbars



Centre feed unit

TT and TTT section busbars



Brace terminals, 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 | | 01069 |
| 30 x 10 and section busbars | 68 x 10 - 28 | | | 3 | 63.0 | 07 | | 01070 |
| 30 x 10 and section busbars | 105 x 10 - 28 | | 2800 A | 3 | 84.0 | 07 | | 01071 |

For the connection of flat busbars and laminated copper busbars

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

| For busbar | Terminal space W x H | 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 | | 01514 |
| 12, 15, 20, 25, 30 x 10 and section busbars | M10 x 10 | 630 A | 6 | 36.2 | 07 | | 01047 |

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 ² | Pack size | Weight kg/100 u. | PG | | Part No. |
|--|-----------------------|-----------------------|-------------------------------|-----------|------------------|----|--|--------------|
| 10 x 40 x 1 | 774 A | 1053 A | 400 | 1 | 746.0 | 06 | | 01615 |
| 10 x 50 x 1 | 914 A | 1244 A | 500 | 1 | 932.0 | 06 | | 01509 |
| 10 x 63 x 1 | 1088 A | 1481 A | 630 | 1 | 1180.0 | 06 | | 01510 |
| 10 x 80 x 1 | 1305 A | 1777 A | 800 | 1 | 1490.0 | 06 | | 01061 |
| 10 x 100 x 1 | 1550 A | 2110 A | 1000 | 1 | 1870.0 | 06 | | 01273 |

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

Components, 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 | | 35008 |
| busbar support, 4-pole, centre | for centre feed unit with double T busbars | 1 | 458.0 | 11 | | 35009 |
| busbar support, 3-pole, centre | for centre feed unit with triple T busbars | 1 | 458.0 | 11 | | 35001 |
| additional cover holder | for centre feed unit | 4 | 1.4 | 11 | | 35017 |

Section busbars, copper

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

For current carrying capacity of the busbars visit www.woehner.com



Centre feed unit

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 | 01369 |

Section busbar, copper, tin-plated

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

For current carrying capacity of the busbars visit www.woehner.com

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 | M 10 x 45 | 12 | 5.1 | 07 | 01379 |
| bolt for TCC-profile, with nut and spring washer | M 12 x 60 | 12 | 9.1 | 07 | 01380 |

For current carrying capacity of the busbars visit www.woehner.com

Brace terminal, 95 to 300 mm², for round conductors

| For busbar | Connection mm ² | 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 | 01318 |
| 20, 25, 30 x 5, 10 and section busbars | * 120 - 300 | 600 A | 3 | 42.5 | 07 | 01760 |

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

Brace terminal, 30 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. |
|--|----------------------|----------|-------------|-----------|------------------|----|--------------|
| 20, 25, 30 x 5, 10 and section busbars | 30 x 20 | 630 A | 750 A | 6 | 30.3 | 07 | 01319 |
| | 32 x 20 | | 800 A | 3 | 34.7 | 07 | 01759 |
| 30 x 10 and section busbars | 55 x 10 - 28 | 1600 A | 2000 A | 3 | 50.0 | 07 | 01069 |
| | 68 x 10 - 28 | | | 3 | 63.0 | 07 | 01070 |
| | 105 x 10 - 28 | | 2800 A | 3 | 84.0 | 07 | 01071 |



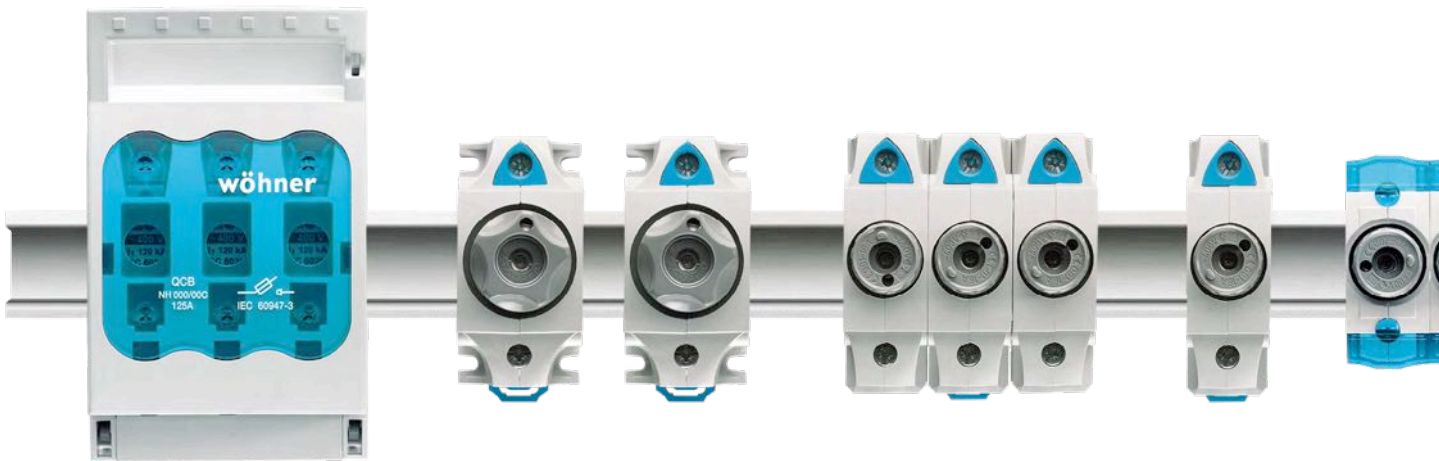
Panel

Panel mounted components
and switching devices



MOUNTING PLATE OR MOUNTING RAIL COMPONENTS

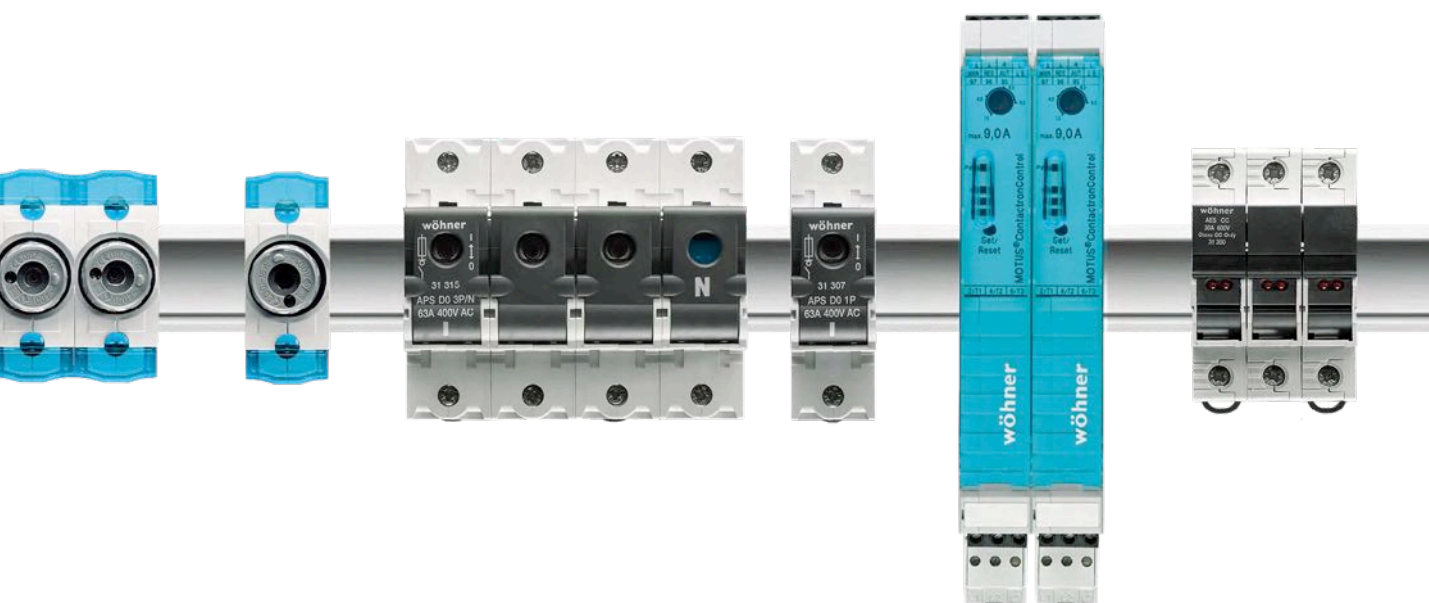
Panel



Components for conventional mounting

For conventional wiring, Wöhner offers a comprehensive range of components for mounting 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 through 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 section offers a high level of safety and favourable connection conditions.

- Wide terminal range up to 35 mm²
- Dual function terminal for 2 conductors, 35 mm² + 16 mm²
- Connection of different conductors
- Integrated cover and comprehensive touch-safe protection



TRITON® Panel

The TRITON® fuse bases D01, D02, DII and DIII in especially robust design with touch-safe protection according to DGUV V3 for industrial applications

- Wide terminal range up to 35 mm²
- Dual-function terminal incoming side
- Connection of different conductors
- Spring loaded contact
- Versions in DII and DIII
- Versions with screw mounting



SECUR® Panel

The SECUR® fuse holder especially for photovoltaic applications allows for a comfortable fuse change by means of a removable fuse carrier. The contacts in the carrier remain protected against touch.

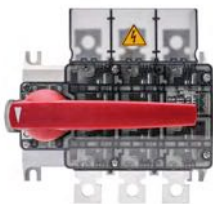
- For 10 (14) × 85 fuses to 1500 V DC
- Equipment width: 22.5 mm
- UL approved



SECUR® Panel

The D0 fuse-switch disconnect offers a high degree of safety and comfort for the operator. The fuse replacement is only possible when switched off.

- Dual-function terminal to 35 mm²
- Captive fuse carrier with commercial gauge ring
- Optional auxiliary switch



CAPUS® Panel

This product series includes three families.

- Switch disconnections with NH fuses from 160 A to 630 A
- Switch disconnectors from 125 A to 3150 A
- Changeover switch from 125 A to 1000 A.
- 3 pole + N versions available



MOTUS® Panel

With the MOTUS® hybrid motor starter Drives up to 4 kW can be operated. By means of the integrated functions – direct and reversing starter, over load protection and emergency stop – significantly reduces the space requirement and wiring cost.

- 3 design versions: up to 0.6 A, up to 2.4 A and up to 9 A
- Equipment width: 22.5 mm
- Up to 30 mil. switching cycles
- UL listed



AMBUS® Panel

The carrier for the cylindrical fuses is available in 1, 2 and 3 pole as well as in versions with neutral conductor, with LED, with auxiliary switch as well as for semiconductor protection.

- 32 A (10 × 38), 50 A (14 × 51), 100 A (22 × 58)
- Rated voltage to 690 V
- Touch-safe protection after VDE 0106
- Photovoltaic variants to 1000 V DC are also UL approved



AMBUS® Panel UL Version

Versions for class CC to 30 A and class J to 60 A fuses according to UL 248-8. All products are touch-safe protected and have convenient connection technology.

- Short-circuit capacity up to 200 kA
- Rated voltage to 600 V
- Versions available with LED as fuse indicator



QUADRON® Panel

The NH fuse-switch disconnecter for Sizes 000 to 4a protect and disconnect currents up to 1600 A.

- NH 000 to 2 can also be mounted on mounting rail
- NH 00 to 3 - versions with fuse monitoring
- Various accessories for connection and shrouding



QUADRON® Panel Speed

One highlight is the QUADRON® Panel switch disconnecter with NH fuses. Its snap-action switch mechanism allows safe, operator-independent switching.

- Double interruption
- Lockable in off-position
- FLAG indicator for switch position indicator
- Versions with rotary drive or fuse monitoring

MOTUS®Panel - Hybrid-Motor starter

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 | 64.3 | 21 | | 36100 |
| 0.18 - 2.4 A direct and reversing starter | 22.5 | 175 | 138 | 1 | 64.3 | 21 | | 36103 |
| 1.5 - 9 A direct and reversing starter | 22.5 | 175 | 138 | 1 | 64.3 | 21 | | 36106 |

MOTUS® accessories

| | | | | | | | | |
|--|---|------|----|--|--|--|--|-------|
| 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 |

MOTUS® replacement components

| | | | | | | | | |
|---|---|------|----|--|--|--|--|-------|
| electronic unit 0.075 - 0.6 A direct and reversing starter | 1 | 57.1 | 21 | | | | | 36109 |
| electronic unit 0.18 - 2.4 A direct and reversing starter | 1 | 57.1 | 21 | | | | | 36110 |
| electronic unit 1.5 - 9 A direct and reversing starter | 1 | 57.1 | 21 | | | | | 36111 |
| adapter for MOTUS®Panel | 1 | 12.8 | 21 | | | | | 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 - D0 integrated fuse base

version with touch-safe protection, dual-function terminal on both sides



D0 fuse base, version for distribution boards

| Type | Rated voltage | Poles | Connection mm ² | 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, pitch 27 mm, length 1 m

| Type | Centre feed | End feed | Cross-section mm ² | 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 ² | for 31014, 31024, 31309, 31311 | 125 A | 25 | 2.5 | 07 | | 31028 |
| connection terminal, side connection | | for 31012 | | 25 | 2.9 | 07 | | 31029 |
| connection terminal, front connection | | | | 25 | 2.9 | 07 | | 31085 |
| connection terminal, front connection | 25 - 95 mm ² | for 31057 | 225 A | 3 | 9.0 | 07 | | 01198 |
| connection terminal, front connection | | for 31056 | | 3 | 9.3 | 07 | | 01228 |

A connection terminal is required for each phase

End cover

| Type | Pack size | Weight kg/100 u. | PG | | Part No. |
|--|-----------|------------------|----|--|--------------|
| for 2-pole and 3-pole comb-type busbars 16 mm ² | 50 | 0.1 | 06 | | 31027 |
| for 3-pole comb-type busbars 35 mm ² | 10 | 0.2 | 06 | | 31084 |

TRITON®Panel - D0 panel-mounting fuse base

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 ² | 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 | | 31286 |
| E 14 / 16 A / 3P | 400 V | 3-pole | | 3 | 38.4 | 02 | | 31288 |
| E 18 / 63 A / 1P | 400 V | 1-pole | | 9 | 13.9 | 02 | | 31291 |
| E 18 / 63 A / 3P | 400 V | 3-pole | | 3 | 41.4 | 02 | | 31293 |

Comb-type busbar, pitch 27 mm, length 1 m

| Type | Cross-section mm ² | 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 | | 31024 |
| comb type busbar, 3-pole, fork type, pitch 27 mm | 16 | | | 10 | 56.0 | 06 | | 31026 |
| comb-type busbar, 1-pole, bridge type, pitch 27 mm | 16 | | | 25 | 19.0 | 06 | | 31014 |
| comb-type busbar, 3-pole, bridge type, pitch 27 mm | 16 | | | 10 | 56.2 | 06 | | 31012 |
| | 35 | 220 A | 130 A | 4 | 125.0 | 06 | | 31056 |

End cover, for insulated comb-type busbars

| | | | | | |
|--|----|-----|----|--|--------------|
| for 2-pole and 3-pole comb-type busbars 16 mm ² | 50 | 0.1 | 06 | | 31027 |
| for 3-pole comb-type busbars 35 mm ² | 10 | 0.2 | 06 | | 31084 |

Connection terminal, for insulated comb-type busbars, bridge version

| Article | Type | Connection mm ² | 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 | | 31028 |
| connection terminal, side connection | for 31012 | 6 - 50 | 125 A | 25 | 2.9 | 07 | | 31029 |
| connection terminal, front connection | for 31012 | 6 - 50 | 125 A | 25 | 2.9 | 07 | | 31085 |
| connection terminal, front connection | for 31056 | 25 - 95 | 225 A | 3 | 9.3 | 07 | | 01228 |

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 | | 31086 |

Label, for label holder

| | | | | | |
|-------------|-----|-----|----|--|--------------|
| Clip 20 x 9 | 100 | 0.1 | 03 | | 31004 |
|-------------|-----|-----|----|--|--------------|

SECUR®Panel - Switch disconnecter with D0 fuse 63 A

Touch-safe protection in accordance with DIN EN 50274/DGUV V5, dual-function terminal on both sides

**D0 switch disconnecter with fuses**

| Type | Rated current | Connection mm ² | Pack size | Weight kg/100 u. | PG | | Part No. |
|----------|---------------|----------------------------|-----------|------------------|----|--|--------------|
| 1-pole | 63 A | 1.5 - 35 | 3 | 14.0 | 03 | | 31307 |
| 1-pole+N | | | 2 | 26.2 | 03 | | 31308 |
| 2-pole | | | 2 | 27.8 | 03 | | 31313 |
| 3-pole | | | 1 | 42.0 | 03 | | 31314 |
| 3-pole+N | | | 1 | 54.0 | 03 | | 31315 |

400 V AC / 130 V DC for 2-pole version

D0 switch disconnecter with fuses, with LED

| Type | Rated current | Connection mm ² | Pack size | Weight kg/100 u. | PG | | Part No. |
|--------|---------------|----------------------------|-----------|------------------|----|--|--------------|
| 1-pole | 63 A | 1.5 - 35 | 3 | 14.2 | 03 | | 31556 |
| 3-pole | | | 1 | 42.6 | 03 | | 31557 |

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 | | 31902 |

Pilot switch, for monitoring the switch position, 9 mm wide

| changeover | Pack size | Weight kg/100 u. | PG | | Part No. |
|-------------------------------|-----------|------------------|----|--|--------------|
| 400 V AC / 2 A, 24 V DC / 6 A | 1 | 5.4 | 03 | | 31316 |

Comb-type busbar, length 1 m

| Type | Cross-section mm ² | 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 | | 31014 |
| | 35 | 220 A | 130 A | 10 | 50.0 | 06 | | 31057 |
| comb-type busbar, 3-pole, bridge type, pitch 27 mm | 16 | 130 A | 80 A | 10 | 56.2 | 06 | | 31012 |
| | 35 | 220 A | 130 A | 4 | 125.0 | 06 | | 31056 |

End cover, for insulated comb-type busbars

| Type | Pack size | Weight kg/100 u. | PG | | Part No. |
|--|-----------|------------------|----|--|--------------|
| for 2-pole and 3-pole comb-type busbars 16 mm ² | 50 | 0.1 | 06 | | 31027 |
| for 3-pole comb-type busbars 35 mm ² | 10 | 0.2 | 06 | | 31084 |

Connection terminal, for comb-type busbars, bridge version

| Article | Type | Connection mm ² | Pack size | Weight kg/100 u. | | | Part No. |
|---------------------------------------|--------------------------------|----------------------------|-----------|------------------|----|--------------|--------------|
| connection terminal, side connection | for 31014, 31024, 31309, 31311 | 6 - 50 | 25 | 2.5 | 07 | | 31028 |
| | for 31012 | | 25 | 2.9 | 07 | 31029 | |
| connection terminal, front connection | for 31012 | 25 - 95 | 25 | 2.9 | 07 | | 31085 |
| | for 31057 | | 3 | 9.0 | 07 | 01198 | |
| | for 31056 | | 3 | 9.3 | 07 | 01228 | |

A connection terminal is required for each phase

Fuse links not included

TRITON®Panel – D fuse base

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 ² | 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 | | 31173 |
| E 27 / 25 A / 3P, for screw-in gauge rings | 500 V | 3 | 1.5 - 35 | 3 | 45.7 | 02 | | 31174 |
| E 33 / 63 A / 1P, for screw-in gauge rings | * 500 V | 1 | 1.5 - 35 | 9 | 18.6 | 02 | | 31175 |
| E 33 / 63 A / 3P, for screw-in gauge rings | * 500 V | 3 | 1.5 - 35 | 3 | 53.8 | 02 | | 31176 |

* Conforms to VDE 0636-31, also 690 V AC / 600 V DC

Comb-type busbar, length 1 m

| Type | Cross-section mm ² | Centre feed | End feed | Pack size | Weight kg/100 u. | PG | | Part No. |
|---|-------------------------------|-------------|----------|-----------|------------------|----|--|--------------|
| 1-pole comb-type busbar, insulated, for E27 | 16 | 130 A | 80 A | 25 | 21.5 | 06 | | 31309 |
| 3-pole comb-type busbar, insulated, for E27 | | | | 10 | 51.4 | 06 | | 31310 |
| 1-pole comb type busbar, insulated, for E33 | | | | 25 | 21.0 | 06 | | 31311 |
| 3-pole comb-type busbar, insulated, for E33 | | | | 10 | 50.5 | 06 | | 31312 |

End cover, for insulated comb-type busbars

| Type | Pack size | Weight kg/100 u. | PG | | Part No. |
|--|-----------|------------------|----|--|--------------|
| for 2-pole and 3-pole comb-type busbars 16 mm ² | 50 | 0.1 | 06 | | 31027 |

Connection terminal, for insulated comb-type busbars

| Article | Type | Connection mm ² | 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 | | 31028 |
| connection terminal, side connection | for 31012 | | | 25 | 2.9 | 07 | | 31029 |
| connection terminal, front connection | | | | 25 | 2.9 | 07 | | 31085 |

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 | | 31086 |

Label, for label holder

| | | | | | |
|-------------|-----|-----|----|--|--------------|
| Clip 20 x 9 | 100 | 0.1 | 03 | | 31004 |
|-------------|-----|-----|----|--|--------------|

AMBUS®Panel - Fuse holder 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 ² / AWG 18 - 4 | 18 | 12 | 5.2 | 17 | | 31110 |
| | | 2-pole | | 36 | 6 | 10.3 | 17 | | 31112 |
| | | 3-pole | | 54 | 4 | 15.5 | 17 | | 31113 |
| 14x51 | 50 A | 1-pole | 1.5 - 35 mm ² / AWG 14 - 2 | 27 | 6 | 9.7 | 17 | | 31115 |
| | | 2-pole | | 54 | 3 | 20.2 | 17 | | 31117 |
| | | 3-pole | | 81 | 2 | 30.4 | 17 | | 31118 |
| 22x58 | 100 A | 1-pole | 4 - 50 mm ² / AWG 10 - 1/0 | 36 | 6 | 15.8 | 17 | | 31120 |
| | | 2-pole | | 72 | 3 | 32.2 | 17 | | 31122 |
| | | 3-pole | | 108 | 2 | 48.6 | 17 | | 31123 |

Fuse holder for cylindrical fuses, standard version with LED 110–690 V AC/DC

| | | | | | | | | | |
|-------|-------|--------|--|-----|----|------|----|--|-------|
| 10x38 | 32 A | 1-pole | 0,75 - 25 mm ² / AWG 18 - 4 | 18 | 12 | 5.7 | 17 | | 31130 |
| 10x38 | | 2-pole | | 36 | 6 | 11.3 | 17 | | 31132 |
| 10x38 | | 3-pole | | 54 | 4 | 17.0 | 17 | | 31133 |
| 14x51 | 50 A | 1-pole | 1,5 - 35 mm ² / AWG 14 - 2 | 27 | 6 | 9.8 | 17 | | 31135 |
| 14x51 | | 3-pole | | 81 | 2 | 30.5 | 17 | | 31138 |
| 22x58 | 100 A | 1-pole | 4 - 50 mm ² / AWG 10 - 1/0 | 36 | 6 | 15.9 | 17 | | 31140 |
| 22x58 | | 3-pole | | 108 | 2 | 48.7 | 17 | | 31143 |

LED signals tripped fuse

Fuse holder for cylindrical fuses, standard version with LED 12–72 V AC/DC

| | | | | | | | | | |
|-------|------|--------|--|----|----|-----|----|--|-------|
| 10x38 | 32 A | 1-pole | 0,75 - 25 mm ² / AWG 18 - 4 | 18 | 12 | 5.7 | 17 | | 31930 |
|-------|------|--------|--|----|----|-----|----|--|-------|

LED signals tripped fuse

Fuse holder for cylindrical fuses, standard version, neutral conductor on right

| | | | | | | | | | |
|-------|-------|----------|--|-----|---|------|----|--|-------|
| 10x38 | 32 A | 1-pole+N | 0,75 - 25 mm ² / AWG 18 - 4 | 36 | 6 | 11.3 | 17 | | 31111 |
| 10x38 | | 3-pole+N | | 72 | 3 | 21.7 | 17 | | 31114 |
| 14x51 | 50 A | 1-pole+N | 1,5 - 35 mm ² / AWG 14 - 2 | 54 | 3 | 21.8 | 17 | | 31116 |
| 14x51 | | 3-pole+N | | 108 | 1 | 42.7 | 17 | | 31119 |
| 22x58 | 100 A | 1-pole+N | 4 - 50 mm ² / AWG 10 - 1/0 | 72 | 3 | 35.8 | 17 | | 31121 |
| 22x58 | | 3-pole+N | | 144 | 1 | 67.5 | 17 | | 31124 |

Fuse holder for cylindrical fuses, standard version, neutral conductor on left

| | | | | | | | | | |
|-------|-------|----------|---------------------------------------|-----|---|------|----|--|-------|
| 14x51 | 50 A | 3-pole+N | 1,5 - 35 mm ² / AWG 14 - 2 | 108 | 1 | 42.7 | 17 | | 31168 |
| 22x58 | 100 A | 3-pole+N | 4 - 50 mm ² / AWG 10 - 1/0 | 144 | 1 | 67.5 | 17 | | 31171 |

Fuse holder for cylindrical fuses, standard design, integrated neutral conductor (left)

| | | | | | | | | | |
|-------|------|----------|-----------------------|----|----|------|----|--|-------|
| 10x38 | 32 A | 1-pole+N | 1,5 - 35 / AWG 14 - 2 | 18 | 12 | 9.0 | 17 | | 31273 |
| 10x38 | | 3-pole+N | | 54 | 4 | 22.0 | 17 | | 31274 |

N-module

| | | | | | | | | | |
|-------|------|---|--|----|----|-----|----|--|-------|
| 10x38 | 32 A | N | 0,75 - 25 mm ² / AWG 18 - 4 | 18 | 12 | 6.2 | 17 | | 31258 |
|-------|------|---|--|----|----|-----|----|--|-------|



AMBUS®Panel - Fuse holder 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 ² / 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 ² / 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 ² / 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

| | | | | | | | | | |
|-------|-------|--------|---------------------------------------|-----|---|------|----|--|-------|
| 14x51 | 50 A | 1-pole | 1,5 - 35 mm ² / 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 ² / 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

| | | | | | | | | | |
|--------------------|------|--------|--|----|----|------|----|--|-------|
| 10x38 / 1P | 30 A | 1-pole | 0,75 - 25 mm ² / 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

| | | | | | | | | | |
|---------|------|--------|--|------|---|-----|----|--|-------|
| 10x85 * | 32 A | 1-pole | 0,75 - 25 mm ² / AWG 18 - 4 | 22.5 | 5 | 9.2 | 17 | | 31555 |
|---------|------|--------|--|------|---|-----|----|--|-------|

* Also suitable for 14 x 85 fuses



AMBUS®Panel – accessories

for AES holder for cylindrical fuses



Connection sets, 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

| | | | | |
|---|---|-----|----|--------------|
| set for 50 fuse holders 31971 and 31973 | 1 | 1.2 | 17 | 31563 |
|---|---|-----|----|--------------|

Comb-type busbar, length 1m

| Type | Cross-section mm ² | 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 | | | | 10 | 56.2 | 06 | 31012 |
| 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 |
| comb-type busbar, 1-pole, bridge type, pitch 27 mm | 35 | 220 A | 130 A | 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 ² | 50 | 0.1 | 06 | 31027 |
| for 1-pole comb-type busbars 25 mm ² | 20 | 0.1 | 06 | 31042 |
| for 2-pole and 3-pole comb-type busbars 25 mm ² | 20 | 0.2 | 06 | 31552 |
| for 3-pole comb-type busbars 35 mm ² | 10 | 0.2 | 06 | 31084 |

Connection terminal, for comb-type busbars

| Article | Type | Connection mm ² | Rated current | Pack size | Weight kg/100 u. | PG | Part No. |
|---------------------------------------|--------------------------------|----------------------------|---------------|-----------|------------------|----|--------------|
| connection terminal, side connection | for 31101 and 31102 | 6 - 25 | 80 A | 50 | 1.2 | 07 | 31103 |
| connection terminal, front connection | for 31101 and 31102 | | | 50 | 1.2 | 07 | 31157 |
| | 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 | | | 25 | 2.9 | 07 | 31029 |
| connection terminal, front connection | for 31012 | 25 - 95 | 225 A | 25 | 2.9 | 07 | 31085 |
| | for 31057 | | | 3 | 9.0 | 07 | 01198 |
| | for 31056 | | | 3 | 9.3 | 07 | 01228 |

A connection terminal is required for each phase



AMBUS®Panel, fuse holder 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 ² / 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

| | | | | | | | |
|--------------|--------|---|----|----|------|----|-------|
| 30 A / 600 V | 1-pole | 0,75 - 25 mm ² / 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

| | | | | | | | |
|------------------|--------|---|----|----|-----|----|-------|
| 30 A / 12 - 72 V | 1-pole | 0,75 - 25 mm ² / AWG 18 - 4 | 18 | 12 | 6.2 | 17 | 31929 |
|------------------|--------|---|----|----|-----|----|-------|

LED signals tripped fuse

Comb-type busbar, length 1 m, pitch 18 mm

| Type | Cross-section mm ² | 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 busbar

| Type | Connection mm ² | 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 busbar

| Type | Pack size | Weight kg/100 u. | PG | Part No. |
|--|-----------|------------------|----|----------|
| for 1-pole comb-type busbars 25 mm ² | 20 | 0.1 | 06 | 31042 |
| for 2-pole and 3-pole comb-type busbars 25 mm ² | 20 | 0.2 | 06 | 31552 |



AMBUS®Panel - QUADRON®Panel - Fuse holder for Class J

with touch-safe protection, for fuses that comply with UL 248-4



Class J fuse holder, AMBUS®Panel, clip-on mounting, standard version

| Type | Poles | Connection | Width | Pack size | Weight kg/100 u. | PG | | Part No. |
|------------------------|--------|--|-------|-----------|------------------|----|--|----------|
| 30 A / 600 V (21 x 57) | 1-pole | 0,75 - 50 mm ² / 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 (27 x 60) | 1-pole | 2,5 - 50 mm ² / 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, clip-on mounting, standard version with LED 110–600 V AC/DC

| | | | | | | | | |
|------------------------|--------|--|-----|---|------|----|--|-------|
| 30 A / 600 V (21 x 57) | 1-pole | 0,75 - 50 mm ² / AWG 18 - 1 | 36 | 6 | 15.8 | 16 | | 31932 |
| 30 A / 600 V (21 x 57) | 2-pole | | 72 | 3 | 32.2 | 16 | | 31933 |
| 30 A / 600 V (21 x 57) | 3-pole | | 108 | 2 | 48.6 | 16 | | 31934 |
| 60 A / 600 V (27 x 60) | 1-pole | 2,5 - 50 mm ² / AWG 14 - 1 | 40 | 6 | 18.2 | 16 | | 31923 |
| 60 A / 600 V (27 x 60) | 2-pole | | 80 | 3 | 37.0 | 16 | | 31924 |
| 60 A / 600 V (27 x 60) | 3-pole | | 120 | 2 | 55.9 | 16 | | 31925 |

LED signals tripped fuse

Class J fuse holder, QUADRON®Panel, for screwing onto mounting plate

| | | | | | | | | | |
|--------------------------|---|--------|---|-----|---|-------|----|--|-------|
| 100 A / 600 V (29 x 117) | * | 3-pole | 4 - 50 mm ² / AWG 14 - 2/0 | 106 | 1 | 107.0 | 16 | | 33408 |
| 200 A / 600 V (41 x 146) | * | | 35 - 150 mm ² / AWG 2 - MCM300 | 184 | 1 | 203.0 | 16 | | 33409 |
| 400 A / 600 V (54 x 181) | | | 25 - 300 mm ² / AWG 4 - MCM600 | 256 | 1 | 672.0 | 16 | | 33308 |

* Do not use fuse links with sharp-edged blades



QUADRON® Panel, NH fuse bases

Fuse holder for NH fuses and NH-PV fuses



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 | 1500 V | NH 1XL | 3 | 51.0 | 10 | | 03290 |
| both sides screw M12 | * 600 A | 1500 V | 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

| | | | | | | | | |
|---|---------|--------|-------------|---|-------|----|--|--------------|
| incoming connection screw M10, outgoing connection to busbar 2x30x10 | 250 A | 1500 V | NH 1XL | 3 | 58.0 | 10 | | 03289 |
| incoming connection screw M10, outgoing connection to busbar 2x30x10, 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 2x40x10 | * 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. 100W power dissipation Information on rated load factors with regard to current carrying capacity is available on request or at www.woehner.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 mm ² | 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

| | | | | | | | | |
|----------------------|-------|-------|----------------------|--------------|-------|-------|-----|--------------|
| 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 |
| 1 | 288.3 | 10 | | 03767 | | | | |
| both sides screw M12 | NH 3 | 1 | 3 | 110.8 | | 10 | | 03768 |
| | | 3 | 1 | 340.0 | | 10 | | 03769 |



QUADRON®Panel – accessories

for NH fuse holders

**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 fuse base NH 00 | 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 mm ² | 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)

| | | | | | | | |
|------|--|----|----|-----|----|--|--------------|
| 63 A | | 10 | 50 | 2.6 | 10 | | 05188 |
|------|--|----|----|-----|----|--|--------------|

Neutral conductor, disconnectable, screw-on mounting

| Rated current | Type | Length | Connection mm ² | 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

| | | | | | | | | |
|-------|----------------------|-----|-----|----|------|----|--|--------------|
| 160 A | both sides clamp | 60 | 70 | 10 | 9.1 | 10 | | 03193 |
| 160 A | both sides clamp | 125 | 70 | 10 | 14.6 | 10 | | 03173 |
| 250 A | both sides screw M10 | 100 | 120 | 10 | 16.8 | 10 | | 03195 |
| 250 A | both sides screw M10 | 198 | 120 | 10 | 30.6 | 10 | | 03196 |
| 630 A | both sides screw M12 | 100 | 240 | 10 | 25.6 | 10 | | 03197 |
| 630 A | 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 disconnecter size 000 to 3

Type LTS and QCB for panel mounting



NH fuse-switch disconnecter, size 000 to 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 ² | 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 disconnecter, size 4a, 3-pole

| | | | | | | |
|--------------|--------|-------|---|--------|----|-------|
| 2x screw M12 | 1600 A | NH 4a | 1 | 1534.0 | 09 | 33204 |
|--------------|--------|-------|---|--------|----|-------|

NH fuse-switch disconnecter, size 00, 3-pole, switchable, with short touch-safe protection

| | | | | | | |
|--|-------|-------|---|------|----|-------|
| clamp 70 mm ² , with short protection cover | 160 A | NH 00 | 1 | 71.6 | 09 | 33221 |
| screw M8, with short protection cover | | | 1 | 71.9 | 09 | 33222 |

NS fuse-switch disconnecter, size 00 to 3, 3-pole, with electronic fuse monitoring

| | | | | | | |
|--------------------------|-------|-------|---|-------|----|-------|
| clamp 70 mm ² | 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

NH fuse-switch disconnecter, size 00 to 3, 3-pole, with electromechanical fuse monitoring

| | | | | | | |
|--------------------------|-------|-------|---|-------|----|-------|
| clamp 70 mm ² | 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



QUADRON® Panel – accessories

NH fuse-switch disconnecter, size 000 to 3



Comb-type busbars, closed version with end covers

| Type | Cross-section mm ² | 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 busbar

| Type | Connection mm ² | Pack size | Weight kg/100 u. | PG | | Part No. |
|---|----------------------------|-----------|------------------|----|--|--------------|
| for 3-pole comb-type busbar 35 mm ² , suitable for NH-fuse switch disconnecter size 00 with screw connection | 6 - 35 | 3 | 4.0 | 09 | | 33907 |
| for 3-pole comb-type busbar 95 mm ² , suitable for NH-fuse switch disconnecter size 00 with box terminal | 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 / lam. Cu | 1 | 3 | 10.0 | 09 | | 33909 |
| clamp connector | 1,5 - 70 / 12 x 1 - 10 | 00 | 3 | 1.5 | 09 | | 03727 |
| clamp connector for Cu cables | 70 - 150 / 18 x 2 - 14 | 1 | 1 | 6.3 | 09 | | 33163 |
| clamp connector for Cu cables | 120 - 240 / 21 x 1 - 14 | 2 | 1 | 10.6 | 09 | | 33164 |
| clamp connector for Cu cables | 150 - 300 / 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 | 00 | 3 | 3.0 | 09 | | 33224 |
| prism terminal, single, for Cu and Al cables | * 35 - 150 | 1 | 1 | 11.6 | 09 | | 33166 |
| prism terminal, single, for Cu and Al cables | * 50 - 240 | 2 | 1 | 19.9 | 09 | | 33167 |
| prism terminal, single, for Cu and Al cables | * 150 - 300 | 3 | 1 | 24.7 | 09 | | 33168 |
| prism terminal, double, for Cu cables | 2x 35 - 70 | 1 | 1 | 16.6 | 09 | | 33145 |
| prism terminal, double, for Cu cables | 2x 70 - 120 | 2 | 1 | 27.8 | 09 | | 33146 |
| prism terminal, double, for Cu cables | 2x 150 | 3 | 1 | 36.8 | 09 | | 33147 |
| prism terminal, double, for Cu cables | 2x 185 | 3 | 1 | 36.8 | 09 | | 33385 |
| tunnel terminal for screw connection M8 | 1x 2,5 - 16 + 2x 2,5 - 25 | 00 | 3 | 4.2 | 09 | | 01182 |

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

QUADRON® Panel – accessories

NH fuse-switch disconnecter, size 000 to 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 | | 79811 |
| for 33221, 33222 | 00 | 2 | 4.8 | 09 | | 33223 |
| for QCB-NH1 and QCS 320 A | 1 | 2 | 10.7 | 09 | | 33142 |
| for QCB-NH2 | 2 | 2 | 10.9 | 09 | | 33143 |
| for QCB-NH3 | 3 | 2 | 15.6 | 09 | | 33144 |

Cover, for connection area, attachable at the top and bottom

| | | | | | | |
|--|---|---|-----|----|--|--------------|
| for NH fuse switch-disconnector size 2 | 2 | 2 | 4.0 | 09 | | 33418 |
| for NH fuse switch-disconnector size 3, max. 600 A | 3 | 2 | 5.4 | 09 | | 33419 |

Barrier for handle

| | | | | | | |
|--------------------------------------|-----|----|-----|----|--|--------------|
| for closing of handle area from rear | 1-3 | 10 | 2.2 | 09 | | 33155 |
|--------------------------------------|-----|----|-----|----|--|--------------|

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 | | 33219 |
| trim frame, double | 199 x 166 x 2 | 000 | 10 | 3.9 | 09 | | 33220 |
| trim frame, single | 130 x 210 x 2 | 00 | 10 | 1.9 | 09 | | 78893 |
| trim frame, double | 232 x 210 x 2 | 00 | 10 | 2.9 | 09 | | 78105 |
| trim frame, triple | 340 x 210 x 2 | 00 | 10 | 3.8 | 09 | | 78139 |
| trim frame, single | * 143 x 210 x 2 | 00 | 10 | 3.3 | 09 | | 33225 |
| trim frame, double | * 250 x 210 x 2 | 00 | 10 | 5.6 | 09 | | 33226 |
| trim frame | 215 x 330 x 2 | 1 | 1 | 11.7 | 09 | | 33152 |
| trim frame | 248 x 330 x 2 | 2 | 1 | 9.4 | 09 | | 33153 |
| trim frame | 290 x 330 x 2 | 3 | 1 | 13.2 | 09 | | 33154 |

* For 33221, 33222

QUADRON®Panel – accessories

NH fuse-switch disconnecter, size 000 to 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 | | 33917 |
| changeover 250 V AC/5 A, 30 V DC/4 A | 000-3 | 1 | 1.1 | 09 | | 33156 |

33156 not suitable for size 1 fuse-switch disconnecters
Connection for flat plug DIN 46244-A, 2.8 x 0.5 mm

Disconnecter lid interlock

| | | | | | | |
|---|-----|----|-----|----|--|--------------|
| for sealing wire | 000 | 10 | 0.1 | 09 | | 33051 |
| for sealing wire | 00 | 10 | 0.2 | 09 | | 03849 |
| for sealing wire or 3 padlocks with shackle of 4 - 7 mm | 1-3 | 10 | 0.5 | 09 | | 33157 |

Rapid mounting set, for rails in accordance with EN 60715 (TH 35 x 7.5 mm)

| | | | | | | |
|--|-----|---|------|----|--|--------------|
| for 1 mounting rail | 000 | 1 | 0.6 | 09 | | 33247 |
| for 2 mounting rails, rails centre distance 125 mm or 150 mm | 00 | 1 | 18.5 | 09 | | 33193 |
| for 2 mounting rails, rails centre distance 125 mm or 150 mm | 1-2 | 1 | 51.0 | 09 | | 33158 |

Arc chamber

| | | | | | | |
|--|---|---|------|----|--|--------------|
| retrofit package for higher utilisation category | 1 | 3 | 10.7 | 09 | | 33918 |
|--|---|---|------|----|--|--------------|

QUADRON® Panel - Switch disconnecter 160 A - 320 A and size 00 to 1

Type QCS, with snap-action switch mechanism



Switch disconnecter, 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 | | 33542 |
| screw M10 * | 320 A | 184 | 1 | 539.0 | 14 | | 33552 |

* 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 disconnecter, 3-pole switchable, with snap-action switch mechanism, for door coupling rotary handle

| | | | | | | | |
|--|-------|-----|---|-------|----|--|--------------|
| box terminal, for door coupling twist handle * | 160 A | 106 | 1 | 203.0 | 14 | | 33545 |
| screw M10, for door coupling rotary handle * | 320 A | 184 | 1 | 516.0 | 14 | | 33555 |

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 fuse-switch disconnecter with 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 | 33502 |
| box terminal, with electronic fuse monitoring | 125 A | NH 00 | 106 | 1 | 208.0 | 15 | 33507 |
| screw M10 | 250 A | NH 1 | 184 | 1 | 540.0 | 15 | 33512 |

Fuse monitoring on request

NH fuse-switch disconnecter with fuses, 3-pole switchable, with snap-action switch mechanism, for door coupling rotary handle

| | | | | | | | |
|---|-------|-------|-----|---|-------|----|--------------|
| box terminal, for door coupling rotary handle | 125 A | NH 00 | 106 | 1 | 201.6 | 15 | 33505 |
| screw M10, for door coupling rotary handle | 250 A | NH 1 | 184 | 1 | 528.0 | 15 | 33515 |

Additional extension shaft and door coupling rotary handle required

Accessories

| Type | Usable for version | Connection mm ² | 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 | 33915 |
| connecting terminal 120 mm ² | QCS-NH00, QCS 160 A | 120 | 3 | 12.1 | 14 | 33914 |
| box terminal for Cu cables | QCB-NH1, QCS-NH1, QCS 320 A | 35 - 185 / lam. Cu | 3 | 10.0 | 09 | 33909 |
| prism terminal, single, for Cu and Al cables * | | 35 - 150 | 1 | 11.6 | 09 | 33166 |
| prism terminal, double, for Cu cables | | 2x 35 - 70 | 1 | 16.6 | 09 | 33145 |
| cover for cable lugs, top / bottom attachable | | | 2 | 10.7 | 09 | 33142 |
| pilot switch for monitoring the switch position | QCS-NH00 / 1, QCS 160 A / 320 A | | 1 | 1.1 | 14 | 33908 |
| door coupling rotary handle, black, without shaft ** | | | 1 | 57.0 | 14 | 33910 |
| door coupling rotary handle, red-yellow, without shaft ** | | | 1 | 57.0 | 14 | 33911 |
| extension shaft, 290 mm long | | | 1 | 13.0 | 14 | 33912 |
| extension shaft, 490 mm long | | | 1 | 22.0 | 14 | 33913 |

For current capacity of the terminals visit 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 - NH fuse-switch disconnecter with fuses size 00 to 3

Type LTS-F

**NH fuse-switch disconnecter with 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 | | 33337 |
| screw M10, graphite-grey handle | 250 A | NH 1 | 1 | 726.0 | 15 | | 33338 |
| screw M10, graphite-grey handle | 400 A | NH 2 | 1 | 760.0 | 15 | | 33339 |
| screw M12, graphite-grey handle | 630 A | NH 3 | 1 | 1310.0 | 15 | | 33340 |
| screw M8, red handle | 160 A | NH 00 | 1 | 230.0 | 15 | | 33359 |
| screw M10, red handle | 250 A | NH 1 | 1 | 724.0 | 15 | | 33360 |
| screw M10, red handle | 400 A | NH 2 | 1 | 768.0 | 15 | | 33361 |
| screw M12, red handle | 630 A | NH 3 | 1 | 1280.0 | 15 | | 33362 |

Fuses and terminal compartment covers are not included in the scope of delivery

Terminalspace 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 | | 33350 |
| | LTS-400/630, LTS-F 250/400 | 2 | 12.0 | 14 | | 33351 |
| | LTS-800, LTS-F 630 | 2 | 20.0 | 14 | | 33352 |

Pilot switch, for monitoring the switch setting

| | | | | | | |
|--|------------|---|-----|----|--|--------------|
| 1 n/c + 1 n/o, plug connectors 6.3 x 0.8 | LTS, LTS-F | 1 | 2.5 | 14 | | 33347 |
|--|------------|---|-----|----|--|--------------|

Door coupling drive

| | | | | | | |
|--|------------------------------------|---|------|----|--|--------------|
| door coupling rotary drive, graphite-grey blind cover | LTS-250/400/630 LTS-F 160/250/400 | 1 | 23.5 | 14 | | 33342 |
| | LTS-800 LTS-F 630 | 1 | 44.0 | 14 | | 33343 |
| door coupling rotary drive, for closing with padlocks and door inter-locking | LTS-250/400/630, LTS-F160/250/400 | 1 | 38.0 | 14 | | 33345 |
| | LTS-800, LTS-F630 | 1 | 67.0 | 14 | | 33346 |
| door coupling rotary drive, red/yellow, for closing with padlocks and door inter-locking | LTS-250/400/630, LTS-F 160/250/400 | 1 | 38.0 | 14 | | 33348 |
| | LTS-800, LTS-F 630 | 1 | 56.0 | 14 | | 33349 |
| extension shaft, 300 mm long | LTS-250/400/630, LTS-F 160/250/400 | 1 | 30.0 | 14 | | 33246 |
| | LTS-800, LTS-F 630 | 1 | 57.3 | 14 | | 33283 |
| extension shaft, 550 mm long | LTS-250/400/630, LTS-F 160/250/400 | 1 | 29.0 | 14 | | 33380 |
| | LTS-800, LTS-F 630 | 1 | 38.0 | 14 | | 33381 |

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 ² / 12 x 10 | 3 | 2.9 | 14 | | 33363 |
| clamp connector for Cu cables | QCB-NH1, QCS-NH1, LTS-F 250, LTS 400 | 70 - 150 / 18 x 2 - 14 | 1 | 6.3 | 09 | | 33163 |
| clamp connector for Cu cables | QCB-NH2, LTS-F 400, LTS 630 | 120 - 240 / 21 x 1 - 14 | 1 | 10.6 | 09 | | 33164 |
| clamp connector for Cu cables | QCB-NH3, LTS-F 630, LTS 800 | 150 - 300 / 25 x 1 - 13 | 1 | 12.5 | 09 | | 33165 |
| wedge clamp terminal, single, for Cu and Al cond. | LTS-F 250, LTS 400 | 70 - 150 | 3 | 11.6 | 14 | | 33366 |
| wedge clamp terminal, single, for Cu and Al cond. | LTS-F 400, LTS 630 | 120 - 240 | 3 | 20.0 | 14 | | 33367 |

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

Fuse links not included

CAPUS®Panel - Switch disconnecter 250 A - 800 A

Type LTS



Switch disconnecter, 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 | 33333 |
| | 400 A | 1 | 538.0 | 14 | 33334 |
| | 630 A | 1 | 546.0 | 14 | 33335 |
| screw M12, graphite-grey handle | 800 A | 1 | 944.0 | 14 | 33336 |
| screw M10, red handle | 250 A | 1 | 194.0 | 14 | 33355 |
| | 400 A | 1 | 546.0 | 14 | 33356 |
| | 630 A | 1 | 544.0 | 14 | 33357 |
| screw M12, red handle | 800 A | 1 | 940.0 | 14 | 33358 |

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 | 33350 |
| | LTS-400/630, LTS-F 250/400 | 2 | 12.0 | 14 | 33351 |
| | LTS-800, LTS-F 630 | 2 | 20.0 | 14 | 33352 |

Pilot switch, for monitoring the switch setting

| | | | | | |
|--|------------|---|-----|----|--------------|
| 1 n/c + 1 n/o, plug connectors 6.3 x 0.8 | LTS, LTS-F | 1 | 2.5 | 14 | 33347 |
|--|------------|---|-----|----|--------------|

Door coupling drive

| | | | | | |
|--|------------------------------------|---|------|----|--------------|
| door coupling rotary drive, graphit-grey blind cover | LTS-250/400/630 LTS-F 160/250/400 | 1 | 23.5 | 14 | 33342 |
| | LTS-800 LTS-F 630 | 1 | 44.0 | 14 | 33343 |
| door coupling rotary drive, for closing with padlocks and door inter-locking | LTS-250/400/630, LTS-F160/250/400 | 1 | 38.0 | 14 | 33345 |
| | LTS-800, LTS-F630 | 1 | 67.0 | 14 | 33346 |
| door coupling rotary drive, red/yellow, for closing with padlocks and door inter-locking | LTS-250/400/630, LTS-F 160/250/400 | 1 | 38.0 | 14 | 33348 |
| | LTS-800, LTS-F 630 | 1 | 56.0 | 14 | 33349 |
| extension shaft, 300 mm long | LTS-250/400/630, LTS-F 160/250/400 | 1 | 30.0 | 14 | 33246 |
| | LTS-800, LTS-F 630 | 1 | 57.3 | 14 | 33283 |
| extension shaft, 550 mm long | LTS-250/400/630, LTS-F 160/250/400 | 1 | 29.0 | 14 | 33380 |
| | LTS-800, LTS-F 630 | 1 | 38.0 | 14 | 33381 |

Connection accessories

| Type | Usable with | Connection mm ² | Pack size | Weight kg/100 u. | PG | Part No. |
|---|--------------------------------------|----------------------------|-----------|------------------|----|--------------|
| clamp connector for lam. Cu | LTS 250 | 14 x 9 | 3 | 3.5 | 14 | 33364 |
| clamp connector for Cu cables | QCB-NH1, QCS-NH1, LTS-F 250, LTS 400 | 18 x 10 | 1 | 6.3 | 09 | 33163 |
| clamp connector for Cu cables | QCB-NH2, LTS-F 400, LTS 630 | 21 x 13 | 1 | 10.6 | 09 | 33164 |
| clamp connector for Cu cables | QCB-NH3, LTS-F 630, LTS 800 | 25 x 13 | 1 | 12.5 | 09 | 33165 |
| wedge clamp terminal, single, for Cu and Al cond. * | LTS 250 | 70 – 120 | 3 | 6.7 | 14 | 33365 |
| wedge clamp terminal, single, for Cu and Al cond. * | LTS-F 250, LTS 400 | 70 – 150 | 3 | 11.6 | 14 | 33366 |
| wedge clamp terminal, single, for Cu and Al cond. * | LTS-F 400, LTS 630 | 120 – 240 | 3 | 20.0 | 14 | 33367 |

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

CAPUS®Panel - Switch disconnecter 125 A - 3150 A

Type LTS-T

**Switch disconnecter, 3-pole, without rotary handle**

| Type | Rated current | Pack size | Weight kg/100 u. | PG | | Part No. |
|---------------------------------|---------------|-----------|------------------|----|--|--------------|
| box terminal 95 mm ² | 125 A | 1 | 80.0 | 14 | | 33424 |
| screw M8 | 125 A | 1 | 80.0 | 14 | | 33425 |
| box terminal 95 mm ² | 160 A | 1 | 80.0 | 14 | | 33426 |
| screw M8 | 160 A | 1 | 80.0 | 14 | | 33427 |
| screw M10 | 200 A | 1 | 80.0 | 14 | | 33428 |
| screw M10 | 250 A | 1 | 90.0 | 14 | | 33429 |
| screw M10 | 315 A | 1 | 170.0 | 14 | | 33430 |
| screw M10 | 400 A | 1 | 170.0 | 14 | | 33431 |
| screw M10 | 630 A | 1 | 420.0 | 14 | | 33432 |
| screw M10 | 800 A | 1 | 420.0 | 14 | | 33433 |
| screw M14 | * 1250 A | 1 | 700.0 | 14 | | 33434 |
| screw M14 | * 1600 A | 1 | 1850.0 | 14 | | 33435 |
| screw M14 | * 1800 A | 1 | 1850.0 | 14 | | 33436 |
| screw M12 | * 2000 A | 1 | 5500.0 | 14 | | 33437 |
| screw M12 | * 2500 A | 1 | 5500.0 | 14 | | 33438 |
| screw M12 | * 3150 A | 1 | 5600.0 | 14 | | 33439 |

Rated current at 400 V AC

* Delivery time on request

Switch disconnecter, 3-pole + N, without rotary handle

| Type | Rated current | Pack size | Weight kg/100 u. | PG | | Part No. |
|---------------------------------|---------------|-----------|------------------|----|--|--------------|
| box terminal 95 mm ² | 125 A | 1 | 90.0 | 14 | | 33440 |
| screw M8 | 125 A | 1 | 90.0 | 14 | | 33441 |
| box terminal 95 mm ² | 160 A | 1 | 90.0 | 14 | | 33442 |
| screw M8 | 160 A | 1 | 90.0 | 14 | | 33443 |
| screw M10 | 200 A | 1 | 90.0 | 14 | | 33444 |
| screw M10 | 250 A | 1 | 100.0 | 14 | | 33445 |
| screw M10 | 315 A | 1 | 190.0 | 14 | | 33446 |
| screw M10 | 400 A | 1 | 190.0 | 14 | | 33447 |
| screw M10 | 630 A | 1 | 450.0 | 14 | | 33448 |
| screw M10 | 800 A | 1 | 450.0 | 14 | | 33449 |
| screw M14 | * 1250 A | 1 | 760.0 | 14 | | 33450 |
| screw M14 | * 1600 A | 1 | 2100.0 | 14 | | 33451 |
| screw M12 | * 2000 A | 1 | 7500.0 | 14 | | 33452 |
| screw M12 | * 2500 A | 1 | 7500.0 | 14 | | 33453 |
| screw M12 | * 3150 A | 1 | 7600.0 | 14 | | 33454 |

* Delivery time on request

CAPUS®Panel – handles and accessories

for switch disconnecter type LTS-T



Handles

| Type | Usable with | Pack size | Weight | PG | | Part No. |
|--|--------------------------------|-----------|--------|----|--|--------------|
| door coupling rotary handle, graphite grey, with shaft | LTS-T 125,160,200,250 | 1 | 25.0 | 14 | | 33921 |
| | LTS-T 315,400 | 1 | 35.0 | 14 | | 33922 |
| | LTS-T 630,800 | 1 | 50.0 | 14 | | 33923 |
| | LTS-T 1250 | 1 | 80.0 | 14 | | 33924 |
| | LTS-T 1600,1800,2000,2500,3150 | 1 | 80.0 | 14 | | 33925 |
| handle for door coupling drive, yellow-red | LTS-T 125,160,200,250 | 1 | 25.0 | 14 | | 33970 |
| | LTS-T 315,400 | 1 | 35.0 | 14 | | 33971 |
| | LTS-T 630,800 | 1 | 50.0 | 14 | | 33972 |
| | LTS-T 1250 | 1 | 80.0 | 14 | | 33973 |
| | LTS-T 1600,1800,2000,2500,3150 | 1 | 80.0 | 14 | | 33974 |
| direct rotary handle, graphite grey | LTS-T 125,160,200,250 | 1 | 5.0 | 14 | | 33926 |
| | LTS-T 315,400 | 1 | 20.0 | 14 | | 33927 |
| | LTS-T 630,800 | 1 | 25.0 | 14 | | 33928 |
| | LTS-T 1250 | 1 | 30.0 | 14 | | 33929 |
| | LTS-T 1600,1800,2000,2500,3150 | 1 | 30.0 | 14 | | 33930 |

Terminal cover

| | | | | | | |
|---|-----------------|---|------|----|--|--------------|
| for covering all terminals at one side of the switch, transparent | LTS-T 315 | 1 | 10.0 | 14 | | 33939 |
| | LTS-T 630,800 | 1 | 15.0 | 14 | | 33940 |
| | LTS-T 1250 | 1 | 20.0 | 14 | | 33941 |
| | LTS-T 1600,1800 | 1 | 45.0 | 14 | | 33942 |

Terminal space cover

| | | | | | | |
|---|-----------------------|---|------|----|--|--------------|
| for covering all terminals at one side of the switch, transparent | LTS-T 125,160,200,250 | 1 | 10.0 | 14 | | 33943 |
| | LTS-T 315,400 | 1 | 15.0 | 14 | | 33944 |
| | LTS-T 630,800 | 1 | 20.0 | 14 | | 33945 |

Pilot switch, for monitoring of the lid position

| | | | | | | |
|--|---------------|---|------|----|--|--------------|
| 1 n/c + 1 n/o, plug connectors 6.3 x 0.8 | LTS-T, LTSU-T | 1 | 5.0 | 14 | | 33946 |
| 2 n/c + 2 n/o, plug connectors 6.3 x 0.8 | | 1 | 10.0 | 14 | | 33947 |

Rapid mounting set

| | | | | | | |
|--|---------------|---|-----|----|--|--------------|
| rapid mounting set for 1 mounting rail TH 35 | LTS-T 125,160 | 1 | 4.0 | 14 | | 33177 |
|--|---------------|---|-----|----|--|--------------|

CAPUS®Panel - Changeover switch 125 A - 1000 A

Type LTSU-T

**Changeover switch, 3-pole, without rotary handle**

| Type | Rated current | Pack size | Weight kg/100 u. | PG | | Part No. |
|-----------|---------------|-----------|------------------|----|--|--------------|
| screw M8 | * 125 A | 1 | 180.0 | 14 | | 33455 |
| screw M8 | * 160 A | 1 | 180.0 | 14 | | 33456 |
| screw M10 | * 200 A | 1 | 190.0 | 14 | | 33457 |
| screw M10 | 250 A | 1 | 550.0 | 14 | | 33458 |
| screw M10 | 315 A | 1 | 550.0 | 14 | | 33459 |
| screw M10 | 400 A | 1 | 550.0 | 14 | | 33460 |
| screw M12 | 630 A | 1 | 1260.0 | 14 | | 33461 |
| screw M12 | 800 A | 1 | 1260.0 | 14 | | 33462 |
| screw M14 | 1000 A | 1 | 2430.0 | 14 | | 33463 |

Rated current at 400 V AC

* Bridge cable required; 6 or 8 connections available

Changeover switch, 3-pole + N, without rotary handle

| | | | | | | |
|-----------|---------|---|--------|----|--|--------------|
| screw M8 | * 125 A | 1 | 210.0 | 14 | | 33464 |
| screw M8 | * 160 A | 1 | 210.0 | 14 | | 33465 |
| screw M10 | * 200 A | 1 | 220.0 | 14 | | 33466 |
| screw M10 | 250 A | 1 | 590.0 | 14 | | 33467 |
| screw M10 | 315 A | 1 | 590.0 | 14 | | 33468 |
| screw M10 | 400 A | 1 | 590.0 | 14 | | 33469 |
| screw M12 | 630 A | 1 | 1370.0 | 14 | | 33470 |
| screw M12 | 800 A | 1 | 1370.0 | 14 | | 33471 |
| screw M14 | 1000 A | 1 | 2680.0 | 14 | | 33472 |

Rated current at 400 V AC

* Bridge cable required; 6 or 8 connections available

Handles

| | | | | | | |
|--|--------------------|---|------|----|--|--------------|
| door coupling rotary handle, graphite grey, with shaft | LTSU-T 125,160,200 | 1 | 25.0 | 14 | | 33931 |
| | LTSU-T 250,400 | 1 | 50.0 | 14 | | 33932 |
| | LTSU-T 630,800 | 1 | 70.0 | 14 | | 33933 |
| | LTSU-T 1000 | 1 | 80.0 | 14 | | 33934 |
| direct rotary handle, graphite grey | LTSU-T 125,160,200 | 1 | 5.0 | 14 | | 33935 |
| | LTSU-T 250,400 | 1 | 5.0 | 14 | | 33936 |
| | LTSU-T 630,800 | 1 | 30.0 | 14 | | 33937 |
| | LTSU-T 1000 | 1 | 30.0 | 14 | | 33938 |

Terminal cover

| | | | | | | |
|--|----------------|---|------|----|--|--------------|
| terminal cover, transparent, 3-pole, for incoming II | LTSU-T 200-400 | 1 | 10.0 | 14 | | 33963 |
| terminal cover, transparent, 3-pole, for incoming I | | 1 | 10.0 | 14 | | 33964 |
| terminal cover, transparent, 3-pole, for outgoing | | 1 | 10.0 | 14 | | 33968 |
| terminal cover, transparent, 4-pole, for incoming I and II | LTSU-T 250-400 | 1 | 10.0 | 14 | | 33967 |
| terminal cover, transparent, 4-pole, for outgoing | | 1 | 10.0 | 14 | | 33969 |

Pilot switch

| | | | | | | |
|--|----------------|---|------|----|--|--------------|
| 1 n/c + 1 n/o, plug connectors 6.3 x 0.8 | LTSU-T, LTSU-T | 1 | 5.0 | 14 | | 33946 |
| 2 n/c + 2 n/o, plug connectors 6.3 x 0.8 | | 1 | 10.0 | 14 | | 33947 |

Accessories

for load switch LTS-T and load 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 | | 33954 |
| extension shaft, 376 mm long | LTS-T 315/400, LTSU-T 250-400 | 1 | 31.0 | 14 | | 33955 |
| extension shaft, 345 mm long | LTS-T 630/800 | 1 | 52.0 | 14 | | 33956 |
| extension shaft, 336 mm long | LTS-T 1250, LTSU-T 630-1000 | 1 | 52.0 | 14 | | 33957 |
| extension shaft, 485 mm long | LTS-T 1600/1800 | 1 | 75.0 | 14 | | 33958 |
| extension shaft, 387 mm long | LTS-T 125-250, LTSU-T 125-200 | 1 | 17.0 | 14 | | 33959 |
| extension shaft, 536 mm long | LTS-T 315/400 | 1 | 43.0 | 14 | | 33960 |
| extension shaft, 525 mm long | LTS-T 630/800 | 1 | 85.0 | 14 | | 33961 |
| extension shaft, 635 mm long | LTS-T 1600/1800 | 1 | 100.0 | 14 | | 33962 |

Accessories

WÖEHNER 01613

CE



D0 fuses

in accordance with DIN VDE 0636-3 / IEC / EN 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 | 03 | | 01685 |
| D01 fuse link 4 A | | | 10 | 0.6 | 03 | | 01686 |
| D01 fuse link 6 A | | | 10 | 0.6 | 03 | | 01687 |
| D01 fuse link 10 A | | | 10 | 0.6 | 03 | | 01688 |
| D01 fuse link 16 A | | | 10 | 0.7 | 03 | | 01689 |
| D02 fuse link 20 A | | | 10 | 1.2 | 03 | | 01690 |
| D02 fuse link 25 A | | | 10 | 1.3 | 03 | | 01691 |
| D02 fuse link 35 A | | | 10 | 1.3 | 03 | | 01692 |
| D02 fuse link 50 A | | | 10 | 1.5 | 03 | | 01693 |
| D02 fuse link 63 A | | | 10 | 1.5 | 03 | | 01694 |

Ferrule gauge ring for E14

| | | | | | |
|---------------------|----|-----|----|--|--------------|
| D01 gauge ring 2 A | 50 | 0.1 | 03 | | 01715 |
| D01 gauge ring 4 A | 50 | 0.1 | 03 | | 01716 |
| D01 gauge ring 6 A | 50 | 0.1 | 03 | | 01717 |
| D01 gauge ring 10 A | 50 | 0.1 | 03 | | 01718 |

Ferrule gauge ring for E18

| | | | | | |
|-----------------------------|----|-----|----|--|--------------|
| special D01 gauge ring 2 A | 50 | 0.1 | 03 | | 01724 |
| special D01 gauge ring 4 A | 50 | 0.1 | 03 | | 01725 |
| special D01 gauge ring 6 A | 50 | 0.1 | 03 | | 01726 |
| special D01 gauge ring 10 A | 50 | 0.1 | 03 | | 01727 |
| special D01 gauge ring 16 A | 50 | 0.1 | 03 | | 01728 |
| D02 gauge ring 20 A | 50 | 0.1 | 03 | | 01719 |
| D02 gauge ring 25 A | 50 | 0.1 | 03 | | 01720 |
| D02 gauge ring 35 A | 50 | 0.1 | 03 | | 01721 |
| D02 gauge ring 50 A | 50 | 0.1 | 03 | | 01722 |

D0 fuses

in accordance with DIN VDE 0636-3 / IEC / EN 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 | 03 | | 01103 |
| D01 screw cap, plastic | | 20 | 1.2 | 03 | | 31005 |
| D02 screw cap, porcelain | E 18 | 20 | 1.8 | 03 | | 01104 |
| D02 screw cap, plastic | | 20 | 1.3 | 03 | | 31006 |
| D02 screw cap, plastic, with reducer for D01 | | 20 | 1.4 | 03 | | 31104 |

Retaining cap

| | | | | | | |
|------------------------------------|------|----|-----|----|--|--------------|
| locking cap D01 version "industry" | E 14 | 36 | 1.1 | 03 | | 31909 |
| locking cap D01 version "utility" | | 36 | 1.1 | 03 | | 31908 |
| locking cap D02 version "industry" | E 18 | 36 | 1.1 | 03 | | 31910 |
| locking cap D02 version "utility" | | 36 | 1.1 | 03 | | 31904 |

Special retaining spring

| Size | Rated current | Pack size | Weight kg/100 u. | PG | | Part No. |
|--|---------------|-----------|------------------|----|--|--------------|
| special-retaining spring for D 01 - E 18 | 2 - 16 A | 50 | 0.1 | 03 | | 01729 |

Gauge ring tool

| | | | | | | |
|-----------|--|---|-----|----|--|--------------|
| D01 - D03 | | 1 | 2.8 | 03 | | 01730 |
|-----------|--|---|-----|----|--|--------------|

Special key for retaining cap

| | | | | | | |
|-----------------------------|--|---|-----|----|--|--------------|
| "industry" version D and D0 | | 1 | 3.6 | 03 | | 31913 |
|-----------------------------|--|---|-----|----|--|--------------|

D fuses

in accordance with DIN VDE 0636-3 / IEC / EN 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 / 50 kA DC | E 27 | 5 | 2.7 | 03 | | 01670 |
| D-fuse link 4 A | | | | 5 | 2.8 | 03 | | 01671 |
| D-fuse link 6 A | | | | 5 | 2.8 | 03 | | 01672 |
| D-fuse link 10 A | | | | 5 | 2.8 | 03 | | 01673 |
| D-fuse link 16 A | | | | 5 | 2.9 | 03 | | 01674 |
| D-fuse link 20 A | | | | 5 | 3.1 | 03 | | 01675 |
| D-fuse link 25 A | | | | 5 | 3.2 | 03 | | 01676 |
| D-fuse link 35 A | | | | E 33 | 5 | 4.8 | 03 | |
| D-fuse link 50 A | | | 5 | | 5.0 | 03 | | 01678 |
| D-fuse link 63 A | | | 5 | | 5.2 | 03 | | 01679 |

Screw-in gauge ring

| | | | | | | |
|--------------------------|-------------|------|-----|-----|----|--------------|
| screw-in gauge ring 2 A | E 27 / E 33 | 25 | 1.3 | 03 | | 01741 |
| screw-in gauge ring 4 A | | 25 | 1.2 | 03 | | 01701 |
| screw-in gauge ring 6 A | | 25 | 1.2 | 03 | | 01702 |
| screw-in gauge ring 10 A | | 25 | 1.2 | 03 | | 01703 |
| screw-in gauge ring 16 A | | 25 | 1.2 | 03 | | 01704 |
| screw-in gauge ring 20 A | | 25 | 1.2 | 03 | | 01705 |
| screw-in gauge ring 25 A | | 25 | 1.2 | 03 | | 01706 |
| screw-in gauge ring 35 A | | E 33 | 25 | 2.0 | 03 | |
| screw-in gauge ring 50 A | 25 | | 2.0 | 03 | | 01708 |
| screw-in gauge ring 63 A | 25 | | 2.0 | 03 | | 01709 |

Gauge ring

| | | | | | | |
|-----------------|------|------|-----|-----|----|--------------|
| gauge ring 2 A | E 27 | 50 | 0.4 | 03 | | 01541 |
| gauge ring 4 A | | 50 | 0.4 | 03 | | 01542 |
| gauge ring 6 A | | 50 | 0.4 | 03 | | 01543 |
| gauge ring 10 A | | 50 | 0.4 | 03 | | 01544 |
| gauge ring 16 A | | 50 | 0.4 | 03 | | 01545 |
| gauge ring 20 A | | 50 | 0.4 | 03 | | 01546 |
| gauge ring 25 A | | 50 | 0.4 | 03 | | 01547 |
| gauge ring 35 A | | E 33 | 50 | 0.4 | 03 | |
| gauge ring 50 A | 50 | | 0.4 | 03 | | 01549 |
| gauge ring 63 A | 50 | | 0.4 | 03 | | 01550 |

D fuses

in accordance with DIN VDE 0636-3 / IEC / EN 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 | 03 | | 01098 |
| D-screw cap, plastic | | | 20 | 2.8 | 03 | | 31098 |
| D-screw cap, porcelain | E 33 | | 20 | 7.9 | 03 | | 01100 |
| D-screw cap, plastic | | | 20 | 4.8 | 03 | | 31100 |

Retaining cap

| | | | | | | | |
|-------------------------------------|------|-------|----|-----|----|--|--------------|
| locking cap DII version "industry" | E 27 | 500 V | 20 | 1.7 | 03 | | 31911 |
| locking cap DII version "utility" | | | 20 | 1.7 | 03 | | 31905 |
| locking cap DIII version "industry" | E 33 | | 10 | 2.6 | 03 | | 31912 |
| locking cap DIII version "utility" | | | 10 | 2.6 | 03 | | 31906 |

Gauge screw key

| Type | Pack size | Weight kg/100 u. | PG | | Part No. |
|-------------|-----------|------------------|----|--|--------------|
| E 27 / E 33 | 1 | 4.7 | 03 | | 01998 |

Gauge screw key

| | | | | | |
|-------------|---|-----|----|--|--------------|
| E 27 / E 33 | 1 | 3.7 | 03 | | 01059 |
|-------------|---|-----|----|--|--------------|

Special key for retaining cap

| | | | | | |
|-----------------------------|---|-----|----|--|--------------|
| "industry" version D and D0 | 1 | 3.6 | 03 | | 31913 |
|-----------------------------|---|-----|----|--|--------------|

NH fuses

in accordance with DIN VDE 0636-2 / IEC / EN 60269-1



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 | 10 | 03243 | |
| NH 000 | 6 A | 500 V | | 3 | 12.2 | 10 | 03523 | |
| NH 000 | 10 A | | | 3 | 12.2 | 10 | 03524 | |
| NH 000 | 16 A | | | 3 | 12.2 | 10 | 03525 | |
| NH 000 | 20 A | | | 3 | 12.2 | 10 | 03526 | |
| NH 000 | 25 A | | | 3 | 12.2 | 10 | 03527 | |
| NH 000 | 35 A | | | 3 | 12.2 | 10 | 03528 | |
| NH 000 | 50 A | | | 3 | 12.2 | 10 | 03529 | |
| NH 000 | 63 A | | | 3 | 12.2 | 10 | 03530 | |
| NH 000 | 80 A | | | 3 | 12.2 | 10 | 03531 | |
| NH 000 | 100 A | | | 3 | 12.2 | 10 | 03532 | |
| NH 00 | 125 A | | | 440 V | 3 | 18.3 | 10 | 03533 |
| NH 00 | 160 A | | | | 3 | 18.3 | 10 | 03534 |
| NH 00 | 6 A | | 690 V | 250 V | 3 | 12.7 | 10 | 03908 |
| NH 00 | 10 A | 3 | | | 12.7 | 10 | 03909 | |
| NH 00 | 16 A | 3 | | | 12.7 | 10 | 03910 | |
| NH 00 | 20 A | 3 | | | 12.7 | 10 | 03911 | |
| NH 00 | 25 A | 3 | | | 12.7 | 10 | 03912 | |
| NH 00 | 32 A | 3 | | | 12.7 | 10 | 03913 | |
| NH 00 | 35 A | 3 | | | 12.7 | 10 | 03914 | |
| NH 00 | 40 A | 3 | | | 12.7 | 10 | 03915 | |
| NH 00 | 50 A | 3 | | | 12.7 | 10 | 03916 | |
| NH 00 | 63 A | 3 | | | 12.7 | 10 | 03917 | |
| NH 00 | 80 A | 3 | | | 19.0 | 10 | 03918 | |
| NH 00 | 100 A | 3 | | | 20.5 | 10 | 03919 | |

NH fuses in accordance with DIN VDE 0636-2 of 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 | 10 | 03161 |
| NH 1 | 250 A | 3 | 14.9 | 10 | 03162 |
| NH 2 | 400 A | 3 | 20.7 | 10 | 03163 |
| NH 3 | 630 A | 3 | 28.0 | 10 | 03164 |
| NH 4a | 1600 A | 3 | 85.0 | 10 | 03185 |

NH universal slip-on handle

| Size | Type | Pack size | Weight kg/100 u. | PG | Part No. |
|-------|----------------|-----------|------------------|----|--------------|
| 000-3 | without sleeve | 1 | 28.4 | 10 | 03502 |

NH fuses

in accordance with DIN VDE 0636-2 / IEC / EN 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 | 10 | | 03550 | |
| | | | 35 A | 3 | 26.3 | 10 | | 03552 | |
| | | | 50 A | 3 | 26.3 | 10 | | 03553 | |
| | | | 80 A | 3 | 26.3 | 10 | | 03555 | |
| | | | 100 A | 3 | 26.3 | 10 | | 03556 | |
| | | | 125 A | 3 | 26.3 | 10 | | 03557 | |
| | | | 160 A | 3 | 26.3 | 10 | | 03558 | |
| | | | 200 A | 3 | 26.3 | 10 | | 03559 | |
| | | | 224 A | 3 | 26.3 | 10 | | 03560 | |
| | 250 A | 3 | 26.3 | 10 | | 03561 | | | |
| | 690 V | 250 V | 160 A | 3 | 35.0 | 10 | | 03929 | |
| | | | 200 A | 3 | 35.0 | 10 | | 03930 | |
| | | | 250 A | 3 | 35.0 | 10 | | 03924 | |
| | NH 2 | 500 V | 440 V | 100 A | 3 | 47.8 | 10 | | 03566 |
| 160 A | | | | 3 | 47.8 | 10 | | 03568 | |
| 200 A | | | | 3 | 47.8 | 10 | | 03569 | |
| 224 A | | | | 3 | 47.8 | 10 | | 03570 | |
| 250 A | | | | 3 | 47.8 | 10 | | 03571 | |
| 300 A | | | | 3 | 47.8 | 10 | | 03572 | |
| 315 A | | | | 3 | 47.8 | 10 | | 03573 | |
| 250 V | | | 355 A | 3 | 47.8 | 10 | | 03574 | |
| | | | 400 A | 3 | 47.8 | 10 | | 03575 | |
| | | | 690 V | 250 A | 3 | 62.6 | 10 | | 03942 |
| 315 A | | 3 | | 62.6 | 10 | | 03943 | | |
| NH 3 | | 500 V | | 315 A | 3 | 65.4 | 10 | | 03577 |
| | | | | 400 A | 3 | 65.4 | 10 | | 03579 |
| | | | 500 A | 3 | 65.4 | 10 | | 03581 | |
| | 690 V | 630 A | 3 | 65.4 | 10 | | 03582 | | |
| | | 400 A | 3 | 96.0 | 10 | | 03946 | | |
| | | 500 A | 3 | 105.0 | 10 | | 03947 | | |
| NH 4a | 500 V | 440 V | 800 A | 1 | 260.0 | 10 | | 03181 | |
| | | | 1000 A | 1 | 260.0 | 10 | | 03182 | |
| | | | 1250 A | 1 | 266.0 | 10 | | 03183 | |

Cylindrical fuses gG

in accordance with IEC 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 | 17 | | 31008 | |
| | 2 A | | | 0.7 W | 10 | 0.6 | 17 | | 31182 | |
| | 4 A | | | 0.8 W | 10 | 0.6 | 17 | | 31183 | |
| | 6 A | | | 0.9 W | 10 | 0.6 | 17 | | 31184 | |
| | 8 A | | | 0.9 W | 10 | 0.6 | 17 | | 31009 | |
| | 10 A | | | 1.3 W | 10 | 0.6 | 17 | | 31185 | |
| | 12 A | | | 1.3 W | 10 | 0.6 | 17 | | 31010 | |
| | 16 A | | | 1.9 W | 10 | 0.6 | 17 | | 31186 | |
| | 20 A | | | 2.3 W | 10 | 0.6 | 17 | | 31187 | |
| | 25 A | | | 2.8 W | 10 | 0.6 | 17 | | 31188 | |
| | 32 A | | | 3.0 W | 10 | 0.6 | 17 | | 31189 | |
| 14x51 | 2 A | 690 V | 80 kA | 0.8 W | 10 | 1.9 | 17 | | 31011 | |
| | 6 A | | | 1.0 W | 10 | 1.9 | 17 | | 31017 | |
| | 10 A | | | 1.8 W | 10 | 1.9 | 17 | | 31190 | |
| | 16 A | | | 80 kA | 2.5 W | 10 | 1.9 | 17 | | 31191 |
| | 20 A | | | | 3.0 W | 10 | 1.9 | 17 | | 31192 |
| | 25 A | 3.5 W | 10 | | 1.9 | 17 | | 31193 | | |
| | 32 A | 500 V | 3.8 W | | 10 | 1.9 | 17 | | 31194 | |
| | 40 A | | 4.4 W | | 10 | 1.9 | 17 | | 31195 | |
| | 50 A | 400 V | 120 kA | 4.7 W | 10 | 1.9 | 17 | | 31196 | |
| | 22x58 | 32 A | 690 V | 80 kA | 4.3 W | 10 | 5.0 | 17 | | 31198 |
| 40 A | | 5.1 W | | | 10 | 5.0 | 17 | | 31199 | |
| 50 A | | 5.5 W | | | 10 | 5.0 | 17 | | 31200 | |
| 63 A | | 6.7 W | | | 10 | 5.0 | 17 | | 31201 | |
| 80 A | | 500 V | 120 kA | 8.0 W | 10 | 5.0 | 17 | | 31202 | |
| 100 A | | | | 9.0 W | 10 | 5.0 | 17 | | 31203 | |
| 125 A | | | | 400 V | 12.5 W | 10 | 5.0 | 17 | | 31204 |

Fuse link gG (gL), with striker

| | | | | | | | | | | |
|-------|------|-------|-------|--------|-------|-----|-----|----|--------------|--------------|
| 14x51 | 6 A | 500 V | 80 kA | 1.1 W | 10 | 2.0 | 17 | | 31366 | |
| 14x51 | 10 A | | | 1.3 W | 10 | 2.0 | 17 | | 31368 | |
| 14x51 | 16 A | | | 2.0 W | 10 | 2.0 | 17 | | 31370 | |
| 14x51 | 20 A | | | 2.5 W | 10 | 2.0 | 17 | | 31371 | |
| 14x51 | 25 A | | | 3.3 W | 10 | 2.0 | 17 | | 31372 | |
| 14x51 | 32 A | | | 120 kA | 3.5 W | 10 | 2.0 | 17 | | 31373 |
| 14x51 | 40 A | | | | 4.8 W | 10 | 2.0 | 17 | | 31374 |
| 22x58 | 50 A | 690 V | 80 kA | 5.2 W | 10 | 5.2 | 17 | | 31385 | |
| 22x58 | 63 A | 500 V | | 6.9 W | 10 | 5.2 | 17 | | 31386 | |
| 22x58 | 80 A | | | 7.8 W | 10 | 5.2 | 17 | | 31387 | |

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 | 17 | | 31205 |
| | 2 A | | | 1.0 W | 10 | 0.6 | 17 | | 31206 |
| | 4 A | | | 1.1 W | 10 | 0.6 | 17 | | 31207 |
| | 6 A | | | 1.6 W | 10 | 0.6 | 17 | | 31208 |
| | 10 A | | | 2.1 W | 10 | 0.6 | 17 | | 31209 |
| | 12 A | | | 3.1 W | 10 | 0.6 | 17 | | 31210 |
| | 16 A | | | 4.4 W | 10 | 0.6 | 17 | | 31211 |
| | 20 A | | | 5.8 W | 10 | 0.6 | 17 | | 31212 |
| | 25 A | | | 6.8 W | 10 | 0.6 | 17 | | 31213 |
| | 30 A | | | 8.2 W | 10 | 0.6 | 17 | | 31214 |
| 14x51 | 10 A | | | 2.6 W | 10 | 1.9 | 17 | | 31215 |
| | 16 A | | | 4.7 W | 10 | 1.9 | 17 | | 31216 |
| | 20 A | | | 6.0 W | 10 | 1.9 | 17 | | 31217 |
| | 32 A | | | 9.5 W | 10 | 1.9 | 17 | | 31219 |
| | 40 A | | | 10.0 W | 10 | 1.9 | 17 | | 31220 |
| | 50 A | | | 12.0 W | 10 | 1.9 | 17 | | 31221 |
| 22x58 | | | | 15.0 W | 10 | 5.0 | 17 | | 31226 |
| | 63 A | | | 16.0 W | 10 | 5.0 | 17 | | 31227 |
| | 80 A | | | 18.0 W | 10 | 5.0 | 17 | | 31228 |
| | 100 A | | | 19.0 W | 10 | 5.0 | 17 | | 31229 |

Fuse link gPV, for photovoltaic applications

| | | | | | | | | | |
|-------|------|--------|-------|-------|----|-----|----|--|-------|
| 10x38 | 8 A | 1000 V | 30 kA | 1.6 W | 10 | 0.6 | 17 | | 31543 |
| | 10 A | | | 2.0 W | 10 | 0.6 | 17 | | 31544 |
| | 12 A | | | 2.4 W | 10 | 0.6 | 17 | | 31545 |
| | 16 A | | | 2.1 W | 10 | 0.6 | 17 | | 31546 |
| | 20 A | | | 2.5 W | 10 | 0.6 | 17 | | 31547 |
| 14x85 | 16 A | 1100 V | | 3.8 W | 20 | 2.7 | 17 | | 31560 |
| | 20 A | | | 4.7 W | 20 | 2.7 | 17 | | 31559 |
| | 25 A | | | 5.9 W | 20 | 2.7 | 17 | | 31558 |



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 | 17 | | 31394 |
| | 1 A | | | 10 | 0.8 | 17 | | 31244 |
| | 1.5 A | | | 10 | 0.8 | 17 | | 31395 |
| | 2 A | | | 10 | 0.8 | 17 | | 31245 |
| | 2.5 A | | | 10 | 0.8 | 17 | | 31396 |
| | 3 A | | | 10 | 0.8 | 17 | | 31397 |
| | 4 A | | | 10 | 0.8 | 17 | | 31246 |
| | 5 A | | | 10 | 0.8 | 17 | | 31398 |
| | 6 A | | | 10 | 0.8 | 17 | | 31247 |
| | 8 A | | | 10 | 0.8 | 17 | | 31399 |
| | 10 A | | | 10 | 0.8 | 17 | | 31248 |
| | 12 A | | | 10 | 0.8 | 17 | | 31400 |
| | 15 A | | | 10 | 0.8 | 17 | | 31249 |
| | 20 A | | | 10 | 0.8 | 17 | | 31250 |
| | 25 A | | | 10 | 0.8 | 17 | | 31251 |
| 30 A | 10 | 0.8 | 17 | | 31252 | | | |

Fuse link, Class CC, fast acting

| | | | | | | | | |
|----------|-------|-------|--------|----|-----|----|--|-------|
| Class CC | 0.5 A | 600 V | 200 kA | 10 | 0.8 | 17 | | 31401 |
| | 1 A | | | 10 | 0.8 | 17 | | 31235 |
| | 2 A | | | 10 | 0.8 | 17 | | 31236 |
| | 3 A | | | 10 | 0.8 | 17 | | 31404 |
| | 4 A | | | 10 | 0.8 | 17 | | 31237 |
| | 5 A | | | 10 | 0.8 | 17 | | 31405 |
| | 6 A | | | 10 | 0.8 | 17 | | 31238 |
| | 8 A | | | 10 | 0.8 | 17 | | 31406 |
| | 10 A | | | 10 | 0.8 | 17 | | 31239 |
| | 12 A | | | 10 | 0.8 | 17 | | 31407 |
| | 15 A | | | 10 | 0.8 | 17 | | 31240 |
| | 20 A | | | 10 | 0.8 | 17 | | 31241 |
| | 25 A | | | 10 | 0.8 | 17 | | 31242 |
| | 30 A | | | 10 | 0.8 | 17 | | 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, 21 x 57 | 1 A | 600 V | 200 kA | 10 | 5.0 | 16 | 31333 |
| | 2 A | | | 10 | 5.0 | 16 | 31338 |
| | 3 A | | | 10 | 5.0 | 16 | 31342 |
| | 4 A | | | 10 | 5.0 | 16 | 31345 |
| | 6 A | | | 10 | 5.0 | 16 | 31349 |
| | 8 A | | | 10 | 5.0 | 16 | 31351 |
| | 10 A | | | 10 | 5.0 | 16 | 31353 |
| | 12 A | | | 10 | 5.0 | 16 | 31354 |
| | 15 A | | | 10 | 5.0 | 16 | 31355 |
| | 20 A | | | 10 | 5.0 | 16 | 31357 |
| | 25 A | | | 10 | 5.0 | 16 | 31358 |
| | 30 A | | | 10 | 5.0 | 16 | 31359 |
| Class J, 27 x 60 | 35 A | 600 V | 200 kA | 10 | 8.5 | 16 | 31360 |
| | 40 A | | | 10 | 8.5 | 16 | 31361 |
| | 45 A | | | 10 | 8.5 | 16 | 31362 |
| | 50 A | | | 10 | 8.5 | 16 | 31363 |
| | 60 A | | | 10 | 8.5 | 16 | 31364 |
| Class J, 29 x 118 | 70 A | 600 V | 200 kA | 1 | 14.5 | 16 | 03228 |
| | 80 A | | | 1 | 14.5 | 16 | 03229 |
| | 90 A | | | 1 | 14.5 | 16 | 03230 |
| | 100 A | | | 1 | 14.5 | 16 | 03231 |
| Class J, 41 x 146 | 125 A | 600 V | 200 kA | 1 | 35.5 | 16 | 03233 |
| | 150 A | | | 1 | 35.5 | 16 | 03234 |
| | 175 A | | | 1 | 35.5 | 16 | 03235 |
| | 200 A | | | 1 | 35.5 | 16 | 03236 |
| Class J, 54 x 181 | 250 A | 600 V | 200 kA | 1 | 67.0 | 16 | 03238 |
| | 300 A | | | 1 | 67.0 | 16 | 03239 |
| | 350 A | | | 1 | 67.0 | 16 | 03240 |
| | 400 A | | | 1 | 67.0 | 16 | 03241 |



Cylindrical fuses Class J

in accordance with UL 248-8

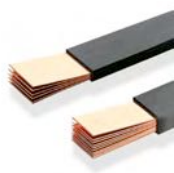


Fuse link, Class J, fast acting

| Size | Rated current | Rated voltage | Rated breaking capacity | Pack size | Weight kg/100 u. | PG | | Part No. |
|-------------------|---------------|---------------|-------------------------|-----------|------------------|----|--|----------|
| Class J, 21 x 57 | 10 A | 600 V | 200 kA | 10 | 5.0 | 16 | | 31323 |
| | 15 A | | | 10 | 5.0 | 16 | | 31324 |
| | 20 A | | | 10 | 5.0 | 16 | | 31325 |
| | 25 A | | | 10 | 5.0 | 16 | | 31326 |
| | 30 A | | | 10 | 5.0 | 16 | | 31327 |
| Class J, 27 x 60 | 35 A | 600 V | 200 kA | 10 | 8.5 | 16 | | 31511 |
| | 40 A | | | 10 | 8.5 | 16 | | 31512 |
| | 50 A | | | 10 | 8.5 | 16 | | 31514 |
| | 60 A | | | 10 | 8.5 | 16 | | 31515 |
| Class J, 29 x 118 | 70 A | 600 V | 200 kA | 1 | 14.5 | 16 | | 03214 |
| | 80 A | | | 1 | 14.5 | 16 | | 03215 |
| | 100 A | | | 1 | 14.5 | 16 | | 03217 |
| Class J, 41 x 146 | 125 A | 600 V | 200 kA | 1 | 35.0 | 16 | | 03219 |
| | 150 A | | | 1 | 35.5 | 16 | | 03220 |
| | 175 A | | | 1 | 38.2 | 16 | | 03221 |
| | 200 A | | | 1 | 35.5 | 16 | | 03222 |
| Class J, 54 x 181 | 250 A | 600 V | 200 kA | 1 | 67.0 | 16 | | 03224 |
| | 300 A | | | 1 | 67.0 | 16 | | 03225 |
| | 350 A | | | 1 | 67.0 | 16 | | 03226 |
| | 400 A | | | 1 | 67.0 | 16 | | 03227 |



Laminated copper busbars



Laminated copper busbars, plain, insulated (105°C), length 2 m

| Dimensions (number of laminates x width x thickness) | Cross-section mm ² | 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.



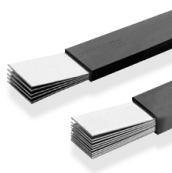
Holder for laminated busbars

| 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 63 x 1 | 4 | 16.6 | 06 | | 01299 |

For mounting on standard C-rail



Laminated copper busbars



Laminated copper busbars, tin-plated, insulated (105°C), length 2 m

| Dimensions (number of laminates x width x thickness) | Cross-section mm ² | Rated current 30 K | Rated current 50 K | Pack size | Weight kg/100 u. | PG | | Part No. |
|--|-------------------------------|--------------------|--------------------|-----------|------------------|----|--|----------|
| 6 x 9 x 0.8 | 43.2 | 176 A | 240 A | 1 | 80.6 | 06 | | 01084 |
| 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 63 x 1 | 4 | 16.6 | 06 | | 01299 |

For mounting on standard C-rail



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

| | | | | | | | | |
|----|----|----|--------|----|-----|----|--|--------------|
| 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 |

Connection bars for PE or N



PE and N busbar, current capacity 63 A, with self-locking screws

| Connection mm ² | 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 | | 01126 |
| | 12 terminal points | 78 x 9 x 6.5 | 100 | 3.2 | 06 | | 01127 |
| | 16 terminal points | 104 x 9 x 6.5 | 100 | 4.3 | 06 | | 01128 |
| | 24 terminal points | 156 x 9 x 6.5 | 50 | 6.7 | 06 | | 01129 |
| | 151 terminal points | 1000 x 9 x 6.5 | 1 | 43.0 | 06 | | 01130 |

Connection terminal

| | | | | | | | |
|----|---|--|-----|-----|----|--|--------------|
| 35 | suitable for PE and N busbars 01126 - 01130 | | 100 | 1.4 | 07 | | 01114 |
|----|---|--|-----|-----|----|--|--------------|

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 ² , screw-on, 61.5 mm long | 62 x 9 x 6.5 | 100 | 2.5 | 06 | | 01926 |
| 1 terminal clamp 25 mm ² | 12 terminal points 10mm ² , screw-on, 124.0 mm long | 124 x 9 x 6.5 | 50 | 5.5 | 06 | | 01927 |
| 2 terminal clamps 25 mm ² | 18 terminal points 10mm ² , screw-on, 186.5 mm long | 187 x 9 x 6.5 | 60 | 9.6 | 06 | | 01928 |
| 3 terminal clamps 25 mm ² | 24 terminal points 10mm ² , screw-on, 249.0 mm long | 249 x 9 x 6.5 | 50 | 11.5 | 06 | | 01929 |
| 4 terminal clamps 25 mm ² | 30 terminal points 10mm ² , screw-on, 311.5 mm long | 312 x 9 x 6.5 | 50 | 16.7 | 06 | | 01930 |
| 5 terminal clamps 25 mm ² | 36 terminal points 10mm ² , screw-on, 374.0 mm long | 374 x 9 x 6.5 | 100 | 17.6 | 06 | | 01931 |
| 15 terminal clamps 25 mm ² | 96 terminal points 10mm ² , screw-on, 1000 mm long | 1000 x 9 x 6.5 | 1 | 48.0 | 06 | | 01932 |

For 10 mm² incoming connection the connection clamp must be reversed

Connection clamp

| | | | | | | | |
|--------------------|-----------------------------|--|-----|-----|----|--|--------------|
| 25 mm ² | for PE/N bars 01926 - 01932 | | 100 | 0.3 | 06 | | 08824 |
|--------------------|-----------------------------|--|-----|-----|----|--|--------------|

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 | | 08825 |
|----------------------------|---|--|-----|-----|----|--|--------------|

Terminal support, for PE and N busbars

| | | | | | | | |
|--------------------------------|--|--|----|-----|----|--|--------------|
| screw-on | | | 50 | 1.4 | 06 | | 01120 |
| snap-on to mounting rail TH 35 | | | 50 | 1.6 | 06 | | 01121 |
| screw-on | | | 50 | 0.1 | 06 | | 01119 |

Connection and connecting terminals



Insulated PE and N terminal

| Rated current | Connection mm ² | Type | Pack size | Weight kg/100 u. | PG | | Part No. |
|---------------|-------------------------------|---------------------------|--------------|---------------------|----|--|--------------|
| 63 A | 7x 10 | PE-terminal, green/yellow | 50 | 2.7 | 06 | | 01144 |
| 63 A | | neutral terminal, blue | 50 | 2.7 | 06 | | 01143 |
| 63 A | | PE-terminal, green/yellow | 50 | 2.9 | 06 | | 01258 |
| 63 A | | neutral terminal, blue | 50 | 2.9 | 06 | | 01257 |

* for mounting on flat busbars 12 x 2mm

** for clip-on mounting

Connecting terminal

| | | | | | | | |
|-------|-----|----------------------|----|------|----|--|--------------|
| 160 A | 70 | both sides clamp | 10 | 9.1 | 10 | | 03193 |
| | | both sides clamp | 10 | 14.6 | 10 | | 03173 |
| 250 A | 120 | both sides screw M10 | 10 | 16.8 | 10 | | 03195 |
| | | both sides screw M10 | 10 | 30.6 | 10 | | 03196 |
| 630 A | 240 | both sides screw M12 | 10 | 25.6 | 10 | | 03197 |
| | | both sides screw M12 | 10 | 42.0 | 10 | | 03198 |

Label, self-adhesive, Ø 15 mm

| | | | | | |
|--------------------------|-----|-----|----|--|--------------|
| PE green-yellow | 200 | 0.1 | 06 | | 78442 |
| N blue | 200 | 0.1 | 06 | | 78443 |
| PE/N green-yellow / blue | 200 | 0.1 | 06 | | 78447 |

Appendix

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 the system designer. Planning, construction requirements and the required test certifications are prescribed in the parts of the IEC or 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

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.

Detailed technical information is available on the internet at: www.woehner.com

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 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

Mounting positions are prohibited where gravity and direction of mounting are opposed.

Air and creepage distances must be calculated in compliance with 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.

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. 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 mm² and AWG / MCM sizes are subsequently listed:

| | | |
|----------------------|-----------|-------------------------|
| 0.75 mm ² | 18 AWG | (0.82 mm ²) |
| 1.5 mm ² | 16 AWG | (1.3 mm ²) |
| 2.5 mm ² | 14 AWG | (2.1 mm ²) |
| 4 mm ² | 12 AWG | (3.3 mm ²) |
| 6 mm ² | 10 AWG | (5.3 mm ²) |
| 10 mm ² | 8 AWG | (8.4 mm ²) |
| 16 mm ² | 6 AWG | (13.3 mm ²) |
| 25 mm ² | 4 AWG | (21.2 mm ²) |
| 35 mm ² | 2 AWG | (33.6 mm ²) |
| 50 mm ² | 0 AWG | (53.5 mm ²) |
| 70 mm ² | 2 / 0 AWG | (67.4 mm ²) |
| 95 mm ² | 3 / 0 AWG | (85.0 mm ²) |
| 120 mm ² | 250 MCM | (127 mm ²) |
| 150 mm ² | 300 MCM | (152 mm ²) |
| 185 mm ² | 350 MCM | (177 mm ²) |
| 240 mm ² | 500 MCM | (253 mm ²) |
| 300 mm ² | 600 MCM | (304 mm ²) |

Conductor types are designated as follows:

| | Abbreviation | Standard name |
|-------------------|--------------|--------------------------|
| solid round | re | Class 1 (IEC / EN 60228) |
| stranded round | rm | Class 2 (IEC / EN 60228) |
| solid sectored | se | Class 1 (IEC / EN 60228) |
| stranded sectored | sm | 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 | lam. 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. Conductor connections are to be set up with consideration given to the requirements as per IEC / EN 60999-1 or -2. Conductor connection set-up is to be such that no load tension and – with respect to the application – no alternating bending load developed.

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 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 switchgear 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 switchgear 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 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 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 disconnecter, 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 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 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 facilitates cabinet and thermal management selection.

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. 300 N/mm²

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

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 cutting 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 circular saw and an AKE circular saw blade for plastics is reliable with the following specific values:

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.

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 600 V AC in compliance with UL 508 A 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 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.

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

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 |
|--|-------------------|
| 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 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 |
|--------------------------------|-------------------|
| 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 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.

You can find an overview of the applicability of Wöhner products in terms of the operation voltage (according to IEC standards) under www.woehner.com/insulation_coordination

| Part no. | Amount of copper in kg | Amount of brass in kg | Amount of silver in g | Chapter page | Pack size |
|----------|------------------------|-----------------------|-----------------------|-------------------------|-----------|
| 01008 | 0,525 | 0,000 | 0,000 | 3.8, 5.1 | 3 |
| 01025 | 0,000 | 0,000 | 0,000 | 3.4 | 2 |
| 01026 | 0,000 | 0,000 | 0,000 | 3.4 | 10 |
| 01027 | 1,124 | 0,000 | 0,000 | 7.12 | 1 |
| 01028 | 2,250 | 0,000 | 0,000 | 7.12 | 1 |
| 01029 | 3,750 | 0,000 | 0,000 | 7.12 | 1 |
| 01035 | 1,392 | 0,000 | 0,000 | 7.12 | 1 |
| 01047 | 0,251 | 0,000 | 0,000 | 3.7, 5.2 | 6 |
| 01054 | 0,404 | 0,000 | 0,000 | 7.12 | 1 |
| 01059 | 0,000 | 0,000 | 0,000 | 7.4 | 1 |
| 01060 | 4,660 | 0,000 | 0,000 | 7.12 | 1 |
| 01061 | 14,900 | 0,000 | 0,000 | 3.8, 5.2, 7.12 | 1 |
| 01063 | 2,250 | 0,000 | 0,000 | 7.13 | 1 |
| 01064 | 3,750 | 0,000 | 0,000 | 7.13 | 1 |
| 01068 | 0,000 | 0,000 | 0,000 | 2.2, 3.6 | 25 |
| 01069 | 0,196 | 0,000 | 0,000 | 3.6, 3.7, 3.8, 5.2, 5.3 | 3 |
| 01070 | 0,235 | 0,000 | 0,000 | 3.6, 3.8, 5.2, 5.3 | 3 |
| 01071 | 0,355 | 0,000 | 0,000 | 3.6, 3.8, 5.2, 5.3 | 3 |
| 01075 | 2,250 | 0,000 | 0,000 | 7.13 | 1 |
| 01076 | 4,500 | 0,000 | 0,000 | 7.13 | 1 |
| 01084 | 0,806 | 0,000 | 0,000 | 7.13 | 1 |
| 01089 | 0,928 | 0,000 | 0,000 | 7.13 | 1 |
| 01090 | 1,392 | 0,000 | 0,000 | 7.13 | 1 |
| 01091 | 2,320 | 0,000 | 0,000 | 7.13 | 1 |
| 01092 | 0,185 | 0,652 | 0,000 | 3.8 | 3 |
| 01093 | 0,000 | 0,000 | 0,000 | 2.2, 3.6 | 20 |
| 01094 | 0,000 | 0,853 | 0,000 | 3.8, 5.1 | 3 |
| 01095 | 2,990 | 0,000 | 0,000 | 7.13 | 1 |
| 01096 | 5,980 | 0,000 | 0,000 | 7.13 | 1 |
| 01097 | 3,730 | 0,000 | 0,000 | 7.13 | 1 |
| 01098 | 0,000 | 0,000 | 0,000 | 7.4 | 20 |
| 01099 | 7,460 | 0,000 | 0,000 | 7.13 | 1 |
| 01100 | 0,000 | 0,000 | 0,000 | 7.4 | 20 |
| 01102 | 0,226 | 0,350 | 0,000 | 3.9 | 2 |
| 01103 | 0,000 | 0,000 | 0,000 | 7.2 | 20 |
| 01104 | 0,000 | 0,000 | 0,000 | 7.2 | 20 |
| 01112 | 4,660 | 0,000 | 0,000 | 7.13 | 1 |
| 01113 | 9,320 | 0,000 | 0,000 | 7.13 | 1 |
| 01114 | 0,000 | 0,006 | 0,000 | 7.15 | 100 |
| 01116 | 0,000 | 0,004 | 0,000 | 3.2 | 4 |
| 01119 | 0,000 | 0,000 | 0,000 | 7.15 | 50 |
| 01120 | 0,000 | 0,000 | 0,000 | 7.15 | 50 |
| 01121 | 0,000 | 0,000 | 0,000 | 7.15 | 50 |
| 01123 | 11,800 | 0,000 | 0,000 | 7.13 | 1 |
| 01126 | 0,000 | 0,012 | 0,000 | 7.15 | 100 |
| 01127 | 0,000 | 0,016 | 0,000 | 7.15 | 100 |
| 01128 | 0,000 | 0,024 | 0,000 | 7.15 | 100 |
| 01129 | 0,000 | 0,037 | 0,000 | 7.15 | 50 |
| 01130 | 0,000 | 0,249 | 0,000 | 7.15 | 1 |
| 01131 | 0,000 | 0,000 | 0,000 | 3.1 | 5 |
| 01132 | 0,000 | 0,004 | 0,000 | 3.2 | 4 |
| 01135 | 0,019 | 0,011 | 0,000 | 2.2, 3.6 | 6 |
| 01136 | 0,000 | 0,000 | 0,000 | 3.4 | 1 |
| 01137 | 0,000 | 0,000 | 0,000 | 3.4 | 1 |
| 01138 | 0,000 | 0,000 | 0,000 | 3.19, 3.30 | 30 |
| 01139 | 0,000 | 0,000 | 0,000 | 3.30 | 10 |
| 01140 | 6,500 | 0,000 | 0,000 | 3.3 | 1 |

| Part no. | Amount of copper in kg | Amount of brass in kg | Amount of silver in g | Chapter page | Pack size |
|----------|------------------------|-----------------------|-----------------------|--------------------|-----------|
| 01141 | 0,521 | 0,000 | 0,000 | 3.9 | 3 |
| 01143 | 0,000 | 0,013 | 0,000 | 7.16 | 50 |
| 01144 | 0,000 | 0,013 | 0,000 | 7.16 | 50 |
| 01145 | 0,536 | 0,403 | 0,000 | 3.9 | 3 |
| 01147 | 0,000 | 0,891 | 0,000 | 3.5 | 1 |
| 01162 | 0,000 | 0,463 | 0,000 | 3.5 | 1 |
| 01165 | 0,036 | 0,021 | 0,000 | 2.2 | 1 |
| 01166 | 0,000 | 0,181 | 0,000 | 2.2, 3.9 | 12 |
| 01170 | 0,000 | 0,000 | 0,000 | 3.19, 3.30 | 100 |
| 01182 | 0,000 | 0,040 | 0,000 | 3.22, 3.24, 6.14 | 3 |
| 01184 | 4,500 | 0,000 | 0,000 | 7.12 | 1 |
| 01185 | 0,198 | 0,000 | 0,000 | 3.8, 5.1 | 3 |
| 01186 | 0,717 | 0,000 | 0,000 | 3.8, 5.1 | 3 |
| 01187 | 24,624 | 0,000 | 0,000 | 3.3 | 1 |
| 01188 | 4,640 | 0,000 | 0,000 | 5.2 | 1 |
| 01189 | 6,723 | 0,000 | 0,000 | 5.2 | 1 |
| 01190 | 23,340 | 0,000 | 0,000 | 3.3 | 1 |
| 01193 | 0,000 | 0,509 | 0,000 | 2.2, 3.9 | 3 |
| 01194 | 0,806 | 0,000 | 0,000 | 7.12 | 1 |
| 01196 | 0,928 | 0,000 | 0,000 | 7.12 | 1 |
| 01198 | 0,032 | 0,000 | 0,000 | 6.2, 6.4, 6.8 | 3 |
| 01199 | 0,000 | 0,386 | 0,000 | 3.5 | 1 |
| 01201 | 0,000 | 0,049 | 0,000 | 3.7 | 3 |
| 01202 | 0,000 | 0,069 | 0,000 | 3.7 | 3 |
| 01203 | 0,000 | 0,000 | 0,000 | 2.2, 3.6, 5.1 | 25 |
| 01204 | 9,700 | 0,000 | 0,000 | 3.3 | 1 |
| 01206 | 0,000 | 0,000 | 0,000 | 3.7 | 10 |
| 01223 | 15,960 | 0,000 | 0,000 | 3.3 | 1 |
| 01224 | 15,920 | 0,000 | 0,000 | 3.3 | 1 |
| 01225 | 2,006 | 0,000 | 0,000 | 5.2 | 1 |
| 01226 | 2,881 | 0,000 | 0,000 | 5.2 | 1 |
| 01227 | 36,936 | 0,000 | 0,000 | 3.3 | 1 |
| 01228 | 0,042 | 0,000 | 0,000 | 6.2, 6.3, 6.4, 6.8 | 3 |
| 01229 | 23,320 | 0,000 | 0,000 | 3.3 | 1 |
| 01231 | 0,000 | 0,018 | 0,000 | 3.2 | 3 |
| 01232 | 0,000 | 0,018 | 0,000 | 3.2 | 2 |
| 01234 | 0,000 | 0,000 | 0,000 | 3.2 | 4 |
| 01236 | 0,000 | 0,000 | 0,000 | 3.4 | 1 |
| 01237 | 0,000 | 0,000 | 0,000 | 3.4 | 1 |
| 01238 | 0,000 | 0,000 | 0,000 | 3.4 | 1 |
| 01240 | 0,031 | 0,018 | 0,000 | 3.5 | 1 |
| 01243 | 0,046 | 0,030 | 0,000 | 3.5 | 1 |
| 01244 | 0,000 | 0,000 | 0,000 | 2.1, 3.4 | 10 |
| 01245 | 0,000 | 0,000 | 0,000 | 2.1, 3.4 | 10 |
| 01249 | 15,560 | 0,000 | 0,000 | 3.3 | 1 |
| 01250 | 10,600 | 0,000 | 0,000 | 3.3 | 1 |
| 01252 | 0,000 | 0,000 | 0,000 | 3.4 | 5 |
| 01253 | 1,800 | 0,000 | 0,000 | 7.12 | 1 |
| 01255 | 2,700 | 0,000 | 0,000 | 7.12 | 1 |
| 01256 | 4,476 | 0,000 | 0,000 | 7.12 | 1 |
| 01257 | 0,000 | 0,013 | 0,000 | 7.16 | 50 |
| 01258 | 0,000 | 0,013 | 0,000 | 7.16 | 50 |
| 01272 | 0,000 | 0,000 | 0,000 | 2.1, 2.5 | 10 |
| 01273 | 18,700 | 0,000 | 0,000 | 3.8, 5.2, 7.12 | 1 |
| 01274 | 1,030 | 0,000 | 0,000 | 3.9 | 3 |
| 01275 | 1,612 | 0,000 | 0,000 | 3.9 | 3 |
| 01284 | 0,000 | 0,000 | 0,000 | 2.2, 3.6 | 100 |
| 01285 | 0,000 | 0,000 | 0,000 | 2.2, 3.6 | 50 |

| Part no. | Amount of copper in kg | Amount of brass in kg | Amount of silver in g | Chapter page | Pack size |
|----------|------------------------|-----------------------|-----------------------|---------------|-----------|
| 01287 | 0,000 | 0,000 | 0,000 | 2.2, 3.6 | 25 |
| 01289 | 0,000 | 0,000 | 0,000 | 2.2, 3.6 | 100 |
| 01290 | 0,000 | 0,000 | 0,000 | 2.2, 3.6 | 50 |
| 01292 | 0,000 | 0,000 | 0,000 | 2.2, 3.6 | 25 |
| 01295 | 6,059 | 0,000 | 0,000 | 3.9 | 1 |
| 01298 | 0,000 | 0,000 | 0,000 | 7.12, 7.13 | 3 |
| 01299 | 0,000 | 0,000 | 0,000 | 7.12, 7.13 | 4 |
| 01300 | 0,000 | 0,000 | 0,000 | 3.5 | 3 |
| 01301 | 0,000 | 0,000 | 0,000 | 3.5 | 3 |
| 01314 | 0,000 | 0,000 | 0,000 | 2.1, 2.5 | 2 |
| 01317 | 0,000 | 0,000 | 0,000 | 2.1, 2.5 | 10 |
| 01318 | 0,000 | 0,128 | 0,000 | 3.6, 5.1, 5.3 | 6 |
| 01319 | 0,000 | 0,115 | 0,000 | 3.6, 5.3 | 6 |
| 01320 | 0,000 | 0,000 | 0,000 | 3.4 | 8 |
| 01323 | 3,600 | 0,000 | 0,000 | 7.12 | 1 |
| 01324 | 5,900 | 0,000 | 0,000 | 7.12 | 1 |
| 01325 | 0,000 | 0,000 | 0,000 | 3.1 | 10 |
| 01343 | 7,460 | 0,000 | 0,000 | 7.12 | 1 |
| 01355 | 0,000 | 0,000 | 0,000 | 3.30 | 1 |
| 01356 | 0,000 | 0,000 | 0,000 | 3.1 | 10 |
| 01357 | 0,000 | 0,000 | 0,000 | 3.1 | 10 |
| 01358 | 0,000 | 0,000 | 0,000 | 3.1 | 10 |
| 01359 | 0,000 | 0,000 | 0,000 | 3.1 | 10 |
| 01360 | 0,000 | 0,000 | 0,000 | 3.9 | 1 |
| 01361 | 0,000 | 0,000 | 0,000 | 3.9 | 1 |
| 01362 | 0,000 | 0,000 | 0,000 | 3.9 | 1 |
| 01363 | 0,000 | 0,000 | 0,000 | 3.1 | 1 |
| 01364 | 0,015 | 0,009 | 0,000 | 2.5 | 1 |
| 01367 | 0,015 | 0,009 | 0,000 | 2.5 | 1 |
| 01369 | 0,000 | 0,000 | 0,000 | 5.3 | 6 |
| 01370 | 0,045 | 0,027 | 0,000 | 2.5 | 1 |
| 01371 | 0,000 | 0,000 | 0,000 | 2.5 | 2 |
| 01373 | 0,000 | 0,000 | 0,000 | 3.2 | 4 |
| 01374 | 0,000 | 0,000 | 0,000 | 2.1 | 10 |
| 01376 | 0,000 | 0,000 | 0,000 | 2.5 | 10 |
| 01379 | 0,000 | 0,000 | 0,000 | 5.3 | 12 |
| 01380 | 0,000 | 0,000 | 0,000 | 5.3 | 12 |
| 01401 | 0,031 | 0,018 | 0,000 | 2.2 | 1 |
| 01413 | 0,000 | 0,000 | 0,000 | 3.6 | 10 |
| 01416 | 0,000 | 0,000 | 0,000 | 4.1 | 1 |
| 01417 | 0,000 | 0,000 | 0,000 | 3.4 | 2 |
| 01420 | 0,000 | 0,000 | 0,000 | 4.1 | 1 |
| 01421 | 0,000 | 0,000 | 0,000 | 4.1 | 1 |
| 01422 | 0,000 | 0,000 | 0,000 | 3.2 | 2 |
| 01424 | 0,000 | 0,000 | 0,000 | 3.18 | 10 |
| 01425 | 0,000 | 0,000 | 0,000 | 3.2 | 4 |
| 01426 | 0,045 | 0,030 | 0,000 | 2.5 | 1 |
| 01427 | 0,031 | 0,020 | 0,000 | 2.5 | 1 |
| 01430 | 0,000 | 0,000 | 0,000 | 4.1 | 4 |
| 01431 | 0,000 | 0,000 | 0,000 | 4.1 | 1 |
| 01432 | 0,000 | 0,000 | 0,000 | 4.1 | 2 |
| 01433 | 0,000 | 0,000 | 0,000 | 4.1 | 8 |
| 01434 | 0,000 | 0,000 | 0,000 | 4.1 | 4 |
| 01435 | 0,000 | 0,000 | 0,000 | 4.1 | 3 |
| 01436 | 0,000 | 0,000 | 0,000 | 4.1 | 1 |
| 01437 | 0,000 | 0,000 | 0,000 | 4.2 | 1 |
| 01438 | 2,393 | 0,000 | 3,128 | 4.2 | 1 |
| 01439 | 6,786 | 0,027 | 4,410 | 4.2 | 1 |
| 01440 | 0,000 | 0,000 | 0,000 | 4.1 | 2 |
| 01441 | 0,893 | 0,136 | 0,000 | 4.2 | 1 |

| Part no. | Amount of copper in kg | Amount of brass in kg | Amount of silver in g | Chapter page | Pack size |
|----------|------------------------|-----------------------|-----------------------|----------------|-----------|
| 01442 | 0,689 | 0,000 | 0,000 | 4.2 | 1 |
| 01443 | 0,883 | 0,000 | 0,000 | 4.2 | 1 |
| 01444 | 0,000 | 0,000 | 0,000 | 4.1 | 2 |
| 01480 | 0,407 | 0,000 | 0,000 | 4.1 | 3 |
| 01481 | 0,602 | 0,000 | 0,000 | 4.1 | 3 |
| 01482 | 0,000 | 0,000 | 0,000 | 4.1 | 1 |
| 01484 | 0,019 | 0,000 | 0,000 | 3.1, 3.5 | 10 |
| 01485 | 0,000 | 0,000 | 0,000 | 3.1 | 10 |
| 01495 | 0,000 | 0,000 | 0,000 | 3.1 | 10 |
| 01498 | 0,000 | 0,025 | 0,000 | 3.18 | 10 |
| 01500 | 0,000 | 0,000 | 0,000 | 3.1 | 10 |
| 01508 | 0,000 | 0,000 | 0,000 | 3.1 | 10 |
| 01509 | 9,320 | 0,000 | 0,000 | 3.8, 5.2, 7.12 | 1 |
| 01510 | 11,800 | 0,000 | 0,000 | 3.8, 5.2, 7.12 | 1 |
| 01512 | 0,027 | 0,000 | 0,000 | 3.7 | 25 |
| 01513 | 0,397 | 0,000 | 0,000 | 3.8, 5.1 | 3 |
| 01514 | 0,091 | 0,000 | 0,000 | 3.7, 5.2 | 20 |
| 01515 | 0,000 | 0,000 | 0,000 | 3.1 | 2 |
| 01518 | 0,000 | 0,000 | 0,000 | 3.1 | 2 |
| 01537 | 0,000 | 0,668 | 0,000 | 3.5 | 1 |
| 01538 | 0,000 | 0,347 | 0,000 | 3.5 | 1 |
| 01539 | 0,000 | 0,000 | 0,000 | 3.6 | 1 |
| 01540 | 0,000 | 0,000 | 0,000 | 3.6 | 1 |
| 01541 | 0,000 | 0,000 | 0,000 | 7.3 | 50 |
| 01542 | 0,000 | 0,000 | 0,000 | 7.3 | 50 |
| 01543 | 0,000 | 0,000 | 0,000 | 7.3 | 50 |
| 01544 | 0,000 | 0,000 | 0,000 | 7.3 | 50 |
| 01545 | 0,000 | 0,000 | 0,000 | 7.3 | 50 |
| 01546 | 0,000 | 0,000 | 0,000 | 7.3 | 50 |
| 01547 | 0,000 | 0,000 | 0,000 | 7.3 | 50 |
| 01548 | 0,000 | 0,000 | 0,000 | 7.3 | 50 |
| 01549 | 0,000 | 0,000 | 0,000 | 7.3 | 50 |
| 01550 | 0,000 | 0,000 | 0,000 | 7.3 | 50 |
| 01554 | 0,000 | 0,000 | 0,000 | 3.4 | 1 |
| 01555 | 0,000 | 0,000 | 0,000 | 3.4 | 2 |
| 01562 | 0,033 | 0,000 | 0,000 | 2.2 | 6 |
| 01563 | 0,033 | 0,000 | 0,000 | 3.5 | 8 |
| 01573 | 0,000 | 0,000 | 0,000 | 3.1, 3.30 | 10 |
| 01583 | 2,320 | 0,000 | 0,000 | 7.12 | 1 |
| 01586 | 0,000 | 0,000 | 0,000 | 3.7 | 10 |
| 01587 | 0,000 | 0,000 | 0,000 | 3.7 | 10 |
| 01590 | 0,000 | 0,000 | 0,000 | 3.6 | 1 |
| 01592 | 0,023 | 0,000 | 0,090 | 1.1 | 1 |
| 01596 | 0,000 | 0,000 | 0,000 | 3.6 | 1 |
| 01597 | 0,000 | 0,000 | 0,000 | 3.6 | 1 |
| 01599 | 0,000 | 0,000 | 0,000 | 3.4 | 1 |
| 01601 | 0,000 | 0,000 | 0,000 | 3.1 | 1 |
| 01602 | 0,000 | 0,000 | 0,000 | 3.1 | 1 |
| 01603 | 0,000 | 0,000 | 0,000 | 3.30 | 10 |
| 01608 | 15,540 | 0,000 | 0,000 | 3.3 | 1 |
| 01609 | 10,620 | 0,000 | 0,000 | 3.3 | 1 |
| 01610 | 34,160 | 0,000 | 0,000 | 3.3, 5.3 | 1 |
| 01611 | 2,250 | 0,000 | 0,000 | 7.12 | 1 |
| 01612 | 2,990 | 0,000 | 0,000 | 7.12 | 1 |
| 01613 | 5,980 | 0,000 | 0,000 | 7.12 | 1 |
| 01614 | 3,730 | 0,000 | 0,000 | 7.12 | 1 |
| 01615 | 7,460 | 0,000 | 0,000 | 3.8, 5.2, 7.12 | 1 |
| 01616 | 0,000 | 0,000 | 0,000 | 3.7 | 6 |

| Part no. | Amount of copper in kg | Amount of brass in kg | Amount of silver in g | Chapter. page | Pack size |
|----------|------------------------|-----------------------|-----------------------|---------------|-----------|
| 01618 | 1,284 | 0,000 | 0,000 | 2.1, 2.5, 3.3 | 1 |
| 01619 | 1,606 | 0,000 | 0,000 | 3.3 | 1 |
| 01620 | 2,144 | 0,000 | 0,000 | 3.3 | 1 |
| 01621 | 2,678 | 0,000 | 0,000 | 3.3 | 1 |
| 01622 | 3,214 | 0,000 | 0,000 | 3.3 | 1 |
| 01623 | 2,570 | 0,000 | 0,000 | 2.1, 3.3 | 1 |
| 01624 | 4,286 | 0,000 | 0,000 | 3.3 | 1 |
| 01625 | 6,432 | 0,000 | 0,000 | 3.3, 4.1 | 1 |
| 01626 | 8,568 | 0,000 | 0,000 | 4.1 | 1 |
| 01628 | 12,940 | 0,000 | 0,000 | 4.1 | 1 |
| 01647 | 0,000 | 0,025 | 0,000 | 3.18 | 10 |
| 01670 | 0,000 | 0,000 | 0,000 | 7.3 | 5 |
| 01671 | 0,000 | 0,000 | 0,000 | 7.3 | 5 |
| 01672 | 0,000 | 0,000 | 0,000 | 7.3 | 5 |
| 01673 | 0,000 | 0,000 | 0,000 | 7.3 | 5 |
| 01674 | 0,000 | 0,000 | 0,000 | 7.3 | 5 |
| 01675 | 0,000 | 0,000 | 0,000 | 7.3 | 5 |
| 01676 | 0,000 | 0,000 | 0,000 | 7.3 | 5 |
| 01677 | 0,000 | 0,000 | 0,000 | 7.3 | 5 |
| 01678 | 0,000 | 0,000 | 0,000 | 7.3 | 5 |
| 01679 | 0,000 | 0,000 | 0,000 | 7.3 | 5 |
| 01685 | 0,000 | 0,000 | 0,000 | 7.1 | 10 |
| 01686 | 0,000 | 0,000 | 0,000 | 7.1 | 10 |
| 01687 | 0,000 | 0,000 | 0,000 | 7.1 | 10 |
| 01688 | 0,000 | 0,000 | 0,000 | 7.1 | 10 |
| 01689 | 0,000 | 0,000 | 0,000 | 7.1 | 10 |
| 01690 | 0,000 | 0,000 | 0,000 | 7.1 | 10 |
| 01691 | 0,000 | 0,000 | 0,000 | 7.1 | 10 |
| 01692 | 0,000 | 0,000 | 0,000 | 7.1 | 10 |
| 01693 | 0,000 | 0,000 | 0,000 | 7.1 | 10 |
| 01694 | 0,000 | 0,000 | 0,000 | 7.1 | 10 |
| 01701 | 0,000 | 0,000 | 0,000 | 7.3 | 25 |
| 01702 | 0,000 | 0,000 | 0,000 | 7.3 | 25 |
| 01703 | 0,000 | 0,000 | 0,000 | 7.3 | 25 |
| 01704 | 0,000 | 0,000 | 0,000 | 7.3 | 25 |
| 01705 | 0,000 | 0,000 | 0,000 | 7.3 | 25 |
| 01706 | 0,000 | 0,000 | 0,000 | 7.3 | 25 |
| 01707 | 0,000 | 0,000 | 0,000 | 7.3 | 25 |
| 01708 | 0,000 | 0,000 | 0,000 | 7.3 | 25 |
| 01709 | 0,000 | 0,000 | 0,000 | 7.3 | 25 |
| 01715 | 0,000 | 0,000 | 0,000 | 7.1 | 50 |
| 01716 | 0,000 | 0,000 | 0,000 | 7.1 | 50 |
| 01717 | 0,000 | 0,000 | 0,000 | 7.1 | 50 |
| 01718 | 0,000 | 0,000 | 0,000 | 7.1 | 50 |
| 01719 | 0,000 | 0,000 | 0,000 | 7.1 | 50 |
| 01720 | 0,000 | 0,000 | 0,000 | 7.1 | 50 |
| 01721 | 0,000 | 0,000 | 0,000 | 7.1 | 50 |
| 01722 | 0,000 | 0,000 | 0,000 | 7.1 | 50 |
| 01724 | 0,000 | 0,000 | 0,000 | 7.1 | 50 |
| 01725 | 0,000 | 0,000 | 0,000 | 7.1 | 50 |
| 01726 | 0,000 | 0,000 | 0,000 | 7.1 | 50 |
| 01727 | 0,000 | 0,000 | 0,000 | 7.1 | 50 |
| 01728 | 0,000 | 0,000 | 0,000 | 7.1 | 50 |
| 01729 | 0,000 | 0,000 | 0,000 | 7.2 | 50 |
| 01730 | 0,000 | 0,000 | 0,000 | 7.2 | 1 |
| 01741 | 0,000 | 0,000 | 0,000 | 7.3 | 25 |
| 01747 | 0,027 | 0,000 | 0,000 | 3.7 | 25 |
| 01748 | 0,091 | 0,000 | 0,000 | 3.7 | 20 |
| 01749 | 0,251 | 0,000 | 0,000 | 3.7 | 6 |
| 01753 | 0,000 | 0,347 | 0,000 | 3.5 | 1 |

| Part no. | Amount of copper in kg | Amount of brass in kg | Amount of silver in g | Chapter. page | Pack size |
|----------|------------------------|-----------------------|-----------------------|---------------|-----------|
| 01754 | 0,000 | 0,668 | 0,000 | 3.5 | 1 |
| 01756 | 0,000 | 0,000 | 0,000 | 3.6 | 1 |
| 01757 | 0,000 | 0,000 | 0,000 | 3.6 | 1 |
| 01759 | 0,000 | 0,115 | 0,000 | 3.6, 5.3 | 3 |
| 01760 | 0,000 | 0,222 | 0,000 | 3.6, 5.1, 5.3 | 3 |
| 01765 | 17,280 | 0,000 | 0,000 | 4.1 | 1 |
| 01766 | 21,740 | 0,000 | 0,000 | 4.1 | 1 |
| 01767 | 25,728 | 0,000 | 0,000 | 4.1 | 1 |
| 01823 | 0,213 | 0,000 | 0,000 | 3.9 | 6 |
| 01827 | 0,290 | 0,217 | 0,000 | 3.9 | 6 |
| 01829 | 0,824 | 0,635 | 0,000 | 3.9 | 3 |
| 01831 | 4,240 | 0,000 | 0,000 | 5.2 | 1 |
| 01838 | 2,933 | 0,000 | 0,000 | 5.2 | 1 |
| 01886 | 0,795 | 0,000 | 0,000 | 3.9 | 3 |
| 01888 | 0,128 | 0,000 | 0,000 | 3.30 | 3 |
| 01890 | 0,130 | 0,044 | 0,000 | 3.30 | 3 |
| 01906 | 0,230 | 0,000 | 0,000 | 3.8, 5.1 | 3 |
| 01907 | 0,262 | 0,000 | 0,000 | 3.8, 5.1 | 3 |
| 01911 | 0,262 | 0,000 | 0,000 | 3.8, 5.1 | 3 |
| 01926 | 0,000 | 0,018 | 0,000 | 7.15 | 100 |
| 01927 | 0,000 | 0,036 | 0,000 | 7.15 | 50 |
| 01928 | 0,000 | 0,054 | 0,000 | 7.15 | 60 |
| 01929 | 0,000 | 0,072 | 0,000 | 7.15 | 50 |
| 01930 | 0,000 | 0,090 | 0,000 | 7.15 | 50 |
| 01931 | 0,000 | 0,108 | 0,000 | 7.15 | 100 |
| 01932 | 0,000 | 0,276 | 0,000 | 7.15 | 1 |
| 01934 | 0,301 | 0,000 | 0,000 | 3.8, 5.1 | 3 |
| 01935 | 0,358 | 0,000 | 0,000 | 3.8, 5.1 | 3 |
| 01936 | 0,230 | 0,000 | 0,000 | 3.8, 5.1 | 3 |
| 01980 | 0,000 | 0,000 | 0,000 | 3.18 | 10 |
| 01981 | 0,000 | 0,000 | 0,000 | 3.18 | 10 |
| 01990 | 0,213 | 0,000 | 0,000 | 3.9 | 6 |
| 01996 | 0,000 | 0,000 | 0,000 | 3.7 | 10 |
| 01997 | 0,000 | 0,000 | 0,000 | 3.7 | 10 |
| 01998 | 0,000 | 0,000 | 0,000 | 7.4 | 1 |
| 03161 | 0,054 | 0,000 | 0,090 | 7.5 | 3 |
| 03162 | 0,127 | 0,000 | 0,239 | 7.5 | 3 |
| 03163 | 0,198 | 0,000 | 0,290 | 7.5 | 3 |
| 03164 | 0,241 | 0,000 | 0,377 | 7.5 | 3 |
| 03173 | 0,056 | 0,000 | 0,000 | 6.12, 7.16 | 10 |
| 03181 | 0,800 | 0,000 | 0,000 | 7.6 | 1 |
| 03182 | 0,800 | 0,000 | 0,000 | 7.6 | 1 |
| 03183 | 0,800 | 0,000 | 0,000 | 7.6 | 1 |
| 03185 | 0,800 | 0,000 | 0,000 | 7.5 | 3 |
| 03193 | 0,025 | 0,000 | 0,000 | 6.12, 7.16 | 10 |
| 03195 | 0,066 | 0,000 | 0,000 | 6.12, 7.16 | 10 |
| 03196 | 0,142 | 0,000 | 0,000 | 6.12, 7.16 | 10 |
| 03197 | 0,108 | 0,000 | 0,000 | 6.12, 7.16 | 10 |
| 03198 | 0,236 | 0,000 | 0,000 | 6.12, 7.16 | 10 |
| 03199 | 0,209 | 0,000 | 0,630 | 3.22 | 1 |
| 03213 | 0,270 | 0,000 | 0,818 | 6.12 | 3 |
| 03214 | 0,000 | 0,000 | 0,000 | 7.11 | 1 |
| 03215 | 0,000 | 0,000 | 0,000 | 7.11 | 1 |
| 03217 | 0,000 | 0,000 | 0,000 | 7.11 | 1 |
| 03219 | 0,000 | 0,000 | 0,000 | 7.11 | 1 |
| 03220 | 0,000 | 0,000 | 0,000 | 7.11 | 1 |
| 03221 | 0,000 | 0,000 | 0,000 | 7.11 | 1 |
| 03222 | 0,000 | 0,000 | 0,000 | 7.11 | 1 |
| 03224 | 0,000 | 0,000 | 0,000 | 7.11 | 1 |
| 03225 | 0,000 | 0,000 | 0,000 | 7.11 | 1 |

| Part no. | Amount of copper in kg | Amount of brass in kg | Amount of silver in g | Chapter. page | Pack size |
|----------|------------------------|-----------------------|-----------------------|---------------|-----------|
| 03226 | 0,000 | 0,000 | 0,000 | 7.11 | 1 |
| 03227 | 0,000 | 0,000 | 0,000 | 7.11 | 1 |
| 03228 | 0,000 | 0,000 | 0,000 | 7.10 | 1 |
| 03229 | 0,000 | 0,000 | 0,000 | 7.10 | 1 |
| 03230 | 0,000 | 0,000 | 0,000 | 7.10 | 1 |
| 03231 | 0,000 | 0,000 | 0,000 | 7.10 | 1 |
| 03233 | 0,000 | 0,000 | 0,000 | 7.10 | 1 |
| 03234 | 0,000 | 0,000 | 0,000 | 7.10 | 1 |
| 03235 | 0,000 | 0,000 | 0,000 | 7.10 | 1 |
| 03236 | 0,000 | 0,000 | 0,000 | 7.10 | 1 |
| 03238 | 0,000 | 0,000 | 0,000 | 7.10 | 1 |
| 03239 | 0,000 | 0,000 | 0,000 | 7.10 | 1 |
| 03240 | 0,000 | 0,000 | 0,000 | 7.10 | 1 |
| 03241 | 0,000 | 0,000 | 0,000 | 7.10 | 1 |
| 03243 | 0,000 | 0,000 | 0,000 | 7.5 | 3 |
| 03287 | 0,000 | 0,000 | 0,000 | 2.4 | 4 |
| 03288 | 0,201 | 0,000 | 0,770 | 6.11 | 3 |
| 03289 | 0,139 | 0,000 | 0,585 | 6.11 | 3 |
| 03290 | 0,097 | 0,000 | 0,400 | 6.11 | 3 |
| 03293 | 0,447 | 0,000 | 1,094 | 6.11 | 3 |
| 03294 | 0,412 | 0,000 | 1,094 | 6.11 | 3 |
| 03299 | 0,201 | 0,000 | 0,612 | 3.22 | 1 |
| 03300 | 0,602 | 0,252 | 1,350 | 3.22 | 1 |
| 03301 | 0,463 | 0,000 | 0,800 | 3.22 | 1 |
| 03316 | 0,189 | 0,032 | 0,516 | 2.4 | 1 |
| 03350 | 0,033 | 0,000 | 0,202 | 6.11 | 10 |
| 03351 | 0,099 | 0,000 | 0,606 | 6.11 | 4 |
| 03354 | 0,033 | 0,000 | 0,188 | 6.11 | 10 |
| 03355 | 0,101 | 0,000 | 0,564 | 6.11 | 4 |
| 03359 | 0,000 | 0,000 | 0,000 | 6.12 | 10 |
| 03377 | 0,000 | 0,000 | 0,000 | 6.12 | 100 |
| 03502 | 0,000 | 0,000 | 0,000 | 7.5 | 1 |
| 03519 | 0,000 | 0,025 | 0,000 | 6.12 | 10 |
| 03523 | 0,000 | 0,000 | 0,000 | 7.5 | 3 |
| 03524 | 0,000 | 0,000 | 0,000 | 7.5 | 3 |
| 03525 | 0,000 | 0,000 | 0,000 | 7.5 | 3 |
| 03526 | 0,000 | 0,000 | 0,000 | 7.5 | 3 |
| 03527 | 0,000 | 0,000 | 0,000 | 7.5 | 3 |
| 03528 | 0,000 | 0,000 | 0,000 | 7.5 | 3 |
| 03529 | 0,000 | 0,000 | 0,000 | 7.5 | 3 |
| 03530 | 0,000 | 0,000 | 0,000 | 7.5 | 3 |
| 03531 | 0,000 | 0,000 | 0,000 | 7.5 | 3 |
| 03532 | 0,000 | 0,000 | 0,000 | 7.5 | 3 |
| 03533 | 0,000 | 0,000 | 0,000 | 7.5 | 3 |
| 03534 | 0,000 | 0,000 | 0,000 | 7.5 | 3 |
| 03550 | 0,000 | 0,000 | 0,000 | 7.6 | 3 |
| 03552 | 0,000 | 0,000 | 0,000 | 7.6 | 3 |
| 03553 | 0,000 | 0,000 | 0,000 | 7.6 | 3 |
| 03555 | 0,000 | 0,000 | 0,000 | 7.6 | 3 |
| 03556 | 0,000 | 0,000 | 0,000 | 7.6 | 3 |
| 03557 | 0,000 | 0,000 | 0,000 | 7.6 | 3 |
| 03558 | 0,000 | 0,000 | 0,000 | 7.6 | 3 |
| 03559 | 0,000 | 0,000 | 0,000 | 7.6 | 3 |
| 03560 | 0,000 | 0,000 | 0,000 | 7.6 | 3 |
| 03561 | 0,000 | 0,000 | 0,000 | 7.6 | 3 |
| 03566 | 0,000 | 0,000 | 0,000 | 7.6 | 3 |
| 03568 | 0,000 | 0,000 | 0,000 | 7.6 | 3 |
| 03569 | 0,000 | 0,000 | 0,000 | 7.6 | 3 |
| 03570 | 0,000 | 0,000 | 0,000 | 7.6 | 3 |
| 03571 | 0,000 | 0,000 | 0,000 | 7.6 | 3 |

| Part no. | Amount of copper in kg | Amount of brass in kg | Amount of silver in g | Chapter. page | Pack size |
|----------|------------------------|-----------------------|-----------------------|---------------|-----------|
| 03572 | 0,000 | 0,000 | 0,000 | 7.6 | 3 |
| 03573 | 0,000 | 0,000 | 0,000 | 7.6 | 3 |
| 03574 | 0,000 | 0,000 | 0,000 | 7.6 | 3 |
| 03575 | 0,000 | 0,000 | 0,000 | 7.6 | 3 |
| 03577 | 0,000 | 0,000 | 0,000 | 7.6 | 3 |
| 03579 | 0,000 | 0,000 | 0,000 | 7.6 | 3 |
| 03581 | 0,000 | 0,000 | 0,000 | 7.6 | 3 |
| 03582 | 0,000 | 0,000 | 0,000 | 7.6 | 3 |
| 03620 | 0,000 | 0,025 | 0,000 | 6.12 | 10 |
| 03654 | 0,189 | 0,000 | 1,003 | 3.22 | 4 |
| 03656 | 0,190 | 0,000 | 1,030 | 3.22 | 4 |
| 03657 | 0,000 | 0,110 | 0,000 | 6.12 | 10 |
| 03668 | 0,000 | 0,108 | 0,000 | 6.12 | 10 |
| 03693 | 1,235 | 0,000 | 2,874 | 3.22 | 1 |
| 03727 | 0,000 | 0,000 | 0,000 | 3.29, 6.14 | 3 |
| 03757 | 0,269 | 0,000 | 0,642 | 6.12 | 3 |
| 03758 | 0,033 | 0,000 | 0,202 | 6.11 | 12 |
| 03759 | 0,099 | 0,000 | 0,606 | 6.11 | 4 |
| 03760 | 0,033 | 0,000 | 0,188 | 6.11 | 12 |
| 03761 | 0,101 | 0,000 | 0,564 | 6.11 | 4 |
| 03762 | 0,089 | 0,000 | 0,320 | 6.11 | 3 |
| 03763 | 0,267 | 0,000 | 0,960 | 6.11 | 1 |
| 03765 | 0,275 | 0,000 | 1,476 | 6.11 | 1 |
| 03766 | 0,366 | 0,000 | 1,134 | 6.11 | 3 |
| 03767 | 1,097 | 0,000 | 3,402 | 6.11 | 1 |
| 03768 | 0,412 | 0,000 | 1,094 | 6.11 | 3 |
| 03769 | 1,236 | 0,000 | 3,282 | 6.11 | 1 |
| 03849 | 0,000 | 0,000 | 0,000 | 3.24, 6.16 | 10 |
| 03908 | 0,000 | 0,000 | 0,000 | 7.5 | 3 |
| 03909 | 0,000 | 0,000 | 0,000 | 7.5 | 3 |
| 03910 | 0,000 | 0,000 | 0,000 | 7.5 | 3 |
| 03911 | 0,000 | 0,000 | 0,000 | 7.5 | 3 |
| 03912 | 0,000 | 0,000 | 0,000 | 7.5 | 3 |
| 03913 | 0,000 | 0,000 | 0,000 | 7.5 | 3 |
| 03914 | 0,000 | 0,000 | 0,000 | 7.5 | 3 |
| 03915 | 0,000 | 0,000 | 0,000 | 7.5 | 3 |
| 03916 | 0,000 | 0,000 | 0,000 | 7.5 | 3 |
| 03917 | 0,000 | 0,000 | 0,000 | 7.5 | 3 |
| 03918 | 0,000 | 0,000 | 0,000 | 7.5 | 3 |
| 03919 | 0,000 | 0,000 | 0,000 | 7.5 | 3 |
| 03924 | 0,000 | 0,000 | 0,000 | 7.6 | 3 |
| 03929 | 0,000 | 0,000 | 0,000 | 7.6 | 3 |
| 03930 | 0,000 | 0,000 | 0,000 | 7.6 | 3 |
| 03942 | 0,000 | 0,000 | 0,000 | 7.6 | 3 |
| 03943 | 0,000 | 0,000 | 0,000 | 7.6 | 3 |
| 03946 | 0,000 | 0,000 | 0,000 | 7.6 | 3 |
| 03947 | 0,000 | 0,000 | 0,000 | 7.6 | 3 |
| 05188 | 0,000 | 0,018 | 0,000 | 6.12 | 50 |
| 05779 | 0,000 | 0,000 | 0,000 | 7.14 | 100 |
| 05780 | 0,000 | 0,000 | 0,000 | 7.14 | 20 |
| 05781 | 0,000 | 0,000 | 0,000 | 7.14 | 20 |
| 05782 | 0,000 | 0,000 | 0,000 | 7.14 | 20 |
| 05783 | 0,000 | 0,000 | 0,000 | 7.14 | 20 |
| 05784 | 0,000 | 0,000 | 0,000 | 7.14 | 20 |
| 05786 | 0,000 | 0,000 | 0,000 | 7.14 | 20 |
| 05787 | 0,000 | 0,000 | 0,000 | 7.14 | 20 |
| 05788 | 0,000 | 0,000 | 0,000 | 7.14 | 20 |
| 05789 | 0,000 | 0,000 | 0,000 | 7.14 | 20 |
| 05790 | 0,000 | 0,000 | 0,000 | 7.14 | 20 |
| 05791 | 0,000 | 0,000 | 0,000 | 7.14 | 20 |

| Part no. | Amount of copper in kg | Amount of brass in kg | Amount of silver in g | Chapter. page | Pack size |
|----------|------------------------|-----------------------|-----------------------|-------------------------|-----------|
| 05792 | 0,000 | 0,000 | 0,000 | 7.14 | 20 |
| 05793 | 0,000 | 0,000 | 0,000 | 7.14 | 20 |
| 05800 | 0,000 | 0,000 | 0,000 | 7.14 | 20 |
| 05801 | 0,000 | 0,000 | 0,000 | 7.14 | 20 |
| 05802 | 0,000 | 0,000 | 0,000 | 7.14 | 20 |
| 08824 | 0,000 | 0,002 | 0,000 | 7.15 | 100 |
| 08825 | 0,000 | 0,000 | 0,000 | 7.15 | 100 |
| 11225 | 0,302 | 0,000 | 0,000 | 1.1 | 1 |
| 11405 | 0,551 | 0,000 | 0,000 | 1.1 | 1 |
| 30322 | 3,277 | 2,101 | 0,000 | 3.9 | 1 |
| 30473 | 4,228 | 2,101 | 0,000 | 3.9 | 1 |
| 30894 | 0,000 | 0,000 | 0,000 | 3.29, 6.14 | 3 |
| 31004 | 0,000 | 0,000 | 0,000 | 6.3, 6.5 | 100 |
| 31005 | 0,000 | 0,000 | 0,000 | 7.2 | 20 |
| 31006 | 0,000 | 0,000 | 0,000 | 7.2 | 20 |
| 31008 | 0,000 | 0,000 | 0,000 | 7.7 | 10 |
| 31009 | 0,000 | 0,000 | 0,000 | 7.7 | 10 |
| 31010 | 0,000 | 0,000 | 0,000 | 7.7 | 10 |
| 31011 | 0,000 | 0,000 | 0,000 | 7.7 | 10 |
| 31012 | 0,765 | 0,000 | 0,000 | 6.2, 6.3, 6.4, 6.8 | 10 |
| 31014 | 0,235 | 0,000 | 0,000 | 6.2, 6.3, 6.4, 6.8 | 25 |
| 31017 | 0,000 | 0,000 | 0,000 | 7.7 | 10 |
| 31024 | 0,268 | 0,000 | 0,000 | 6.3 | 25 |
| 31026 | 0,670 | 0,000 | 0,000 | 6.3 | 10 |
| 31027 | 0,000 | 0,000 | 0,000 | 6.2, 6.3, 6.4, 6.5, 6.8 | 50 |
| 31028 | 0,000 | 0,000 | 0,000 | 6.2, 6.3, 6.4, 6.5, 6.8 | 25 |
| 31029 | 0,000 | 0,000 | 0,000 | 6.2, 6.3, 6.4, 6.5, 6.8 | 25 |
| 31039 | 0,015 | 0,000 | 0,000 | 6.8, 6.9 | 10 |
| 31042 | 0,000 | 0,000 | 0,000 | 6.8, 6.9 | 20 |
| 31056 | 1,485 | 0,000 | 0,000 | 6.2, 6.3, 6.4, 6.8 | 4 |
| 31057 | 0,505 | 0,000 | 0,000 | 6.2, 6.4, 6.8 | 10 |
| 31070 | 0,000 | 0,000 | 0,000 | 3.17 | 10 |
| 31071 | 0,000 | 0,000 | 0,000 | 3.17 | 10 |
| 31072 | 0,000 | 0,000 | 0,000 | 3.17 | 5 |
| 31073 | 0,000 | 0,000 | 0,000 | 3.17 | 5 |
| 31084 | 0,000 | 0,000 | 0,000 | 6.2, 6.3, 6.4, 6.8 | 10 |
| 31085 | 0,000 | 0,000 | 0,000 | 6.2, 6.3, 6.4, 6.5, 6.8 | 25 |
| 31086 | 0,000 | 0,000 | 0,000 | 6.3, 6.5 | 100 |
| 31098 | 0,000 | 0,000 | 0,000 | 7.4 | 20 |
| 31100 | 0,000 | 0,000 | 0,000 | 7.4 | 20 |
| 31101 | 0,220 | 0,000 | 0,000 | 6.8 | 25 |
| 31102 | 0,812 | 0,000 | 0,000 | 6.8 | 10 |
| 31103 | 0,000 | 0,000 | 0,000 | 6.8 | 50 |
| 31104 | 0,000 | 0,000 | 0,000 | 7.2 | 20 |
| 31110 | 0,006 | 0,000 | 0,006 | 6.6 | 12 |
| 31111 | 0,020 | 0,000 | 0,012 | 6.6 | 6 |
| 31112 | 0,011 | 0,000 | 0,012 | 6.6 | 6 |
| 31113 | 0,016 | 0,000 | 0,018 | 6.6 | 4 |
| 31114 | 0,030 | 0,000 | 0,024 | 6.6 | 3 |
| 31115 | 0,012 | 0,000 | 0,015 | 6.6 | 6 |
| 31116 | 0,040 | 0,000 | 0,030 | 6.6 | 3 |
| 31117 | 0,025 | 0,000 | 0,030 | 6.6 | 3 |
| 31118 | 0,038 | 0,000 | 0,045 | 6.6 | 2 |
| 31119 | 0,066 | 0,000 | 0,060 | 6.6 | 1 |

| Part no. | Amount of copper in kg | Amount of brass in kg | Amount of silver in g | Chapter. page | Pack size |
|----------|------------------------|-----------------------|-----------------------|---------------------|-----------|
| 31120 | 0,024 | 0,000 | 0,028 | 6.6 | 6 |
| 31121 | 0,079 | 0,000 | 0,056 | 6.6 | 3 |
| 31122 | 0,048 | 0,000 | 0,056 | 6.6 | 3 |
| 31123 | 0,072 | 0,000 | 0,084 | 6.6 | 2 |
| 31124 | 0,127 | 0,000 | 0,112 | 6.6 | 1 |
| 31130 | 0,006 | 0,000 | 0,006 | 6.6 | 12 |
| 31132 | 0,011 | 0,000 | 0,012 | 6.6 | 6 |
| 31133 | 0,016 | 0,000 | 0,018 | 6.6 | 4 |
| 31135 | 0,011 | 0,000 | 0,000 | 6.6 | 6 |
| 31138 | 0,037 | 0,000 | 0,000 | 6.6 | 2 |
| 31140 | 0,024 | 0,000 | 0,028 | 6.6 | 6 |
| 31143 | 0,072 | 0,000 | 0,084 | 6.6 | 2 |
| 31157 | 0,020 | 0,000 | 0,000 | 6.8 | 50 |
| 31158 | 0,222 | 0,000 | 2,685 | 3.18 | 1 |
| 31168 | 0,066 | 0,000 | 0,060 | 6.6 | 1 |
| 31171 | 0,127 | 0,000 | 0,112 | 6.6 | 1 |
| 31173 | 0,014 | 0,013 | 0,065 | 6.5 | 9 |
| 31174 | 0,042 | 0,041 | 0,195 | 6.5 | 3 |
| 31175 | 0,014 | 0,022 | 0,065 | 6.5 | 9 |
| 31176 | 0,042 | 0,067 | 0,195 | 6.5 | 3 |
| 31182 | 0,000 | 0,000 | 0,000 | 7.7 | 10 |
| 31183 | 0,000 | 0,000 | 0,000 | 7.7 | 10 |
| 31184 | 0,000 | 0,000 | 0,000 | 7.7 | 10 |
| 31185 | 0,000 | 0,000 | 0,000 | 7.7 | 10 |
| 31186 | 0,000 | 0,000 | 0,000 | 7.7 | 10 |
| 31187 | 0,000 | 0,000 | 0,000 | 7.7 | 10 |
| 31188 | 0,000 | 0,000 | 0,000 | 7.7 | 10 |
| 31189 | 0,000 | 0,000 | 0,000 | 1.2, 2.3, 3.16, 7.7 | 10 |
| 31190 | 0,000 | 0,000 | 0,000 | 7.7 | 10 |
| 31191 | 0,000 | 0,000 | 0,000 | 7.7 | 10 |
| 31192 | 0,000 | 0,000 | 0,000 | 7.7 | 10 |
| 31193 | 0,000 | 0,000 | 0,000 | 7.7 | 10 |
| 31194 | 0,000 | 0,000 | 0,000 | 7.7 | 10 |
| 31195 | 0,000 | 0,000 | 0,000 | 7.7 | 10 |
| 31196 | 0,000 | 0,000 | 0,000 | 7.7 | 10 |
| 31198 | 0,000 | 0,000 | 0,000 | 7.7 | 10 |
| 31199 | 0,000 | 0,000 | 0,000 | 7.7 | 10 |
| 31200 | 0,000 | 0,000 | 0,000 | 7.7 | 10 |
| 31201 | 0,000 | 0,000 | 0,000 | 7.7 | 10 |
| 31202 | 0,000 | 0,000 | 0,000 | 7.7 | 10 |
| 31203 | 0,000 | 0,000 | 0,000 | 7.7 | 10 |
| 31204 | 0,000 | 0,000 | 0,000 | 7.7 | 10 |
| 31205 | 0,000 | 0,000 | 0,000 | 7.8 | 10 |
| 31206 | 0,000 | 0,000 | 0,000 | 7.8 | 10 |
| 31207 | 0,000 | 0,000 | 0,000 | 7.8 | 10 |
| 31208 | 0,000 | 0,000 | 0,000 | 7.8 | 10 |
| 31209 | 0,000 | 0,000 | 0,000 | 7.8 | 10 |
| 31210 | 0,000 | 0,000 | 0,000 | 7.8 | 10 |
| 31211 | 0,000 | 0,000 | 0,000 | 7.8 | 10 |
| 31212 | 0,000 | 0,000 | 0,000 | 7.8 | 10 |
| 31213 | 0,000 | 0,000 | 0,000 | 7.8 | 10 |
| 31214 | 0,000 | 0,000 | 0,000 | 7.8 | 10 |
| 31215 | 0,000 | 0,000 | 0,000 | 7.8 | 10 |
| 31216 | 0,000 | 0,000 | 0,000 | 7.8 | 10 |
| 31217 | 0,000 | 0,000 | 0,000 | 7.8 | 10 |
| 31219 | 0,000 | 0,000 | 0,000 | 7.8 | 10 |
| 31220 | 0,000 | 0,000 | 0,000 | 7.8 | 10 |
| 31221 | 0,000 | 0,000 | 0,000 | 7.8 | 10 |
| 31226 | 0,000 | 0,000 | 0,000 | 7.8 | 10 |
| 31227 | 0,000 | 0,000 | 0,000 | 7.8 | 10 |

| Part no. | Amount of copper in kg | Amount of brass in kg | Amount of silver in g | Chapter. page | Pack size |
|----------|------------------------|-----------------------|-----------------------|---------------------|-----------|
| 31228 | 0,000 | 0,000 | 0,000 | 7.8 | 10 |
| 31229 | 0,000 | 0,000 | 0,000 | 7.8 | 10 |
| 31232 | 0,222 | 0,000 | 2,685 | 3.18, 3.20 | 1 |
| 31235 | 0,000 | 0,000 | 0,000 | 7.9 | 10 |
| 31236 | 0,000 | 0,000 | 0,000 | 7.9 | 10 |
| 31237 | 0,000 | 0,000 | 0,000 | 7.9 | 10 |
| 31238 | 0,000 | 0,000 | 0,000 | 7.9 | 10 |
| 31239 | 0,000 | 0,000 | 0,000 | 7.9 | 10 |
| 31240 | 0,000 | 0,000 | 0,000 | 7.9 | 10 |
| 31241 | 0,000 | 0,000 | 0,000 | 7.9 | 10 |
| 31242 | 0,000 | 0,000 | 0,000 | 7.9 | 10 |
| 31243 | 0,000 | 0,000 | 0,000 | 7.9 | 10 |
| 31244 | 0,000 | 0,000 | 0,000 | 7.9 | 10 |
| 31245 | 0,000 | 0,000 | 0,000 | 7.9 | 10 |
| 31246 | 0,000 | 0,000 | 0,000 | 7.9 | 10 |
| 31247 | 0,000 | 0,000 | 0,000 | 7.9 | 10 |
| 31248 | 0,000 | 0,000 | 0,000 | 7.9 | 10 |
| 31249 | 0,000 | 0,000 | 0,000 | 7.9 | 10 |
| 31250 | 0,000 | 0,000 | 0,000 | 7.9 | 10 |
| 31251 | 0,000 | 0,000 | 0,000 | 7.9 | 10 |
| 31252 | 0,000 | 0,000 | 0,000 | 1.2, 2.3, 3.16, 7.9 | 10 |
| 31258 | 0,015 | 0,000 | 0,006 | 6.6 | 12 |
| 31269 | 0,000 | 0,000 | 0,000 | 6.8 | 1 |
| 31273 | 0,009 | 0,000 | 0,012 | 6.6 | 12 |
| 31274 | 0,023 | 0,000 | 0,024 | 6.6 | 4 |
| 31275 | 0,006 | 0,000 | 0,006 | 6.7 | 12 |
| 31276 | 0,011 | 0,000 | 0,012 | 6.7 | 6 |
| 31277 | 0,016 | 0,000 | 0,018 | 6.7 | 4 |
| 31278 | 0,012 | 0,000 | 0,015 | 6.7 | 6 |
| 31279 | 0,025 | 0,000 | 0,030 | 6.7 | 3 |
| 31280 | 0,038 | 0,000 | 0,045 | 6.7 | 2 |
| 31281 | 0,024 | 0,000 | 0,028 | 6.7 | 6 |
| 31282 | 0,048 | 0,000 | 0,056 | 6.7 | 3 |
| 31283 | 0,072 | 0,000 | 0,084 | 6.7 | 2 |
| 31284 | 0,024 | 0,000 | 0,028 | 6.10 | 6 |
| 31285 | 0,048 | 0,000 | 0,056 | 6.10 | 3 |
| 31286 | 0,000 | 0,022 | 0,000 | 6.3 | 9 |
| 31287 | 0,072 | 0,000 | 0,084 | 6.10 | 2 |
| 31288 | 0,000 | 0,066 | 0,000 | 6.3 | 3 |
| 31291 | 0,000 | 0,031 | 0,000 | 6.3 | 9 |
| 31293 | 0,000 | 0,094 | 0,000 | 6.3 | 3 |
| 31295 | 0,006 | 0,000 | 0,006 | 6.9 | 12 |
| 31296 | 0,011 | 0,000 | 0,012 | 6.9 | 6 |
| 31297 | 0,016 | 0,000 | 0,018 | 6.9 | 4 |
| 31298 | 0,006 | 0,000 | 0,006 | 6.9 | 12 |
| 31299 | 0,011 | 0,000 | 0,012 | 6.9 | 6 |
| 31300 | 0,016 | 0,000 | 0,018 | 6.9 | 4 |
| 31301 | 0,000 | 0,021 | 0,000 | 6.2 | 9 |
| 31302 | 0,000 | 0,064 | 0,000 | 6.2 | 3 |
| 31303 | 0,000 | 0,021 | 0,000 | 6.2 | 9 |
| 31306 | 0,000 | 0,063 | 0,000 | 6.2 | 3 |
| 31307 | 0,030 | 0,000 | 0,296 | 6.4 | 3 |
| 31308 | 0,051 | 0,000 | 0,440 | 6.4 | 2 |
| 31309 | 0,263 | 0,000 | 0,000 | 6.5 | 25 |
| 31310 | 0,671 | 0,000 | 0,000 | 6.5 | 10 |
| 31311 | 0,256 | 0,000 | 0,000 | 6.5 | 25 |
| 31312 | 0,641 | 0,000 | 0,000 | 6.5 | 10 |
| 31313 | 0,062 | 0,000 | 0,592 | 6.4 | 2 |
| 31314 | 0,090 | 0,000 | 0,888 | 6.4 | 1 |
| 31315 | 0,111 | 0,000 | 1,032 | 6.4 | 1 |

| Part no. | Amount of copper in kg | Amount of brass in kg | Amount of silver in g | Chapter. page | Pack size |
|----------|------------------------|-----------------------|-----------------------|---------------|-----------|
| 31316 | 0,000 | 0,000 | 0,000 | 6.4 | 1 |
| 31323 | 0,000 | 0,000 | 0,000 | 7.11 | 10 |
| 31324 | 0,000 | 0,000 | 0,000 | 7.11 | 10 |
| 31325 | 0,000 | 0,000 | 0,000 | 7.11 | 10 |
| 31326 | 0,000 | 0,000 | 0,000 | 7.11 | 10 |
| 31327 | 0,000 | 0,000 | 0,000 | 7.11 | 10 |
| 31333 | 0,000 | 0,000 | 0,000 | 7.10 | 10 |
| 31338 | 0,000 | 0,000 | 0,000 | 7.10 | 10 |
| 31342 | 0,000 | 0,000 | 0,000 | 7.10 | 10 |
| 31345 | 0,000 | 0,000 | 0,000 | 7.10 | 10 |
| 31349 | 0,000 | 0,000 | 0,000 | 7.10 | 10 |
| 31351 | 0,000 | 0,000 | 0,000 | 7.10 | 10 |
| 31353 | 0,000 | 0,000 | 0,000 | 7.10 | 10 |
| 31354 | 0,000 | 0,000 | 0,000 | 7.10 | 10 |
| 31355 | 0,000 | 0,000 | 0,000 | 7.10 | 10 |
| 31357 | 0,000 | 0,000 | 0,000 | 7.10 | 10 |
| 31358 | 0,000 | 0,000 | 0,000 | 7.10 | 10 |
| 31359 | 0,000 | 0,000 | 0,000 | 7.10 | 10 |
| 31360 | 0,000 | 0,000 | 0,000 | 7.10 | 10 |
| 31361 | 0,000 | 0,000 | 0,000 | 7.10 | 10 |
| 31362 | 0,000 | 0,000 | 0,000 | 7.10 | 10 |
| 31363 | 0,000 | 0,000 | 0,000 | 7.10 | 10 |
| 31364 | 0,000 | 0,000 | 0,000 | 7.10 | 10 |
| 31366 | 0,000 | 0,000 | 0,000 | 7.7 | 10 |
| 31368 | 0,000 | 0,000 | 0,000 | 7.7 | 10 |
| 31370 | 0,000 | 0,000 | 0,000 | 7.7 | 10 |
| 31371 | 0,000 | 0,000 | 0,000 | 7.7 | 10 |
| 31372 | 0,000 | 0,000 | 0,000 | 7.7 | 10 |
| 31373 | 0,000 | 0,000 | 0,000 | 7.7 | 10 |
| 31374 | 0,000 | 0,000 | 0,000 | 7.7 | 10 |
| 31385 | 0,000 | 0,000 | 0,000 | 7.7 | 10 |
| 31386 | 0,000 | 0,000 | 0,000 | 7.7 | 10 |
| 31387 | 0,000 | 0,000 | 0,000 | 7.7 | 10 |
| 31390 | 0,000 | 0,000 | 0,000 | 2.6 | 1 |
| 31394 | 0,000 | 0,000 | 0,000 | 7.9 | 10 |
| 31395 | 0,000 | 0,000 | 0,000 | 7.9 | 10 |
| 31396 | 0,000 | 0,000 | 0,000 | 7.9 | 10 |
| 31397 | 0,000 | 0,000 | 0,000 | 7.9 | 10 |
| 31398 | 0,000 | 0,000 | 0,000 | 7.9 | 10 |
| 31399 | 0,000 | 0,000 | 0,000 | 7.9 | 10 |
| 31400 | 0,000 | 0,000 | 0,000 | 7.9 | 10 |
| 31401 | 0,000 | 0,000 | 0,000 | 7.9 | 10 |
| 31404 | 0,000 | 0,000 | 0,000 | 7.9 | 10 |
| 31405 | 0,000 | 0,000 | 0,000 | 7.9 | 10 |
| 31406 | 0,000 | 0,000 | 0,000 | 7.9 | 10 |
| 31407 | 0,000 | 0,000 | 0,000 | 7.9 | 10 |
| 31441 | 0,019 | 0,037 | 0,000 | 3.17 | 10 |
| 31442 | 0,019 | 0,060 | 0,000 | 3.17 | 10 |
| 31511 | 0,000 | 0,000 | 0,000 | 7.11 | 10 |
| 31512 | 0,000 | 0,000 | 0,000 | 7.11 | 10 |
| 31514 | 0,000 | 0,000 | 0,000 | 7.11 | 10 |
| 31515 | 0,000 | 0,000 | 0,000 | 7.11 | 10 |
| 31525 | 0,222 | 0,000 | 2,685 | 3.18 | 1 |
| 31543 | 0,000 | 0,000 | 0,000 | 7.8 | 10 |
| 31544 | 0,000 | 0,000 | 0,000 | 7.8 | 10 |
| 31545 | 0,000 | 0,000 | 0,000 | 7.8 | 10 |
| 31546 | 0,000 | 0,000 | 0,000 | 7.8 | 10 |
| 31547 | 0,000 | 0,000 | 0,000 | 7.8 | 10 |
| 31548 | 0,450 | 0,000 | 0,000 | 6.8, 6.9 | 10 |
| 31549 | 1,070 | 0,000 | 0,000 | 6.8, 6.9 | 10 |

| Part no. | Amount of copper in kg | Amount of brass in kg | Amount of silver in g | Chapter. page | Pack size |
|----------|------------------------|-----------------------|-----------------------|---------------------|-----------|
| 31550 | 0,035 | 0,000 | 0,000 | 6.8, 6.9 | 10 |
| 31552 | 0,000 | 0,000 | 0,000 | 6.8, 6.9 | 20 |
| 31554 | 0,049 | 0,000 | 0,000 | 2.4 | 6 |
| 31555 | 0,008 | 0,000 | 0,006 | 6.7 | 5 |
| 31556 | 0,030 | 0,000 | 0,800 | 6.4 | 3 |
| 31557 | 0,090 | 0,000 | 0,888 | 6.4 | 1 |
| 31558 | 0,000 | 0,000 | 0,000 | 7.8 | 20 |
| 31559 | 0,000 | 0,000 | 0,000 | 7.8 | 20 |
| 31560 | 0,000 | 0,000 | 0,000 | 7.8 | 20 |
| 31561 | 0,680 | 0,000 | 0,000 | 6.8, 6.9 | 10 |
| 31563 | 0,000 | 0,000 | 0,000 | 6.8 | 1 |
| 31564 | 0,000 | 0,000 | 0,000 | 6.8 | 1 |
| 31565 | 0,000 | 0,000 | 0,000 | 6.8 | 1 |
| 31567 | 0,000 | 0,000 | 0,000 | 1.2, 2.3, 3.16, 6.1 | 3 |
| 31568 | 0,000 | 0,000 | 0,000 | 1.2, 2.3, 3.16, 6.1 | 3 |
| 31569 | 0,000 | 0,000 | 0,000 | 1.2, 2.3, 3.16, 6.1 | 3 |
| 31570 | 0,005 | 0,000 | 0,006 | 3.20 | 12 |
| 31571 | 0,005 | 0,000 | 0,006 | 3.20 | 12 |
| 31572 | 0,005 | 0,000 | 0,006 | 3.20 | 12 |
| 31574 | 0,081 | 0,000 | 1,107 | 3.19 | 1 |
| 31575 | 0,081 | 0,000 | 1,107 | 3.19 | 1 |
| 31578 | 0,081 | 0,000 | 1,107 | 3.19 | 1 |
| 31579 | 0,081 | 0,000 | 1,107 | 3.19 | 1 |
| 31588 | 0,081 | 0,000 | 1,107 | 3.19 | 1 |
| 31901 | 0,000 | 0,000 | 0,000 | 3.18 | 5 |
| 31902 | 0,000 | 0,000 | 0,000 | 3.18, 3.19, 6.4 | 20 |
| 31903 | 0,000 | 0,000 | 0,000 | 3.18 | 1 |
| 31904 | 0,000 | 0,000 | 0,000 | 7.2 | 36 |
| 31905 | 0,000 | 0,000 | 0,000 | 7.4 | 20 |
| 31906 | 0,000 | 0,000 | 0,000 | 7.4 | 10 |
| 31908 | 0,000 | 0,000 | 0,000 | 7.2 | 36 |
| 31909 | 0,000 | 0,000 | 0,000 | 7.2 | 36 |
| 31910 | 0,000 | 0,000 | 0,000 | 7.2 | 36 |
| 31911 | 0,000 | 0,000 | 0,000 | 7.4 | 20 |
| 31912 | 0,000 | 0,000 | 0,000 | 7.4 | 10 |
| 31913 | 0,000 | 0,000 | 0,000 | 7.2, 7.4 | 1 |
| 31914 | 0,000 | 0,000 | 0,000 | 3.19 | 5 |
| 31915 | 0,000 | 0,000 | 0,000 | 3.19 | 5 |
| 31918 | 0,028 | 0,037 | 0,000 | 3.17 | 10 |
| 31919 | 0,028 | 0,060 | 0,000 | 3.17 | 10 |
| 31920 | 0,040 | 0,032 | 0,268 | 6.10 | 6 |
| 31921 | 0,079 | 0,064 | 0,536 | 6.10 | 3 |
| 31922 | 0,118 | 0,096 | 0,804 | 6.10 | 2 |
| 31923 | 0,040 | 0,032 | 0,268 | 6.10 | 6 |
| 31924 | 0,079 | 0,064 | 0,536 | 6.10 | 3 |
| 31925 | 0,118 | 0,096 | 0,804 | 6.10 | 2 |
| 31929 | 0,006 | 0,000 | 0,006 | 6.9 | 12 |
| 31930 | 0,006 | 0,000 | 0,006 | 6.6 | 12 |
| 31932 | 0,024 | 0,032 | 0,028 | 6.10 | 6 |
| 31933 | 0,048 | 0,065 | 0,056 | 6.10 | 3 |
| 31934 | 0,072 | 0,098 | 0,084 | 6.10 | 2 |
| 31935 | 0,000 | 0,025 | 0,000 | 3.18 | 8 |
| 31936 | 0,000 | 0,025 | 0,000 | 3.18 | 6 |
| 31940 | 0,012 | 0,000 | 0,015 | 6.7 | 6 |
| 31941 | 0,038 | 0,000 | 0,045 | 6.7 | 2 |
| 31942 | 0,024 | 0,000 | 0,028 | 6.7 | 6 |
| 31943 | 0,072 | 0,000 | 0,084 | 6.7 | 2 |

| Part no. | Amount of copper in kg | Amount of brass in kg | Amount of silver in g | Chapter. page | Pack size |
|----------|------------------------|-----------------------|-----------------------|---------------|-----------|
| 31946 | 0,028 | 0,037 | 0,000 | 3.17 | 8 |
| 31947 | 0,028 | 0,060 | 0,000 | 3.17 | 6 |
| 31950 | 0,019 | 0,037 | 0,000 | 3.17 | 8 |
| 31951 | 0,019 | 0,060 | 0,000 | 3.17 | 6 |
| 31954 | 0,032 | 0,000 | 0,348 | 3.20 | 4 |
| 31955 | 0,032 | 0,000 | 0,348 | 3.20 | 4 |
| 31957 | 0,048 | 0,000 | 0,056 | 6.7 | 3 |
| 31958 | 0,032 | 0,000 | 0,348 | 3.21 | 4 |
| 31959 | 0,032 | 0,000 | 0,348 | 3.21 | 4 |
| 31961 | 0,022 | 0,000 | 0,232 | 3.20 | 6 |
| 31963 | 0,052 | 0,000 | 0,464 | 3.20 | 4 |
| 31964 | 0,052 | 0,000 | 0,464 | 3.20 | 4 |
| 31968 | 0,139 | 0,098 | 0,000 | 3.21 | 1 |
| 31970 | 0,340 | 0,096 | 0,000 | 3.21 | 1 |
| 31971 | 0,006 | 0,000 | 0,006 | 6.7 | 12 |
| 31972 | 0,025 | 0,000 | 0,030 | 6.7 | 3 |
| 31973 | 0,006 | 0,000 | 0,006 | 6.7 | 12 |
| 31974 | 0,011 | 0,000 | 0,012 | 6.7 | 6 |
| 31976 | 0,000 | 0,000 | 0,000 | 3.19 | 1 |
| 32004 | 0,952 | 0,052 | 0,000 | 3.15 | 1 |
| 32017 | 0,455 | 0,000 | 0,000 | 3.14 | 1 |
| 32018 | 0,397 | 0,000 | 0,000 | 3.14 | 1 |
| 32020 | 0,397 | 0,000 | 0,000 | 3.14 | 1 |
| 32023 | 0,309 | 0,009 | 0,000 | 3.14 | 1 |
| 32028 | 0,397 | 0,000 | 0,375 | 3.14 | 1 |
| 32029 | 0,182 | 0,000 | 0,000 | 3.13 | 1 |
| 32031 | 1,559 | 0,007 | 0,000 | 3.15 | 1 |
| 32033 | 2,276 | 0,005 | 0,000 | 3.15 | 1 |
| 32064 | 1,641 | 0,020 | 5,642 | 3.15 | 1 |
| 32067 | 0,614 | 0,000 | 0,000 | 3.14 | 1 |
| 32137 | 0,307 | 0,018 | 0,000 | 3.14 | 1 |
| 32138 | 1,088 | 0,003 | 0,000 | 3.15 | 1 |
| 32140 | 0,322 | 0,018 | 0,000 | 3.14 | 1 |
| 32146 | 0,029 | 0,000 | 0,000 | 3.12 | 4 |
| 32156 | 0,312 | 0,007 | 0,000 | 3.14 | 1 |
| 32157 | 1,095 | 0,007 | 0,000 | 3.15 | 1 |
| 32168 | 0,348 | 0,040 | 0,000 | 3.14 | 1 |
| 32214 | 0,156 | 0,027 | 0,000 | 3.14 | 1 |
| 32215 | 0,156 | 0,027 | 0,000 | 3.14 | 1 |
| 32216 | 0,348 | 0,040 | 0,000 | 3.14 | 1 |
| 32400 | 0,047 | 0,000 | 0,000 | 3.10 | 4 |
| 32401 | 0,047 | 0,000 | 0,000 | 3.10 | 4 |
| 32402 | 0,047 | 0,000 | 0,000 | 3.10 | 4 |
| 32404 | 0,091 | 0,000 | 0,000 | 3.10 | 4 |
| 32408 | 0,091 | 0,000 | 0,000 | 3.10 | 4 |
| 32412 | 0,109 | 0,000 | 0,000 | 3.10 | 4 |
| 32416 | 0,109 | 0,000 | 0,000 | 3.10 | 4 |
| 32420 | 0,004 | 0,000 | 0,000 | 3.10 | 4 |
| 32421 | 0,011 | 0,000 | 0,000 | 3.10 | 4 |
| 32425 | 0,004 | 0,000 | 0,000 | 3.10 | 4 |
| 32426 | 0,011 | 0,000 | 0,000 | 3.10 | 4 |
| 32427 | 0,048 | 0,000 | 0,000 | 3.13 | 4 |
| 32428 | 0,048 | 0,000 | 0,000 | 3.13 | 4 |
| 32429 | 0,036 | 0,000 | 0,000 | 3.13 | 4 |
| 32430 | 0,042 | 0,000 | 0,000 | 3.11 | 4 |
| 32431 | 0,042 | 0,000 | 0,000 | 3.11 | 4 |
| 32432 | 0,046 | 0,000 | 0,000 | 3.11 | 2 |
| 32433 | 0,042 | 0,000 | 0,000 | 3.11 | 4 |
| 32434 | 0,048 | 0,000 | 0,000 | 3.13 | 4 |
| 32436 | 0,021 | 0,000 | 0,000 | 3.11 | 4 |

| Part no. | Amount of copper in kg | Amount of brass in kg | Amount of silver in g | Chapter. page | Pack size |
|----------|------------------------|-----------------------|-----------------------|---------------|-----------|
| 32438 | 0,048 | 0,000 | 0,000 | 3.13 | 4 |
| 32439 | 0,021 | 0,000 | 0,000 | 3.11 | 4 |
| 32440 | 0,040 | 0,000 | 0,000 | 3.13 | 2 |
| 32441 | 0,084 | 0,000 | 0,000 | 3.11 | 4 |
| 32442 | 0,084 | 0,000 | 0,000 | 3.11 | 4 |
| 32443 | 0,084 | 0,000 | 0,000 | 3.11 | 4 |
| 32444 | 0,084 | 0,000 | 0,000 | 3.11 | 4 |
| 32445 | 0,042 | 0,000 | 0,000 | 3.13 | 4 |
| 32446 | 0,084 | 0,000 | 0,000 | 3.11 | 4 |
| 32448 | 0,046 | 0,000 | 0,000 | 3.13 | 2 |
| 32449 | 0,084 | 0,000 | 0,000 | 3.11 | 4 |
| 32450 | 0,042 | 0,000 | 0,000 | 3.13 | 4 |
| 32451 | 0,048 | 0,000 | 0,000 | 3.13 | 4 |
| 32452 | 0,046 | 0,000 | 0,000 | 3.13 | 2 |
| 32453 | 0,052 | 0,000 | 0,000 | 3.13 | 2 |
| 32454 | 0,105 | 0,000 | 0,000 | 3.11 | 4 |
| 32455 | 0,105 | 0,000 | 0,000 | 3.11 | 4 |
| 32456 | 0,105 | 0,000 | 0,000 | 3.11 | 4 |
| 32457 | 0,105 | 0,000 | 0,000 | 3.11 | 4 |
| 32459 | 0,105 | 0,000 | 0,000 | 3.11 | 4 |
| 32460 | 0,105 | 0,000 | 0,000 | 3.13 | 4 |
| 32461 | 0,105 | 0,000 | 0,000 | 3.11 | 4 |
| 32463 | 0,105 | 0,000 | 0,000 | 3.13 | 2 |
| 32464 | 0,058 | 0,000 | 0,000 | 3.12 | 4 |
| 32465 | 0,058 | 0,000 | 0,000 | 3.12 | 4 |
| 32466 | 0,057 | 0,000 | 0,000 | 3.11 | 4 |
| 32467 | 0,057 | 0,000 | 0,000 | 3.11 | 4 |
| 32469 | 0,057 | 0,000 | 0,000 | 3.11 | 4 |
| 32472 | 0,057 | 0,000 | 0,000 | 3.11 | 4 |
| 32477 | 0,004 | 0,000 | 0,000 | 3.12 | 4 |
| 32478 | 0,011 | 0,000 | 0,000 | 3.12 | 4 |
| 32484 | 0,004 | 0,000 | 0,000 | 3.12 | 4 |
| 32485 | 0,011 | 0,000 | 0,000 | 3.12 | 4 |
| 32486 | 0,022 | 0,000 | 0,000 | 3.12 | 4 |
| 32487 | 0,022 | 0,000 | 0,000 | 3.12 | 4 |
| 32498 | 0,049 | 0,000 | 0,000 | 3.13 | 4 |
| 32511 | 0,000 | 0,000 | 0,000 | 3.10, 3.12 | 10 |
| 32513 | 0,000 | 0,000 | 0,000 | 3.10, 3.12 | 10 |
| 32533 | 0,048 | 0,000 | 0,000 | 3.13 | 4 |
| 32534 | 0,084 | 0,000 | 0,000 | 3.13 | 4 |
| 32535 | 0,105 | 0,000 | 0,000 | 3.13 | 4 |
| 32570 | 0,266 | 0,002 | 0,772 | 3.14 | 1 |
| 32575 | 0,397 | 0,000 | 0,375 | 3.14 | 1 |
| 32577 | 0,397 | 0,000 | 0,375 | 3.14 | 1 |
| 32578 | 0,611 | 0,000 | 0,000 | 3.14 | 1 |
| 32579 | 2,103 | 0,009 | 0,000 | 3.15 | 1 |
| 32580 | 0,617 | 0,000 | 0,000 | 3.14 | 1 |
| 32581 | 2,157 | 0,003 | 0,000 | 3.15 | 1 |
| 32584 | 0,600 | 0,000 | 0,000 | 3.14 | 1 |
| 32585 | 2,765 | 0,007 | 0,000 | 3.15 | 1 |
| 32586 | 0,617 | 0,000 | 0,000 | 3.14 | 1 |
| 32588 | 0,051 | 0,000 | 0,000 | 3.13 | 4 |
| 32590 | 0,040 | 0,000 | 0,000 | 2.3 | 4 |
| 32591 | 0,087 | 0,000 | 0,000 | 2.3 | 4 |
| 32592 | 0,449 | 0,000 | 0,000 | 3.14 | 1 |
| 32593 | 1,458 | 0,003 | 0,000 | 3.15 | 1 |
| 32594 | 0,097 | 0,000 | 0,000 | 3.23 | 2 |
| 32595 | 0,233 | 0,000 | 0,000 | 3.23 | 2 |
| 32601 | 0,440 | 0,000 | 0,000 | 3.14 | 1 |
| 32628 | 0,033 | 0,000 | 0,000 | 2.6 | 12 |

| Part no. | Amount of copper in kg | Amount of brass in kg | Amount of silver in g | Chapter. page | Pack size |
|----------|------------------------|-----------------------|-----------------------|---------------|-----------|
| 32629 | 0,030 | 0,000 | 0,000 | 2.6 | 12 |
| 32630 | 0,031 | 0,000 | 0,000 | 2.6 | 12 |
| 32631 | 0,000 | 0,000 | 0,000 | 2.6 | 6 |
| 32632 | 0,008 | 0,005 | 0,000 | 2.6 | 12 |
| 32633 | 0,000 | 0,000 | 0,000 | 2.6 | 12 |
| 32634 | 0,007 | 0,005 | 0,000 | 2.6 | 12 |
| 32635 | 0,005 | 0,000 | 0,000 | 3.12 | 4 |
| 32636 | 0,005 | 0,000 | 0,000 | 3.12 | 4 |
| 32637 | 0,055 | 0,000 | 0,000 | 3.13 | 4 |
| 32638 | 0,064 | 0,000 | 0,000 | 3.13 | 4 |
| 32639 | 0,049 | 0,000 | 0,000 | 3.13 | 4 |
| 32640 | 0,217 | 0,004 | 0,000 | 2.5 | 1 |
| 32641 | 1,473 | 0,003 | 0,000 | 3.15 | 1 |
| 32642 | 0,426 | 0,010 | 0,000 | 3.14 | 1 |
| 32643 | 1,679 | 0,010 | 0,000 | 3.15 | 1 |
| 32650 | 0,055 | 0,000 | 0,000 | 3.13 | 4 |
| 32651 | 0,462 | 0,000 | 0,000 | 3.14 | 1 |
| 32655 | 0,049 | 0,000 | 0,000 | 3.11 | 4 |
| 32659 | 0,064 | 0,000 | 0,000 | 3.13 | 4 |
| 32660 | 0,218 | 0,000 | 0,000 | 3.14 | 1 |
| 32661 | 0,218 | 0,000 | 0,000 | 2.3 | 1 |
| 32662 | 0,181 | 0,000 | 0,000 | 3.13 | 1 |
| 32663 | 0,181 | 0,000 | 0,000 | 3.13 | 1 |
| 32664 | 0,192 | 0,000 | 0,000 | 3.13 | 1 |
| 32666 | 0,014 | 0,000 | 0,090 | 1.3 | 1 |
| 32668 | 0,014 | 0,000 | 0,090 | 1.3 | 1 |
| 32669 | 0,014 | 0,000 | 0,090 | 1.3 | 1 |
| 32676 | 0,021 | 0,000 | 0,090 | 1.3 | 1 |
| 32682 | 0,036 | 0,000 | 0,090 | 1.3 | 1 |
| 32684 | 0,036 | 0,000 | 0,090 | 1.3 | 1 |
| 32686 | 0,036 | 0,000 | 0,090 | 1.3 | 1 |
| 32692 | 0,052 | 0,000 | 0,090 | 1.3 | 1 |
| 32700 | 0,000 | 0,000 | 0,000 | 4.8 | 1 |
| 32701 | 0,000 | 0,000 | 0,000 | 4.8 | 1 |
| 32702 | 0,000 | 0,000 | 0,000 | 4.8 | 1 |
| 32703 | 0,000 | 0,000 | 0,000 | 4.8 | 1 |
| 32704 | 0,000 | 0,000 | 0,000 | 4.8 | 1 |
| 32706 | 0,000 | 0,000 | 0,000 | 4.8 | 1 |
| 32718 | 24,310 | 0,000 | 0,000 | 4.6 | 1 |
| 32719 | 22,875 | 0,000 | 0,000 | 4.6 | 1 |
| 32720 | 24,383 | 0,000 | 0,000 | 4.8 | 1 |
| 32721 | 23,892 | 0,000 | 0,000 | 4.8 | 1 |
| 32722 | 24,313 | 0,000 | 0,000 | 4.6 | 1 |
| 32723 | 22,875 | 0,000 | 0,000 | 4.6 | 1 |
| 32724 | 24,382 | 0,000 | 0,000 | 4.8 | 1 |
| 32725 | 22,944 | 0,000 | 0,000 | 4.8 | 1 |
| 32726 | 22,912 | 0,000 | 0,000 | 4.5 | 1 |
| 32729 | 14,858 | 0,000 | 0,000 | 4.5 | 1 |
| 32730 | 14,282 | 0,000 | 0,000 | 4.5 | 1 |
| 32731 | 24,805 | 0,000 | 0,000 | 4.5 | 1 |
| 32732 | 23,366 | 0,000 | 0,000 | 4.5 | 1 |
| 32733 | 15,557 | 0,000 | 0,000 | 4.5 | 1 |
| 32734 | 24,351 | 0,000 | 0,000 | 4.5 | 1 |
| 32737 | 22,912 | 0,000 | 0,000 | 4.5 | 1 |
| 32738 | 24,768 | 0,000 | 0,000 | 4.6 | 1 |
| 32739 | 23,042 | 0,000 | 0,000 | 4.6 | 1 |
| 32741 | 4,611 | 0,008 | 0,000 | 4.3 | 1 |
| 32742 | 4,503 | 0,008 | 0,000 | 4.3 | 1 |
| 32743 | 4,482 | 0,008 | 0,000 | 4.3 | 1 |
| 32745 | 5,351 | 0,008 | 0,000 | 4.3 | 1 |

| Part no. | Amount of copper in kg | Amount of brass in kg | Amount of silver in g | Chapter. page | Pack size |
|----------|------------------------|-----------------------|-----------------------|-----------------|-----------|
| 32746 | 5,219 | 0,008 | 0,000 | 4.3 | 1 |
| 32747 | 14,858 | 0,000 | 0,000 | 4.5 | 1 |
| 32748 | 24,837 | 0,000 | 0,000 | 4.8 | 1 |
| 32749 | 23,111 | 0,000 | 0,000 | 4.8 | 1 |
| 32752 | 23,387 | 0,000 | 0,000 | 4.4 | 1 |
| 32753 | 21,661 | 0,000 | 0,000 | 4.4 | 1 |
| 32754 | 14,272 | 0,000 | 0,000 | 4.4 | 1 |
| 32755 | 14,848 | 0,000 | 0,000 | 4.4 | 1 |
| 32756 | 22,933 | 0,000 | 0,000 | 4.4 | 1 |
| 32757 | 21,494 | 0,000 | 0,000 | 4.4 | 1 |
| 32758 | 14,149 | 0,000 | 0,000 | 4.4 | 1 |
| 32761 | 23,387 | 0,000 | 0,000 | 4.4 | 1 |
| 32762 | 21,948 | 0,000 | 0,000 | 4.4 | 1 |
| 32763 | 14,848 | 0,000 | 0,000 | 4.4 | 1 |
| 32764 | 24,805 | 0,000 | 0,000 | 4.5 | 1 |
| 32765 | 21,494 | 0,000 | 0,000 | 4.4 | 1 |
| 32766 | 14,149 | 0,000 | 0,000 | 4.4 | 1 |
| 32767 | 13,573 | 0,000 | 0,000 | 4.4 | 1 |
| 32769 | 13,573 | 0,000 | 0,000 | 4.4 | 1 |
| 32770 | 13,642 | 0,000 | 0,000 | 4.7 | 1 |
| 32771 | 23,079 | 0,000 | 0,000 | 4.5 | 1 |
| 32772 | 21,730 | 0,000 | 0,000 | 4.7 | 1 |
| 32773 | 14,917 | 0,000 | 0,000 | 4.7 | 1 |
| 32774 | 14,341 | 0,000 | 0,000 | 4.7 | 1 |
| 32775 | 23,002 | 0,000 | 0,000 | 4.7 | 1 |
| 32776 | 21,563 | 0,000 | 0,000 | 4.7 | 1 |
| 32777 | 13,642 | 0,000 | 0,000 | 4.7 | 1 |
| 32779 | 14,917 | 0,000 | 0,000 | 4.7 | 1 |
| 32780 | 23,456 | 0,000 | 0,000 | 4.7 | 1 |
| 32781 | 22,017 | 0,000 | 0,000 | 4.7 | 1 |
| 32783 | 15,557 | 0,000 | 0,000 | 4.5 | 1 |
| 32784 | 21,563 | 0,000 | 0,000 | 4.7 | 1 |
| 32785 | 14,218 | 0,000 | 0,000 | 4.7 | 1 |
| 32786 | 13,642 | 0,000 | 0,000 | 4.7 | 1 |
| 32787 | 24,768 | 0,000 | 0,000 | 4.6 | 1 |
| 32788 | 23,329 | 0,000 | 0,000 | 4.6 | 1 |
| 32789 | 24,837 | 0,000 | 0,000 | 4.8 | 1 |
| 32790 | 23,398 | 0,000 | 0,000 | 4.8 | 1 |
| 32795 | 14,981 | 0,000 | 0,000 | 4.5 | 1 |
| 32796 | 14,282 | 0,000 | 0,000 | 4.5 | 1 |
| 32797 | 24,351 | 0,000 | 0,000 | 4.5 | 1 |
| 32807 | 22,923 | 0,000 | 0,000 | 4.4 | 1 |
| 32808 | 21,563 | 0,000 | 0,000 | 4.7 | 1 |
| 32809 | 23,665 | 0,000 | 0,000 | 4.7 | 1 |
| 32907 | 0,008 | 0,000 | 0,000 | 3.12 | 24 |
| 32912 | 0,000 | 0,000 | 0,000 | 2.3 | 10 |
| 32914 | 0,052 | 0,000 | 0,000 | 3.12 | 24 |
| 32915 | 0,026 | 0,000 | 0,000 | 3.12 | 24 |
| 32921 | 0,004 | 0,000 | 0,000 | 3.12 | 24 |
| 32933 | 0,000 | 0,000 | 0,000 | 1.3 | 8 |
| 32934 | 0,000 | 0,000 | 0,000 | 1.3 | 4 |
| 32937 | 0,000 | 0,000 | 0,000 | 3.14 | 4 |
| 32947 | 0,000 | 0,000 | 0,000 | 1.3, 3.10, 3.12 | 10 |
| 32948 | 0,000 | 0,000 | 0,000 | 3.10, 3.12 | 10 |
| 32949 | 0,000 | 0,000 | 0,000 | 3.10, 3.12 | 10 |
| 32950 | 0,000 | 0,000 | 0,000 | 3.10, 3.12 | 10 |
| 32951 | 0,000 | 0,000 | 0,000 | 3.10, 3.12 | 10 |
| 32952 | 0,000 | 0,000 | 0,000 | 1.3 | 10 |
| 32954 | 0,000 | 0,000 | 0,000 | 3.10, 3.12 | 50 |
| 32956 | 0,000 | 0,000 | 0,000 | 3.10 | 10 |

| Part no. | Amount of copper in kg | Amount of brass in kg | Amount of silver in g | Chapter. page | Pack size |
|----------|------------------------|-----------------------|-----------------------|-----------------------------------|-----------|
| 32963 | 0,000 | 0,000 | 0,000 | 3.12 | 10 |
| 32964 | 0,000 | 0,000 | 0,000 | 3.10 | 10 |
| 32969 | 0,000 | 0,000 | 0,000 | 3.10, 3.12 | 50 |
| 32973 | 0,000 | 0,000 | 0,000 | 3.11 | 4 |
| 32974 | 0,000 | 0,000 | 0,000 | 3.11 | 4 |
| 32975 | 1,167 | 0,025 | 0,000 | 3.15 | 1 |
| 32976 | 0,358 | 0,015 | 0,000 | 3.14 | 1 |
| 32977 | 0,358 | 0,021 | 0,000 | 3.14 | 1 |
| 32978 | 1,473 | 0,000 | 0,000 | 3.15 | 1 |
| 32979 | 0,000 | 0,000 | 0,000 | 1.3 | 10 |
| 32980 | 1,163 | 0,053 | 0,000 | 3.15 | 1 |
| 32981 | 0,182 | 0,000 | 0,000 | 3.13 | 1 |
| 32982 | 0,000 | 0,000 | 0,000 | 3.15 | 1 |
| 32983 | 0,000 | 0,000 | 0,000 | 4.8 | 1 |
| 32984 | 0,000 | 0,000 | 0,000 | 4.8 | 1 |
| 32985 | 0,000 | 0,000 | 0,000 | 4.8 | 1 |
| 32986 | 0,000 | 0,000 | 0,000 | 4.8 | 1 |
| 32987 | 0,000 | 0,000 | 0,000 | 4.8 | 1 |
| 32988 | 0,000 | 0,000 | 0,000 | 4.3 | 1 |
| 32989 | 0,000 | 0,000 | 0,000 | 4.3 | 1 |
| 32990 | 0,000 | 0,000 | 0,000 | 4.3 | 1 |
| 33051 | 0,000 | 0,000 | 0,000 | 3.24, 6.16 | 10 |
| 33075 | 0,210 | 0,000 | 0,630 | 3.19, 3.30 | 1 |
| 33079 | 0,385 | 0,000 | 0,624 | 3.19, 3.30 | 1 |
| 33113 | 0,000 | 0,000 | 0,000 | 4.10, 4.12, 4.14, 4.15 | 4 |
| 33142 | 0,000 | 0,000 | 0,000 | 3.25, 3.28, 6.15, 6.17 | 2 |
| 33143 | 0,000 | 0,000 | 0,000 | 3.25, 6.15 | 2 |
| 33144 | 0,000 | 0,000 | 0,000 | 3.25, 6.15 | 2 |
| 33145 | 0,000 | 0,124 | 0,000 | 3.24, 3.28, 6.14, 6.17 | 1 |
| 33146 | 0,000 | 0,202 | 0,000 | 3.24, 6.14 | 1 |
| 33147 | 0,000 | 0,288 | 0,000 | 3.24, 6.14 | 1 |
| 33148 | 0,000 | 0,000 | 0,000 | 3.24 | 1 |
| 33149 | 0,325 | 0,000 | 1,200 | 6.13 | 1 |
| 33150 | 0,684 | 0,000 | 2,064 | 6.13 | 1 |
| 33151 | 1,111 | 0,000 | 3,474 | 6.13 | 1 |
| 33152 | 0,000 | 0,000 | 0,000 | 6.15 | 1 |
| 33153 | 0,000 | 0,000 | 0,000 | 6.15 | 1 |
| 33154 | 0,000 | 0,000 | 0,000 | 6.15 | 1 |
| 33155 | 0,000 | 0,000 | 0,000 | 3.24, 6.15 | 10 |
| 33156 | 0,000 | 0,000 | 0,052 | 2.4, 3.24, 3.29, 4.10, 4.12, 6.16 | 1 |
| 33157 | 0,000 | 0,000 | 0,000 | 3.24, 6.16 | 10 |
| 33158 | 0,000 | 0,000 | 0,000 | 6.16 | 1 |
| 33160 | 0,583 | 0,000 | 1,200 | 3.23 | 1 |
| 33161 | 1,620 | 0,000 | 4,342 | 3.23 | 1 |
| 33162 | 2,766 | 0,000 | 6,723 | 3.23 | 1 |
| 33163 | 0,000 | 0,027 | 0,000 | 3.24, 3.28, 6.14, 6.18, 6.19 | 1 |
| 33164 | 0,000 | 0,049 | 0,000 | 3.24, 6.14, 6.18, 6.19 | 1 |
| 33165 | 0,000 | 0,069 | 0,000 | 3.24, 6.14, 6.18, 6.19 | 1 |
| 33166 | 0,000 | 0,080 | 0,000 | 3.24, 3.28, 6.14, 6.17 | 1 |
| 33167 | 0,000 | 0,137 | 0,000 | 3.24, 6.14 | 1 |
| 33168 | 0,000 | 0,177 | 0,000 | 3.24, 6.14 | 1 |
| 33177 | 0,000 | 0,000 | 0,000 | 6.21 | 1 |
| 33193 | 0,000 | 0,000 | 0,000 | 6.16 | 1 |

| Part no. | Amount of copper in kg | Amount of brass in kg | Amount of silver in g | Chapter. page | Pack size |
|----------|------------------------|-----------------------|-----------------------|------------------------|-----------|
| 33194 | 0,888 | 0,000 | 2,274 | 3.19, 3.30 | 1 |
| 33198 | 0,209 | 0,000 | 0,630 | 3.23 | 1 |
| 33199 | 0,110 | 0,000 | 0,624 | 6.13 | 1 |
| 33200 | 0,110 | 0,000 | 0,624 | 6.13 | 1 |
| 33201 | 0,306 | 0,000 | 1,368 | 6.13 | 1 |
| 33202 | 0,665 | 0,000 | 2,064 | 6.13 | 1 |
| 33203 | 1,090 | 0,000 | 3,474 | 6.13 | 1 |
| 33204 | 7,090 | 0,000 | 14,300 | 6.13 | 1 |
| 33206 | 0,216 | 0,000 | 0,630 | 3.23 | 1 |
| 33207 | 0,116 | 0,000 | 0,624 | 6.13 | 1 |
| 33208 | 0,116 | 0,000 | 0,624 | 6.13 | 1 |
| 33216 | 0,375 | 0,065 | 0,861 | 3.23 | 1 |
| 33217 | 0,086 | 0,065 | 0,486 | 6.13 | 1 |
| 33219 | 0,000 | 0,000 | 0,000 | 6.15 | 10 |
| 33220 | 0,000 | 0,000 | 0,000 | 6.15 | 10 |
| 33221 | 0,110 | 0,000 | 0,624 | 6.13 | 1 |
| 33222 | 0,110 | 0,000 | 0,624 | 6.13 | 1 |
| 33223 | 0,000 | 0,000 | 0,000 | 6.15 | 2 |
| 33224 | 0,000 | 0,014 | 0,000 | 3.22, 3.24, 3.29, 6.14 | 3 |
| 33225 | 0,000 | 0,000 | 0,000 | 6.15 | 10 |
| 33226 | 0,000 | 0,000 | 0,000 | 6.15 | 10 |
| 33234 | 0,488 | 0,000 | 2,241 | 3.29 | 1 |
| 33246 | 0,000 | 0,000 | 0,000 | 6.18, 6.19 | 1 |
| 33247 | 0,000 | 0,000 | 0,000 | 6.16 | 1 |
| 33283 | 0,000 | 0,000 | 0,000 | 6.18, 6.19 | 1 |
| 33285 | 0,488 | 0,002 | 2,241 | 3.29 | 1 |
| 33292 | 0,000 | 0,000 | 0,000 | 4.12 | 1 |
| 33293 | 0,000 | 0,000 | 0,000 | 4.12 | 1 |
| 33294 | 0,000 | 0,000 | 0,000 | 4.12 | 1 |
| 33295 | 0,000 | 0,000 | 0,000 | 4.12 | 1 |
| 33298 | 0,000 | 0,000 | 0,000 | 4.12 | 1 |
| 33299 | 0,000 | 0,000 | 0,000 | 4.12 | 1 |
| 33308 | 1,480 | 2,100 | 5,100 | 6.10 | 1 |
| 33311 | 3,134 | 1,050 | 8,349 | 3.21 | 1 |
| 33315 | 0,000 | 0,000 | 0,000 | 3.25 | 1 |
| 33316 | 0,000 | 0,000 | 0,000 | 3.25 | 1 |
| 33317 | 0,000 | 0,000 | 0,000 | 3.25 | 2 |
| 33324 | 0,209 | 0,005 | 0,630 | 3.23 | 1 |
| 33325 | 0,577 | 0,000 | 1,200 | 3.23 | 1 |
| 33326 | 1,614 | 0,000 | 4,342 | 3.23 | 1 |
| 33327 | 2,758 | 0,000 | 6,723 | 3.23 | 1 |
| 33328 | 0,110 | 0,003 | 0,624 | 6.13 | 1 |
| 33329 | 0,110 | 0,003 | 0,624 | 6.13 | 1 |
| 33330 | 0,319 | 0,000 | 1,200 | 6.13 | 1 |
| 33331 | 0,678 | 0,000 | 2,064 | 6.13 | 1 |
| 33332 | 1,103 | 0,000 | 3,474 | 6.13 | 1 |
| 33333 | 0,248 | 0,000 | 0,000 | 6.19 | 1 |
| 33334 | 0,980 | 0,000 | 0,000 | 6.19 | 1 |
| 33335 | 1,041 | 0,000 | 0,000 | 6.19 | 1 |
| 33336 | 2,043 | 0,000 | 0,000 | 6.19 | 1 |
| 33337 | 0,413 | 0,000 | 0,000 | 6.18 | 1 |
| 33338 | 1,803 | 0,000 | 0,000 | 6.18 | 1 |
| 33339 | 2,135 | 0,000 | 0,000 | 6.18 | 1 |
| 33340 | 3,897 | 0,000 | 0,000 | 6.18 | 1 |
| 33342 | 0,000 | 0,000 | 0,000 | 6.18, 6.19 | 1 |
| 33343 | 0,000 | 0,000 | 0,000 | 6.18, 6.19 | 1 |
| 33345 | 0,000 | 0,000 | 0,000 | 6.18, 6.19 | 1 |
| 33346 | 0,000 | 0,000 | 0,000 | 6.18, 6.19 | 1 |
| 33347 | 0,000 | 0,000 | 0,000 | 6.18, 6.19 | 1 |
| 33348 | 0,000 | 0,000 | 0,000 | 6.18, 6.19 | 1 |

| Part no. | Amount of copper in kg | Amount of brass in kg | Amount of silver in g | Chapter. page | Pack size |
|----------|------------------------|-----------------------|-----------------------|---------------|-----------|
| 33349 | 0,000 | 0,000 | 0,000 | 6.18, 6.19 | 1 |
| 33350 | 0,000 | 0,000 | 0,000 | 6.18, 6.19 | 2 |
| 33351 | 0,000 | 0,000 | 0,000 | 6.18, 6.19 | 2 |
| 33352 | 0,000 | 0,000 | 0,000 | 6.18, 6.19 | 2 |
| 33355 | 0,248 | 0,000 | 0,000 | 6.19 | 1 |
| 33356 | 0,980 | 0,000 | 0,000 | 6.19 | 1 |
| 33357 | 1,041 | 0,000 | 0,000 | 6.19 | 1 |
| 33358 | 2,043 | 0,000 | 0,000 | 6.19 | 1 |
| 33359 | 0,413 | 0,000 | 0,000 | 6.18 | 1 |
| 33360 | 1,803 | 0,000 | 0,000 | 6.18 | 1 |
| 33361 | 2,135 | 0,000 | 0,000 | 6.18 | 1 |
| 33362 | 3,897 | 0,000 | 0,000 | 6.18 | 1 |
| 33363 | 0,000 | 0,000 | 0,000 | 6.18 | 3 |
| 33364 | 0,000 | 0,000 | 0,000 | 6.19 | 3 |
| 33365 | 0,000 | 0,000 | 0,000 | 6.19 | 3 |
| 33366 | 0,000 | 0,080 | 0,000 | 6.18, 6.19 | 3 |
| 33367 | 0,000 | 0,131 | 0,000 | 6.18, 6.19 | 3 |
| 33376 | 0,404 | 0,000 | 0,000 | 6.14 | 4 |
| 33377 | 0,661 | 0,000 | 0,000 | 6.14 | 4 |
| 33378 | 0,090 | 0,052 | 0,000 | 6.14 | 3 |
| 33380 | 0,000 | 0,000 | 0,000 | 6.18, 6.19 | 1 |
| 33381 | 0,000 | 0,000 | 0,000 | 6.18, 6.19 | 1 |
| 33385 | 0,000 | 0,288 | 0,000 | 3.24, 6.14 | 1 |
| 33392 | 0,998 | 0,000 | 0,000 | 6.14 | 4 |
| 33393 | 0,380 | 0,505 | 1,812 | 6.13 | 1 |
| 33394 | 0,201 | 0,003 | 0,612 | 3.23 | 1 |
| 33398 | 0,201 | 0,000 | 0,690 | 3.23 | 1 |
| 33402 | 0,351 | 0,000 | 0,990 | 3.21 | 1 |
| 33403 | 0,769 | 0,225 | 1,800 | 3.21 | 1 |
| 33408 | 0,255 | 0,000 | 1,010 | 6.10 | 1 |
| 33409 | 0,504 | 0,451 | 1,680 | 6.10 | 1 |
| 33416 | 0,189 | 0,030 | 0,516 | 2.4, 2.5 | 1 |
| 33418 | 0,000 | 0,000 | 0,000 | 3.25, 6.15 | 2 |
| 33419 | 0,000 | 0,000 | 0,000 | 3.25, 6.15 | 2 |
| 33420 | 0,208 | 0,005 | 0,612 | 3.23 | 1 |
| 33421 | 0,463 | 0,000 | 0,990 | 3.21 | 1 |
| 33422 | 0,480 | 0,000 | 0,990 | 3.21 | 1 |
| 33424 | 0,124 | 0,000 | 0,000 | 6.20 | 1 |
| 33425 | 0,145 | 0,000 | 0,000 | 6.20 | 1 |
| 33426 | 0,124 | 0,000 | 0,000 | 6.20 | 1 |
| 33427 | 0,145 | 0,000 | 0,000 | 6.20 | 1 |
| 33428 | 0,214 | 0,000 | 0,000 | 6.20 | 1 |
| 33429 | 0,214 | 0,000 | 0,000 | 6.20 | 1 |
| 33430 | 0,473 | 0,000 | 0,000 | 6.20 | 1 |
| 33431 | 0,473 | 0,000 | 0,000 | 6.20 | 1 |
| 33432 | 0,913 | 0,000 | 0,000 | 6.20 | 1 |
| 33433 | 0,913 | 0,000 | 0,000 | 6.20 | 1 |
| 33434 | 2,606 | 0,000 | 0,000 | 6.20 | 1 |
| 33435 | 6,648 | 0,000 | 0,000 | 6.20 | 1 |
| 33436 | 6,648 | 0,000 | 0,000 | 6.20 | 1 |
| 33437 | 18,968 | 0,000 | 0,000 | 6.20 | 1 |
| 33438 | 20,468 | 0,000 | 0,000 | 6.20 | 1 |
| 33439 | 20,468 | 0,000 | 0,000 | 6.20 | 1 |
| 33440 | 0,166 | 0,000 | 0,000 | 6.20 | 1 |
| 33441 | 0,193 | 0,000 | 0,000 | 6.20 | 1 |
| 33442 | 0,166 | 0,000 | 0,000 | 6.20 | 1 |
| 33443 | 0,193 | 0,000 | 0,000 | 6.20 | 1 |
| 33444 | 0,273 | 0,000 | 0,000 | 6.20 | 1 |
| 33445 | 0,273 | 0,000 | 0,000 | 6.20 | 1 |
| 33446 | 0,564 | 0,000 | 0,000 | 6.20 | 1 |

| Part no. | Amount of copper in kg | Amount of brass in kg | Amount of silver in g | Chapter page | Pack size |
|----------|------------------------|-----------------------|-----------------------|--------------|-----------|
| 33447 | 0,564 | 0,000 | 0,000 | 6.20 | 1 |
| 33448 | 1,217 | 0,000 | 0,000 | 6.20 | 1 |
| 33449 | 1,217 | 0,000 | 0,000 | 6.20 | 1 |
| 33450 | 3,186 | 0,000 | 0,000 | 6.20 | 1 |
| 33451 | 8,444 | 0,000 | 0,000 | 6.20 | 1 |
| 33452 | 26,968 | 0,000 | 0,000 | 6.20 | 1 |
| 33453 | 28,468 | 0,000 | 0,000 | 6.20 | 1 |
| 33454 | 28,468 | 0,000 | 0,000 | 6.20 | 1 |
| 33455 | 0,280 | 0,000 | 0,000 | 6.22 | 1 |
| 33456 | 0,280 | 0,000 | 0,000 | 6.22 | 1 |
| 33457 | 0,437 | 0,000 | 0,000 | 6.22 | 1 |
| 33458 | 0,888 | 0,000 | 0,000 | 6.22 | 1 |
| 33459 | 0,888 | 0,000 | 0,000 | 6.22 | 1 |
| 33460 | 0,888 | 0,000 | 0,000 | 6.22 | 1 |
| 33461 | 2,984 | 0,000 | 0,000 | 6.22 | 1 |
| 33462 | 2,984 | 0,000 | 0,000 | 6.22 | 1 |
| 33463 | 9,245 | 0,000 | 0,000 | 6.22 | 1 |
| 33464 | 0,392 | 0,000 | 0,000 | 6.22 | 1 |
| 33465 | 0,392 | 0,000 | 0,000 | 6.22 | 1 |
| 33466 | 0,557 | 0,000 | 0,000 | 6.22 | 1 |
| 33467 | 1,209 | 0,000 | 0,000 | 6.22 | 1 |
| 33468 | 1,209 | 0,000 | 0,000 | 6.22 | 1 |
| 33469 | 1,209 | 0,000 | 0,000 | 6.22 | 1 |
| 33470 | 3,984 | 0,000 | 0,000 | 6.22 | 1 |
| 33471 | 3,984 | 0,000 | 0,000 | 6.22 | 1 |
| 33472 | 11,740 | 0,000 | 0,000 | 6.22 | 1 |
| 33500 | 0,385 | 0,110 | 2,352 | 3.26 | 1 |
| 33501 | 0,415 | 0,110 | 3,582 | 3.26 | 1 |
| 33502 | 0,334 | 0,110 | 3,618 | 6.17 | 1 |
| 33503 | 0,385 | 0,123 | 2,352 | 3.26 | 1 |
| 33504 | 0,415 | 0,123 | 2,904 | 3.26 | 1 |
| 33505 | 0,334 | 0,123 | 3,618 | 6.17 | 1 |
| 33506 | 0,368 | 0,111 | 2,094 | 3.26 | 1 |
| 33507 | 0,344 | 0,111 | 8,940 | 6.17 | 1 |
| 33510 | 0,913 | 0,286 | 7,167 | 3.27 | 1 |
| 33511 | 1,059 | 0,286 | 10,071 | 3.27 | 1 |
| 33512 | 0,854 | 0,286 | 9,090 | 6.17 | 1 |
| 33513 | 0,913 | 0,334 | 7,167 | 3.27 | 1 |
| 33514 | 1,059 | 0,334 | 10,071 | 3.27 | 1 |
| 33515 | 0,854 | 0,334 | 9,090 | 6.17 | 1 |
| 33516 | 0,926 | 0,286 | 14,301 | 3.27 | 1 |
| 33540 | 0,444 | 0,110 | 3,798 | 3.26 | 1 |
| 33541 | 0,474 | 0,110 | 5,028 | 3.26 | 1 |
| 33542 | 0,393 | 0,110 | 5,064 | 6.17 | 1 |
| 33543 | 0,444 | 0,123 | 3,798 | 3.26 | 1 |
| 33544 | 0,474 | 0,123 | 5,028 | 3.26 | 1 |
| 33545 | 0,393 | 0,123 | 5,064 | 6.17 | 1 |
| 33550 | 0,896 | 0,286 | 6,177 | 3.27 | 1 |
| 33551 | 1,041 | 0,286 | 7,641 | 3.27 | 1 |
| 33552 | 0,837 | 0,286 | 8,100 | 6.17 | 1 |
| 33553 | 0,896 | 0,334 | 6,177 | 3.27 | 1 |
| 33554 | 1,042 | 0,334 | 7,641 | 3.27 | 1 |
| 33555 | 0,837 | 0,334 | 8,100 | 6.17 | 1 |
| 33600 | 0,602 | 0,252 | 1,506 | 3.23 | 1 |
| 33601 | 0,565 | 0,000 | 1,200 | 3.23 | 1 |
| 33602 | 1,601 | 0,000 | 4,342 | 3.23 | 1 |
| 33603 | 2,745 | 0,000 | 8,868 | 3.23 | 1 |
| 33610 | 0,996 | 0,000 | 4,780 | 4.13 | 1 |
| 33611 | 0,883 | 0,000 | 4,780 | 4.13 | 1 |
| 33612 | 0,996 | 0,000 | 4,780 | 4.13 | 1 |

| Part no. | Amount of copper in kg | Amount of brass in kg | Amount of silver in g | Chapter page | Pack size |
|----------|------------------------|-----------------------|-----------------------|--------------|-----------|
| 33613 | 0,883 | 0,000 | 4,780 | 4.13 | 1 |
| 33614 | 1,072 | 0,000 | 4,780 | 4.13 | 1 |
| 33615 | 0,959 | 0,000 | 4,780 | 4.13 | 1 |
| 33616 | 1,072 | 0,000 | 4,780 | 4.13 | 1 |
| 33617 | 0,959 | 0,000 | 4,780 | 4.13 | 1 |
| 33620 | 1,061 | 0,000 | 4,780 | 4.13 | 1 |
| 33621 | 0,948 | 0,000 | 4,780 | 4.13 | 1 |
| 33622 | 1,043 | 0,000 | 4,780 | 4.13 | 1 |
| 33623 | 0,930 | 0,000 | 4,780 | 4.13 | 1 |
| 33624 | 1,137 | 0,000 | 4,780 | 4.13 | 1 |
| 33625 | 1,024 | 0,000 | 4,780 | 4.13 | 1 |
| 33626 | 1,119 | 0,000 | 4,780 | 4.13 | 1 |
| 33627 | 1,006 | 0,000 | 4,780 | 4.13 | 1 |
| 33630 | 2,696 | 0,000 | 15,180 | 4.15 | 1 |
| 33631 | 2,868 | 0,000 | 15,710 | 4.15 | 1 |
| 33632 | 3,685 | 0,000 | 18,290 | 4.15 | 1 |
| 33633 | 4,003 | 0,000 | 18,920 | 4.15 | 1 |
| 33634 | 4,718 | 0,000 | 19,920 | 4.15 | 1 |
| 33635 | 5,285 | 0,000 | 20,950 | 4.15 | 1 |
| 33636 | 2,758 | 0,000 | 15,180 | 4.15 | 1 |
| 33637 | 2,915 | 0,000 | 15,710 | 4.15 | 1 |
| 33638 | 3,747 | 0,000 | 18,290 | 4.15 | 1 |
| 33639 | 4,050 | 0,000 | 18,920 | 4.15 | 1 |
| 33640 | 4,780 | 0,000 | 19,920 | 4.15 | 1 |
| 33641 | 5,332 | 0,000 | 20,950 | 4.15 | 1 |
| 33642 | 0,000 | 0,000 | 0,052 | 4.14, 4.15 | 1 |
| 33645 | 0,000 | 0,000 | 0,000 | 4.14 | 1 |
| 33646 | 0,000 | 0,000 | 0,000 | 4.15 | 1 |
| 33647 | 0,000 | 0,000 | 0,000 | 4.15 | 1 |
| 33648 | 0,381 | 0,205 | 0,810 | 4.15 | 1 |
| 33649 | 0,381 | 0,205 | 0,810 | 4.15 | 1 |
| 33650 | 0,000 | 0,000 | 0,000 | 4.15 | 1 |
| 33651 | 0,151 | 0,000 | 0,000 | 4.15 | 1 |
| 33652 | 0,000 | 0,000 | 0,000 | 4.15 | 3 |
| 33653 | 0,000 | 0,000 | 0,000 | 4.14 | 1 |
| 33700 | 0,602 | 0,000 | 1,780 | 4.9 | 1 |
| 33701 | 1,733 | 0,000 | 4,785 | 4.11 | 1 |
| 33702 | 1,733 | 0,000 | 4,785 | 4.11 | 1 |
| 33703 | 2,555 | 0,000 | 4,892 | 4.11 | 1 |
| 33704 | 0,530 | 0,000 | 1,570 | 4.9 | 1 |
| 33705 | 0,530 | 0,000 | 1,570 | 4.9 | 1 |
| 33706 | 1,733 | 0,000 | 4,785 | 4.11 | 1 |
| 33707 | 1,733 | 0,000 | 4,785 | 4.11 | 1 |
| 33708 | 2,555 | 0,000 | 4,892 | 4.11 | 1 |
| 33715 | 0,602 | 0,000 | 1,780 | 4.9 | 1 |
| 33716 | 1,733 | 0,000 | 4,785 | 4.11 | 1 |
| 33717 | 1,733 | 0,000 | 4,785 | 4.11 | 1 |
| 33718 | 2,555 | 0,000 | 4,892 | 4.11 | 1 |
| 33719 | 0,530 | 0,000 | 1,570 | 4.9 | 1 |
| 33720 | 0,626 | 0,000 | 4,420 | 4.9 | 1 |
| 33721 | 1,781 | 0,000 | 4,785 | 4.11 | 1 |
| 33722 | 1,781 | 0,000 | 4,785 | 4.11 | 1 |
| 33723 | 2,598 | 0,000 | 4,892 | 4.11 | 1 |
| 33724 | 0,554 | 0,000 | 4,210 | 4.9 | 1 |
| 33725 | 0,000 | 0,000 | 0,000 | 4.10 | 1 |
| 33726 | 0,000 | 0,000 | 0,000 | 4.10 | 1 |
| 33727 | 0,000 | 0,000 | 0,000 | 4.10 | 1 |
| 33728 | 0,405 | 0,000 | 0,000 | 4.10, 4.14 | 1 |
| 33731 | 6,837 | 0,000 | 12,774 | 4.11 | 1 |
| 33732 | 0,000 | 0,000 | 0,000 | 4.10, 4.14 | 1 |

| Part no. | Amount of copper in kg | Amount of brass in kg | Amount of silver in g | Chapter. page | Pack size |
|----------|------------------------|-----------------------|-----------------------|------------------------|-----------|
| 33733 | 0,000 | 0,000 | 0,000 | 4.12, 4.15 | 1 |
| 33734 | 0,000 | 0,030 | 0,000 | 4.10, 4.14 | 3 |
| 33735 | 0,000 | 0,068 | 0,000 | 4.12 | 3 |
| 33736 | 0,000 | 0,068 | 0,000 | 4.12 | 3 |
| 33737 | 0,038 | 0,000 | 0,000 | 4.9 | 3 |
| 33738 | 0,051 | 0,000 | 0,000 | 4.11, 4.2 | 3 |
| 33739 | 0,003 | 0,000 | 0,000 | 4.9 | 3 |
| 33740 | 0,000 | 0,000 | 0,000 | 4.11, 4.2 | 3 |
| 33741 | 0,000 | 0,000 | 0,000 | 4.10, 4.14 | 1 |
| 33742 | 0,000 | 0,000 | 0,000 | 4.10, 4.14 | 1 |
| 33744 | 0,000 | 0,000 | 0,000 | 4.10, 4.14 | 1 |
| 33745 | 0,000 | 0,000 | 0,000 | 4.12 | 1 |
| 33746 | 0,000 | 0,000 | 0,000 | 4.12 | 1 |
| 33747 | 0,000 | 0,000 | 0,000 | 4.12 | 1 |
| 33748 | 0,000 | 0,000 | 0,000 | 4.12 | 1 |
| 33749 | 0,000 | 0,000 | 0,000 | 4.10 | 1 |
| 33750 | 0,000 | 0,000 | 0,000 | 4.10, 4.14 | 1 |
| 33751 | 0,000 | 0,000 | 0,000 | 4.10, 4.14 | 1 |
| 33752 | 0,000 | 0,000 | 0,000 | 4.10, 4.14 | 1 |
| 33753 | 0,000 | 0,000 | 0,000 | 4.10, 4.14 | 1 |
| 33754 | 0,000 | 0,000 | 0,000 | 4.10, 4.14 | 1 |
| 33755 | 0,000 | 0,000 | 0,000 | 4.10, 4.14 | 3 |
| 33758 | 0,000 | 0,000 | 0,000 | 4.10, 4.12, 4.14, 4.15 | 2 |
| 33759 | 0,000 | 0,000 | 0,000 | 4.12 | 6 |
| 33761 | 0,000 | 0,000 | 0,000 | 4.12 | 10 |
| 33762 | 1,340 | 0,001 | 1,520 | 4.12, 4.16, 4.2 | 1 |
| 33765 | 0,038 | 0,000 | 0,000 | 4.9 | 3 |
| 33766 | 0,000 | 0,000 | 0,000 | 4.10 | 1 |
| 33767 | 0,000 | 0,000 | 0,000 | 4.10 | 1 |
| 33768 | 0,000 | 0,000 | 0,000 | 4.12 | 1 |
| 33769 | 0,000 | 0,000 | 0,000 | 4.12 | 1 |
| 33770 | 0,606 | 0,000 | 1,772 | 4.9 | 1 |
| 33771 | 0,630 | 0,000 | 4,412 | 4.9 | 1 |
| 33772 | 0,606 | 0,000 | 1,772 | 4.9 | 1 |
| 33773 | 0,534 | 0,000 | 1,490 | 4.9 | 1 |
| 33774 | 0,558 | 0,000 | 4,130 | 4.9 | 1 |
| 33775 | 0,534 | 0,000 | 1,490 | 4.9 | 1 |
| 33780 | 0,000 | 0,000 | 0,000 | 4.16 | 1 |
| 33781 | 0,000 | 0,000 | 0,000 | 4.16 | 1 |
| 33782 | 0,000 | 0,000 | 0,000 | 4.16 | 1 |
| 33783 | 0,000 | 0,000 | 0,000 | 4.16 | 1 |
| 33784 | 0,000 | 0,000 | 0,000 | 4.16 | 1 |
| 33785 | 0,000 | 0,000 | 0,000 | 4.16 | 1 |
| 33786 | 0,000 | 0,000 | 0,000 | 4.16 | 1 |
| 33787 | 0,000 | 0,000 | 0,000 | 4.16 | 1 |
| 33788 | 0,000 | 0,000 | 0,000 | 4.16 | 1 |
| 33789 | 0,000 | 0,000 | 0,000 | 4.16 | 1 |
| 33790 | 0,000 | 0,000 | 0,000 | 4.16 | 1 |
| 33791 | 0,000 | 0,000 | 0,000 | 4.16 | 1 |
| 33906 | 0,434 | 0,000 | 0,000 | 6.14 | 4 |
| 33907 | 0,050 | 0,000 | 0,000 | 6.14 | 3 |
| 33908 | 0,000 | 0,000 | 0,056 | 3.28, 6.17 | 1 |
| 33909 | 0,012 | 0,084 | 0,074 | 3.24, 3.28, 6.14, 6.17 | 3 |
| 33910 | 0,000 | 0,000 | 0,000 | 3.28, 6.17 | 1 |
| 33911 | 0,000 | 0,000 | 0,000 | 3.28, 6.17 | 1 |
| 33912 | 0,000 | 0,000 | 0,000 | 3.28, 6.17 | 1 |
| 33913 | 0,000 | 0,000 | 0,000 | 3.28, 6.17 | 1 |
| 33914 | 0,090 | 0,044 | 0,000 | 3.28, 6.17 | 3 |

| Part no. | Amount of copper in kg | Amount of brass in kg | Amount of silver in g | Chapter. page | Pack size |
|----------|------------------------|-----------------------|-----------------------|------------------------|-----------|
| 33915 | 0,000 | 0,002 | 0,000 | 3.22, 3.24, 3.28, 6.17 | 3 |
| 33916 | 0,000 | 0,000 | 0,000 | 3.22 | 3 |
| 33917 | 0,000 | 0,000 | 0,056 | 3.24, 6.16 | 1 |
| 33918 | 0,000 | 0,000 | 0,000 | 3.24, 6.16 | 3 |
| 33921 | 0,000 | 0,000 | 0,000 | 6.21 | 1 |
| 33922 | 0,000 | 0,000 | 0,000 | 6.21 | 1 |
| 33923 | 0,000 | 0,000 | 0,000 | 6.21 | 1 |
| 33924 | 0,000 | 0,000 | 0,000 | 6.21 | 1 |
| 33925 | 0,000 | 0,000 | 0,000 | 6.21 | 1 |
| 33926 | 0,000 | 0,000 | 0,000 | 6.21 | 1 |
| 33927 | 0,000 | 0,000 | 0,000 | 6.21 | 1 |
| 33928 | 0,000 | 0,000 | 0,000 | 6.21 | 1 |
| 33929 | 0,000 | 0,000 | 0,000 | 6.21 | 1 |
| 33930 | 0,000 | 0,000 | 0,000 | 6.21 | 1 |
| 33931 | 0,000 | 0,000 | 0,000 | 6.22 | 1 |
| 33932 | 0,000 | 0,000 | 0,000 | 6.22 | 1 |
| 33933 | 0,000 | 0,000 | 0,000 | 6.22 | 1 |
| 33934 | 0,000 | 0,000 | 0,000 | 6.22 | 1 |
| 33935 | 0,000 | 0,000 | 0,000 | 6.22 | 1 |
| 33936 | 0,000 | 0,000 | 0,000 | 6.22 | 1 |
| 33937 | 0,000 | 0,000 | 0,000 | 6.22 | 1 |
| 33938 | 0,000 | 0,000 | 0,000 | 6.22 | 1 |
| 33939 | 0,000 | 0,000 | 0,000 | 6.21 | 1 |
| 33940 | 0,000 | 0,000 | 0,000 | 6.21 | 1 |
| 33941 | 0,000 | 0,000 | 0,000 | 6.21 | 1 |
| 33942 | 0,000 | 0,000 | 0,000 | 6.21 | 1 |
| 33943 | 0,000 | 0,000 | 0,000 | 6.21 | 1 |
| 33944 | 0,000 | 0,000 | 0,000 | 6.21 | 1 |
| 33945 | 0,000 | 0,000 | 0,000 | 6.21 | 1 |
| 33946 | 0,000 | 0,000 | 0,000 | 6.21, 6.22 | 1 |
| 33947 | 0,000 | 0,000 | 0,000 | 6.21, 6.22 | 1 |
| 33954 | 0,000 | 0,000 | 0,000 | 6.23 | 1 |
| 33955 | 0,000 | 0,000 | 0,000 | 6.23 | 1 |
| 33956 | 0,000 | 0,000 | 0,000 | 6.23 | 1 |
| 33957 | 0,000 | 0,000 | 0,000 | 6.23 | 1 |
| 33958 | 0,000 | 0,000 | 0,000 | 6.23 | 1 |
| 33959 | 0,000 | 0,000 | 0,000 | 6.23 | 1 |
| 33960 | 0,000 | 0,000 | 0,000 | 6.23 | 1 |
| 33961 | 0,000 | 0,000 | 0,000 | 6.23 | 1 |
| 33962 | 0,000 | 0,000 | 0,000 | 6.23 | 1 |
| 33963 | 0,000 | 0,000 | 0,000 | 6.22 | 1 |
| 33964 | 0,000 | 0,000 | 0,000 | 6.22 | 1 |
| 33967 | 0,000 | 0,000 | 0,000 | 6.22 | 1 |
| 33968 | 0,000 | 0,000 | 0,000 | 6.22 | 1 |
| 33969 | 0,000 | 0,000 | 0,000 | 6.22 | 1 |
| 33970 | 0,000 | 0,000 | 0,000 | 6.21 | 1 |
| 33971 | 0,000 | 0,000 | 0,000 | 6.21 | 1 |
| 33972 | 0,000 | 0,000 | 0,000 | 6.21 | 1 |
| 33973 | 0,000 | 0,000 | 0,000 | 6.21 | 1 |
| 33974 | 0,000 | 0,000 | 0,000 | 6.21 | 1 |
| 35001 | 0,000 | 0,000 | 0,000 | 5.2 | 1 |
| 35004 | 12,570 | 0,000 | 0,000 | 5.1 | 1 |
| 35005 | 8,730 | 0,000 | 0,000 | 5.1 | 1 |
| 35006 | 8,644 | 0,000 | 0,000 | 5.1 | 1 |
| 35007 | 5,966 | 0,000 | 0,000 | 5.1 | 1 |
| 35008 | 0,000 | 0,000 | 0,000 | 5.2 | 2 |
| 35009 | 0,000 | 0,000 | 0,000 | 5.2 | 1 |
| 35015 | 13,921 | 0,000 | 0,000 | 5.1 | 1 |
| 35016 | 20,170 | 0,000 | 0,000 | 5.1 | 1 |
| 35017 | 0,000 | 0,000 | 0,000 | 5.2 | 4 |

| Part no. | Amount of copper in kg | Amount of brass in kg | Amount of silver in g | Chapter. page | Pack size | |
|----------|------------------------|-----------------------|-----------------------|---------------------|-----------|--|
| 36001 | 0,027 | 0,000 | 0,000 | 2.3 | 1 | |
| 36003 | 0,028 | 0,000 | 0,000 | 3.10 | 1 | |
| 36009 | 0,020 | 0,000 | 0,000 | 1.3 | 1 | |
| 36100 | 0,023 | 0,004 | 0,000 | 6.1 | 1 | |
| 36101 | 0,019 | 0,000 | 0,000 | 2.3 | 1 | |
| 36102 | 0,019 | 0,000 | 0,000 | 3.16 | 1 | |
| 36103 | 0,023 | 0,004 | 0,000 | 6.1 | 1 | |
| 36104 | 0,019 | 0,000 | 0,000 | 2.3 | 1 | |
| 36105 | 0,019 | 0,000 | 0,000 | 3.16 | 1 | |
| 36106 | 0,022 | 0,005 | 0,000 | 6.1 | 1 | |
| 36107 | 0,019 | 0,000 | 0,000 | 2.3 | 1 | |
| 36108 | 0,019 | 0,000 | 0,000 | 3.16 | 1 | |
| 36109 | 0,013 | 0,000 | 0,000 | 1.2, 2.3, 3.16, 6.1 | 1 | |
| 36110 | 0,013 | 0,000 | 0,000 | 1.2, 2.3, 3.16, 6.1 | 1 | |
| 36111 | 0,013 | 0,000 | 0,000 | 1.2, 2.3, 3.16, 6.1 | 1 | |
| 36112 | 0,011 | 0,004 | 0,000 | 6.1 | 1 | |
| 36113 | 0,007 | 0,000 | 0,000 | 2.3 | 1 | |
| 36114 | 0,007 | 0,000 | 0,000 | 3.16 | 1 | |
| 36152 | 0,025 | 0,000 | 0,000 | 2.3 | 1 | |
| 36153 | 0,025 | 0,000 | 0,000 | 3.16 | 1 | |
| 36154 | 0,013 | 0,000 | 0,000 | 1.2, 2.3, 3.16 | 1 | |
| 36155 | 0,012 | 0,000 | 0,000 | 2.3 | 1 | |
| 36156 | 0,012 | 0,000 | 0,000 | 3.16 | 1 | |
| 36157 | 0,025 | 0,000 | 0,000 | 2.3 | 1 | |
| 36158 | 0,025 | 0,000 | 0,000 | 3.16 | 1 | |
| 36159 | 0,013 | 0,000 | 0,000 | 1.2, 2.3, 3.16 | 1 | |
| 36200 | 0,000 | 0,000 | 0,000 | 1.1 | 1 | |
| 36902 | 0,049 | 0,000 | 0,000 | 6.1 | 1 | |
| 36903 | 0,062 | 0,000 | 0,000 | 6.1 | 1 | |
| 36904 | 0,076 | 0,000 | 0,000 | 6.1 | 1 | |
| 36916 | 0,000 | 0,000 | 0,000 | 1.2, 2.3, 3.16 | 1 | |
| 36917 | 0,000 | 0,000 | 0,000 | 1.2, 2.3, 3.16 | 1 | |
| 36918 | 0,000 | 0,000 | 0,000 | 1.2, 2.3, 3.16 | 1 | |
| 78105 | 0,000 | 0,000 | 0,000 | 6.15 | 10 | |
| 78139 | 0,000 | 0,000 | 0,000 | 6.15 | 10 | |
| 78442 | 0,000 | 0,000 | 0,000 | 7.16 | 200 | |
| 78443 | 0,000 | 0,000 | 0,000 | 7.16 | 200 | |
| 78447 | 0,000 | 0,000 | 0,000 | 7.16 | 200 | |
| 78463 | 0,000 | 0,000 | 0,000 | 2.1, 3.4 | 10 | |
| 78893 | 0,000 | 0,000 | 0,000 | 6.15 | 10 | |
| 79448 | 0,000 | 0,000 | 0,000 | 3.22, 4.10, 6.12 | 30 | |
| 79449 | 0,000 | 0,000 | 0,000 | 3.22, 6.11, 6.12 | 30 | |
| 79663 | 0,000 | 0,000 | 0,000 | 3.17, 3.18 | 10 | |
| 79738 | 0,000 | 0,000 | 0,000 | 3.30 | 10 | |
| 79811 | 0,000 | 0,000 | 0,000 | 3.22, 3.25, 6.15 | 1 | |
| 79859 | 0,000 | 0,000 | 0,000 | 3.30 | 10 | |

Terms of Delivery and Payment of Wöhner GmbH & Co. KG

I. General

1. Diverging and / or supplementary conditions of the Customer not expressly acknowledged by us in writing are not binding upon us, even if they are not expressly opposed by us.

2. Orders shall not be deemed as accepted but upon confirmation by us or delivery having been made.

II. Delivery

1. We aim high at complying as punctual as possible with the delivery dates confirmed by us. Should such compliance with the delivery time be impossible due to circumstances beyond our control, such as natural disasters, war, or measures of industrial action with us or our subcontractors, a reasonable extension of the delivery time sets in. Should such impediments continue to exist for more than 2 months, each contracting party is entitled to withdrawal.

2. Partial delivery is possible. With manufacture to Customer's specifications, delivery deviations of 10 % more / less are permissible. Wöhner reserves the right of modifications, especially of the given values, measures and weights, as well as of constructional modifications. Drawings are not binding.

3. In case of delay in delivery on our side and an additional period of time of reasonable length having been granted to us by the Customer, and with such period having been elapsed, the Customer may either withdraw from the Contract or inasmuch as he shows satisfactorily that he has suffered a loss by this – demand for each terminated week of such delay a compensation of 0,5 % but all in all not more than 5 % of the purchase price of such delayed delivery. Any further claims of the Customer in all cases of delayed delivery are excluded, even in case of expiration of an additional period of time that may have been granted to us. To claims for compensation apply also par. IX.1 pages 2 and 3 and IX.4.

4. Returns accepted by our firm upon prior agreement confirmed in writing are reimbursed with 90 % of the invoice value. Returns are not possible but within the first 14 days following delivery and in closed original packing. With returns, packing is not reimbursed. With returns of a total value of less than 250,- Euros a handling fee of 25,- Euros net is charged.

III. Prices, Dispatch, Liability for Damage to Goods in Transit

1. Accounting is done at the list prices, allowances, and terms valid on the day of delivery. Precious metal surcharges are charged separately according to the quotation of the day before the day the order is received. Our prices are based on a price of 200.- € per 100 kg of copper, 185.- € per 100 kg of brass and 180.- € per kg of silver.

2. All list and offer prices are net, without the statutory VAT, without packing and ex works. Orders under 100.- € are charged without any allowance. From 500.- € net on, Wöhner delivers "free domicile, packing extra" and from 1000.- € net on "free domicile, standard packing included". Insurance charges equaling 1 % of the net total price are also charged. Basis of these terms is a complete order and the taking of the goods in packing units. Special wishes of the Customer (e. g. delivery under an address other than that of the Customer, express delivery, special packing, commissioning of a particular forwarder) are taken into account as far as possible. The additional costs resulting therefrom are borne by the Customer.

3. Tool costs paid pro rata by the Customer create no entitlement to the tools, unless otherwise agreed by the parties. They remain the property of the firm of Wöhner. This applies also to the rights in exclusive developments.

4. With dispatch ex works and also in case of partial delivery, risk passes in any event to the Customer, even when in individual cases freight paid delivery was agreed. With the product being ready for dispatch and its dispatch or taking delivery of being delayed for reasons beyond our control, risk passes to the Customer at the moment of receipt of the advice of readiness for dispatch.

IV. Payments

1. On invoiced amounts received within 14 days upon the invoice date the Customer may deduct 2 % discount. Except for that our invoices are payable 30 days upon the invoice date without deduction, unless otherwise individually agreed.

2. According to the statutory regulations, the Customer is in default especially 30 days upon payment being due and receipt of an invoice or an equivalent list of accounts receivable. Payments shall be considered as being made on the day the amount is at our disposal. From the due date on, statutory default interest of 8 % above the basic interest rate is charged.

3. Dishonoured cheques or bills of exchange, suspension of payments, and petition in insolvency proceedings against the assets of the Customer make all our claims – also in case of respite – immediately become due.

4. The Customer may only set off such claims that are established uncontested or have become final and absolute.

V. Reservation of Title

1. We reserve full title in the products until payment in full of all accounts receivable under a current business relation.

2. The Customer is obliged to the careful handling of the products. The Customer is obliged to inform us immediately of any attachment of the products by third parties, e. g. in case of seizure, as well as of possible damages to or the destruction of the products. Any change in the possession of the products and the change of his own residence must immediately be communicated to us by the Customer.

3. With the Customer being in breach of contract, especially in case of delay in payment, we are entitled to withdraw from the Contract and to demand the return of the products.

4. The Customer is entitled to resell the products in the ordinary course of business. He already now assigns to us all claims to the size of our invoice amount that accrue to him against a third party through such reselling. We accept this assignment. Upon assignment the Customer is entitled to collect the sum due. We reserve the right to collect the sum due ourselves the moment the Customer does not properly comply with his financial obligations and is in default.

5. The processing and working up of the products by the Customer is always done in our name and on our behalf. Where the products are being worked up with objects not in our possession, we acquire co-ownership in the new article at the ratio of the value of the products delivered by us to the other worked up objects. The same applies when the products are mixed with other objects not in our possession.

VI. Duty to Examine and Notice of Defect

Has the Customer failed to give notice of defect according to § 377 sub-par. 1 HGB / German Commercial Code, which has to be sent in writing to our firm within 10 days upon receipt of the products, any recourse of the Customer is excluded, unless such defect is of a kind not recognisable at the time of the examination.

VII. Warranty

1. We warrant the faultlessness corresponding to the respective state of the art. Modifications in construction or design that do not impair neither the functionality nor the value of the product do not represent an imperfection.

2. For the condition of the product only the product description shall basically pass for being agreed on.

3. With the product being defective, of which notification in writing has to be made immediately by the Customer, we shall within a reasonable period of time remove such defect at no cost by our after-sales service or deliver a faultless article (= subsequent performance). We choose in each case under the aspect of reasonableness the adequate kind of subsequent performance. Should subsequent improvement or substitute delivery fail, the Customer may withdraw from the Contract or reduce the purchase price. In case of a substitute delivery or withdrawal we reserve ourselves the assertion of an adequate allowance for use. To claims for damages applies par. IX, any further claims of the customer are excluded.

4. All statutory and contractual claims of the Customer based on a defective product become statute-barred for new products after two years upon handing over. Removal of defects or new delivery is no new beginning of the limitation period. This does not apply where the law provides for periods of time exceeding two years, especially in case of § 479 BGB / German Civil Code (right of recourse). For claims for damages par. IX.3 is applicable.

5. Rights of recourse of the customer against the supplier under § 478 BGB / German Civil Code (recourse of the contractor) do not exist but in so far as the Customer and his buyer have not made any agreements that go beyond the legally fixed claims based on defects and when the article was resold in an unmodified state. Necessary expenses will not be refunded but with the Customer presenting a copy of the proof of purchase of the consumer, a description of defects, and evidence of the necessary expenses.

VIII. Industrial Property Rights / Copyrights

Orders according to drawings, drafts or other indications given to us are executed at Customer's risk regarding patent, industrial design, and trademark rights. Should the execution of such orders interfere with any third party's industrial property rights, the Customer accepts responsibility for any damage incurred to us by such interference.

IX. Other Liabilities

1. Any claims for damages by the Customer for whatsoever cause in law are excluded. This does not apply where obligatory liability is given, e. g. under the German product liability law, or in cases of intent, gross negligence, for personal injury or the breach of essential contractual obligations. Yet, indemnity for breach of essential contractual obligations is limited to a foreseeable contractually inherent damage, as far as it is not a case of intent or gross negligence or liability for personal injury is given.

2. Any other claims against us do not exist, especially no claims for damages and no rights of recourse for non-compliance with the instructions for use or the mounting instructions, or for misuse of the products. Claims for damages and rights of recourse do also not exist for damages arising out of in-expert installation, mounting or repair of our products, or for damages arising during transport after the passing of risk to the Customer. Any intruding action on the product, especially the changing of parts and / or modification of the original Wöhner product excludes liability.

3. Claims for damages for defects become statute-barred one year upon handing over of the product, except for the reproach of gross fault or fraudulent intent, or in case of injuries to health.

4. A reversal of the burden of proof to the prejudice of the Customer is not incidental to the above terms.

X. Place of Performance and Venue

1. Place of performance for all obligations under this contractual relationship is the registered office of Wöhner.

2. Place of venue is – with the Customer being merchant entered in the commercial register – at our choice Coburg or the seat of our respective locally responsible distribution company.

3. For these contractual relations the German Law is applicable to the exclusion of the United Nations Convention on Contracts for the International Sale of Goods (CISG).

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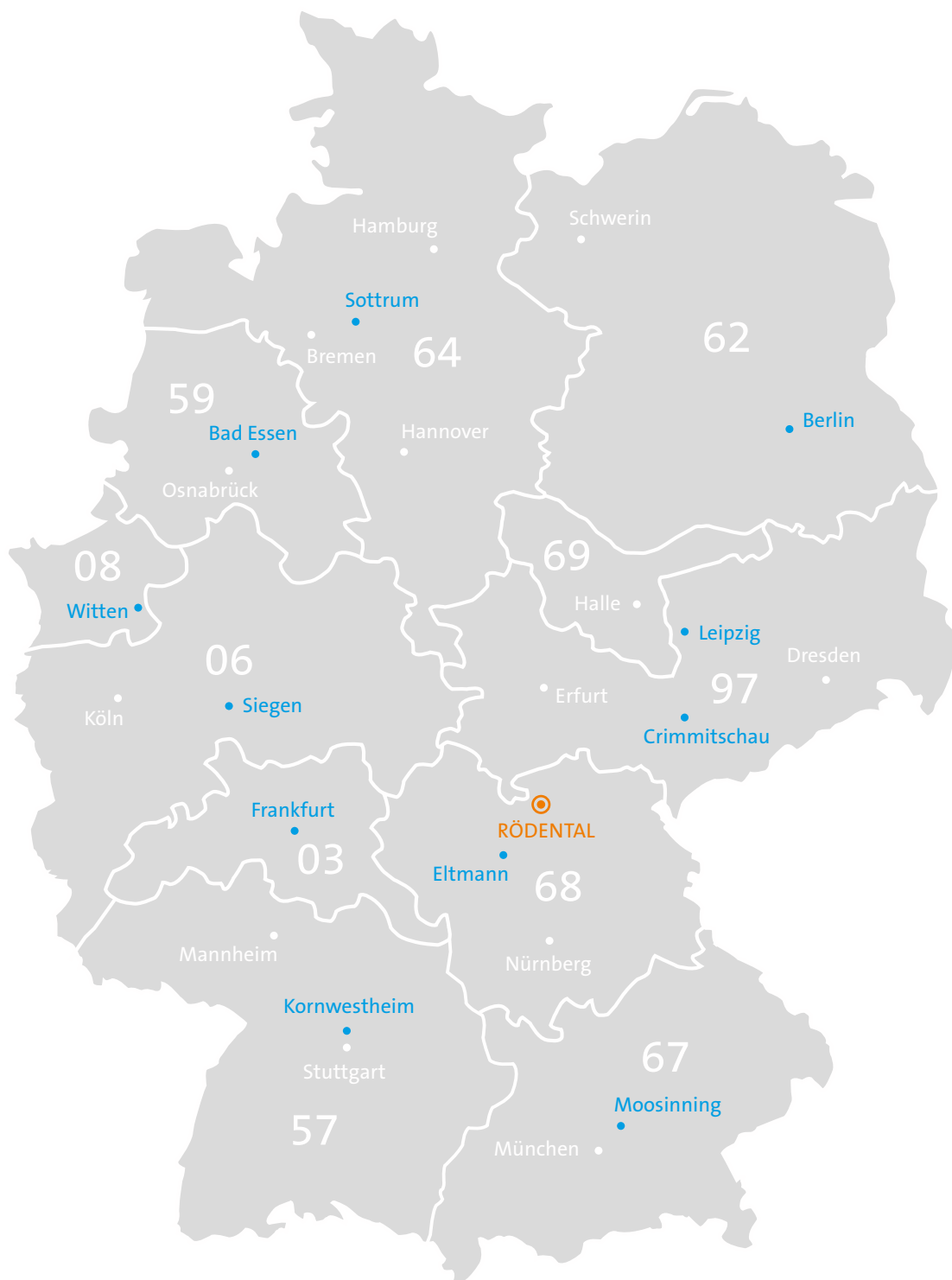
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