

Rittal – The System.

Faster – better – everywhere.

VX25 Ri4Power

The switchgear and power distribution system for the VX25



ENCLOSURES

POWER DISTRIBUTION

CLIMATE CONTROL

IT INFRASTRUCTURE

SOFTWARE & SERVICES

FRIEDHELM LOH GROUP





VX25. **SYSTEM PERFECTION.**

System perfection. Solutions from Rittal.

The future is shaped by innovative companies with the ability to supply smart solutions to their partners in industry, mechanical & plant engineering and IT. Rittal are global market and innovation leaders, and expert problem-solvers. Based on our performance promise “faster – better – everywhere”, we provide our customers with comprehensive support along the entire value chain, to gain a crucial competitive edge.

Best proof: the VX25. A large enclosure built to Industry 4.0 standards for world-class, digitally networked technology. The perfect solution to accommodate demands for increased productivity and assembly speed, and further proof that our passion and inventiveness create sustainable solutions that take our customers to the cutting-edge of technology.

Now we have upped our innovation game once more, with a comprehensive overhaul of the entire VX25 Ri4Power modular system. Now more efficient, even faster and stronger than ever before, it is the ultimate future-proof solution.

VX25 Ri4Power – ready for your challenges.



VX25. SYSTEM PERFECTION.

VX25 Ri4Power



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Location-flexible power distribution

Low-voltage switchgear may be housed at a variety of locations, such as a central location outside the production area, in the periphery or on separate levels. This is where the VX25 Ri4Power switchgear system scores points, offering unparalleled adaptability and flexibility for a wide range of applications up to 6300 A.

THE COMPLETE SOLUTION

Enclosure and busbar system in one – The Rittal VX25 enclosure system and the Rittal VX25 Ri4Power switchgear system together form a complete solution for the assembly of type-tested low-voltage switchgear with internal form separation.

Faster, stronger, more efficient – VX25 Ri4Power is the perfect solution for applications up to 6300 A. Project planning is child's play with the user-friendly Power Engineering software. Fast assembly with up to 50% time savings. The optimised arrangement of busbars translates into impressive copper savings. That's Rittal system efficiency!

Switching and control under one roof

VX25 Ri4Power unites power distribution and control technology in a single enclosure. The continuous modular system allows each enclosure panel to be flexibly subdivided into individually configurable busbar compartments, functional units and connection areas to Form 2-4, for a time-saving solution.

ACB section

For the infeed and output of large currents into and from the switchgear. Air circuit-breakers are used to protect people and machines.

Cable chamber

For distributing cables and lines leading into or out of compartments, to provide cable management for outgoing sections. Cable entry is optionally from above or below.

Outgoing section

For the installation of circuits with switchgear, power supply outlets, controllers, switchgear units, fused outgoing feeders and much more, allowing circuits and controllers to be combined under one roof.

Fuse-switch disconnecter section

For compact, variable distribution of electric power with fused switchgear. Plug-type NH slimline fuse-switch disconnectors are used here, supported by vertical multi-terminal busbar systems.

THE SECTION TYPES

Modular section system

The VX25 Ri4Power allows you to create different sections within a switchgear or power distribution system to perform these tasks.



Form 2b

As effective protection against accidental contact with the busbar. Designed as an internal sub-division of the busbar compartment into functional space and adjacent compartment.

Energy storage section

The infrastructure solution for battery energy storage solutions (BESS): The modular system allows you to compile bespoke enclosures from Rittal standard components to suit the individual storage system.

Coupling section

For disconnecting or connecting busbar systems within low-voltage equipment. Also for maintaining machine and plant uptime, because individual sub-sections may be disconnected separately.

Tested safety

- The VX25 Ri4Power switchgear system is continuously type-tested to international standard IEC 61 439-1
- Tests with ASTA certification
- Protection category up to IP 54
- Tested accidental arcing protection to IEC 61 641
- Additional accidental arcing protection as a preventive measure

Complete partitioning

Compartment side panels matching the enclosure height instantly shield all the functional spaces below. This replaces individual vertical partitions from section to section and reduces the number of components and assembly time required.

Flexibility

The 25 mm enclosure section pitch pattern and side panel perforations allow fast, height-flexible assembly of the horizontal compartment dividers with minimal parts. They simply slide into position like a baking tray in an oven.

Adjustment

Removal of the pre-punched knock-outs in the compartment dividers is burr-free, for flexible subdivision of the openings depending on the planned cable routing. This supports a continuous, direct power supply to the control and wiring sections.



Independence

The main busbars may optionally be routed in the roof section or central rear section for improved planning and space flexibility.



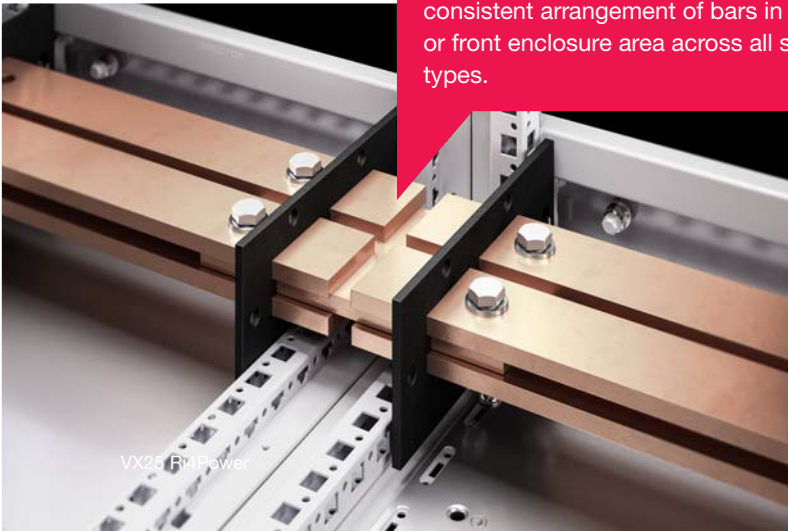
Continuity

Connecting PE or N conductors by directly screw-fastening the bar supports to the frame section ensures an identical, consistent arrangement of bars in the rear or front enclosure area across all section types.



Straight lines

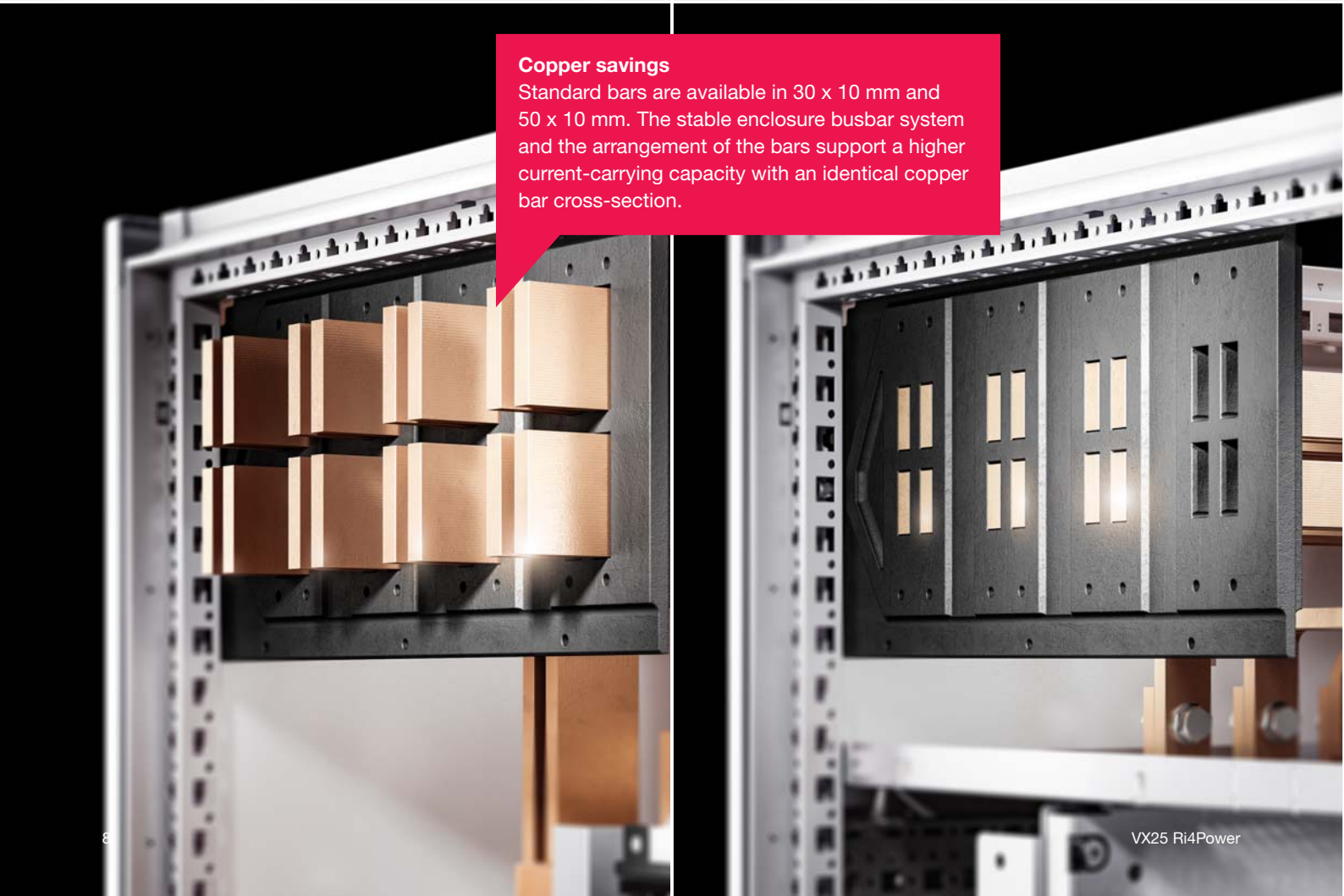
The pre-punched knock-outs in the compartment side panels allow PE and N conductors to be continued across sections, for straight-line routing through all section types.





Reduced number of items

The 25 mm pitch pattern allows top busbar supports to be mounted directly onto the enclosure section. Just three screws is all you need. No further components are required.



Copper savings

Standard bars are available in 30 x 10 mm and 50 x 10 mm. The stable enclosure busbar system and the arrangement of the bars support a higher current-carrying capacity with an identical copper bar cross-section.



Functional

No need to modify the busbar layout, even when using mounting plates. To maintain the rail position, it is sufficient to rotate the functional bar support through 180° around its vertical axis.

Immediate machining

The standard 50 x 10 mm copper bars are already pre-punched and cut to the required length to match the enclosure widths. They may be fitted directly without machining.



Multi-functionality

The standard 50 x 10 mm copper bars may also be used as a neutral conductor.

Fast attachment

The open busbar support can additionally accommodate the quick-release fastener for simple, fast connection to the next section.



Bar termination

The solid bar support is used as a termination.



Health and safety at work

Rounded edges ensure optimum work safety standards when populating the enclosure.

Stability

The seamlessly laser-welded, rolled enclosure profile ensures optimum force transmission on installed equipment.

Labour-saving

With one-person assembly, the positioning aid for the side and rear panels is an ideal, user-friendly preliminary fixing, leaving both hands free to screw-fasten the panels into position.

Stability

The corner piece with welded base frame makes it easier to secure to the floor and base and improves stability.



Installation options

The continuous pattern of square punchings supports the use of M6/M8 cage nuts to create more mounting options at all profile levels.



Labour-saving

The new hinge allows doors to be fitted and removed incredibly easily without any tools, and separately locking and unlocking the hinge bolts is a thing of the past.

Clamping force

The baying connectors are screwed into place in the direction of baying to bring the enclosures safely into position.





THE ACB SECTION

For protecting machinery and equipment

Air circuit-breakers protect machines, plant and people from damage and injury associated with short-circuits, earth faults and overloads.

- The VX25 Ri4Power is suitable for use with open and compact circuit-breakers from all well-known manufacturers, including ABB, Eaton, General Electric, Mitsubishi, Schneider Electric, Siemens, LSIS and Terasaki.
- Modular continuity and a high manufacturing quality guarantee exceptionally time-saving assembly.
- Up to 6300 A, the busbar systems are dimensioned to your specific requirements with standard copper bars and individually configured.
- All drawings of connector kits and connection brackets for connecting air circuit-breakers may be generated and printed with the Rittal Power Engineering software so that all copper parts can be prepared for installation early in the process.

Maximum performance

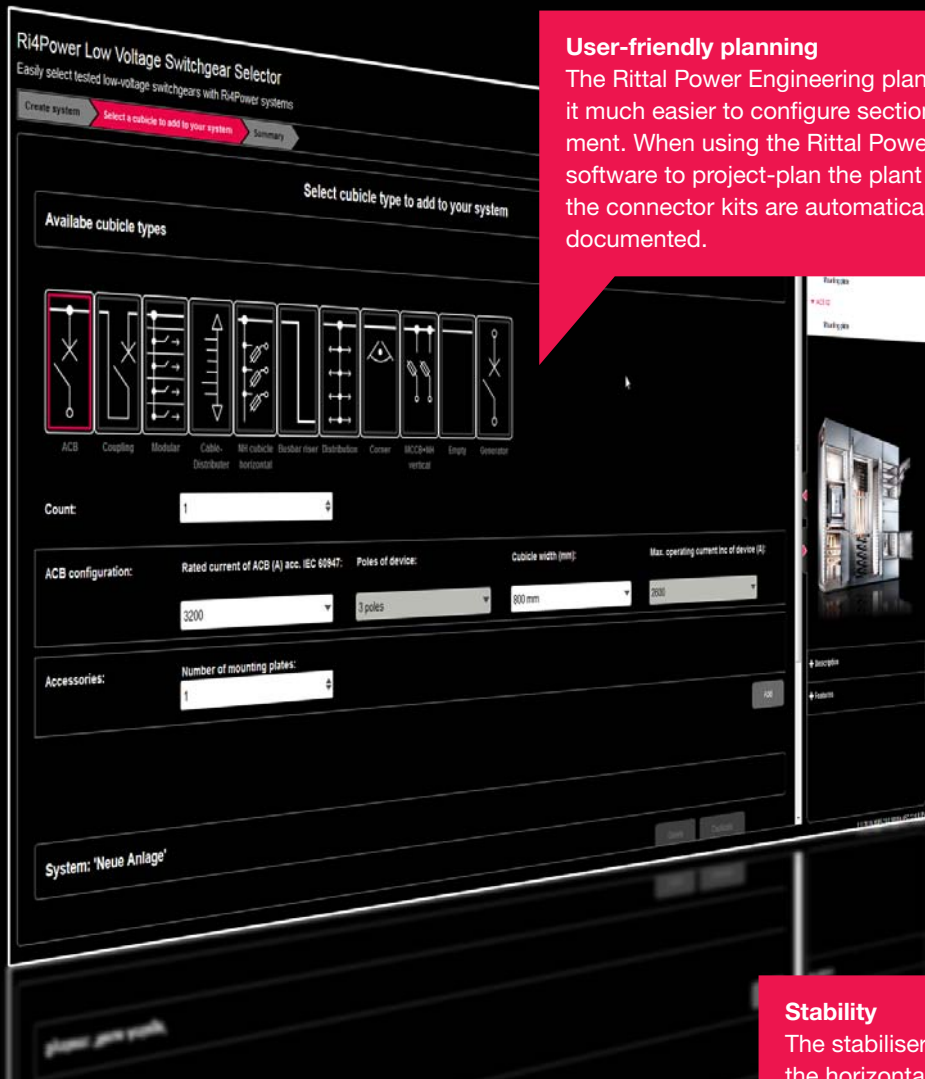
The end position of the rails on the compartment side panel is always identical and is defined by the existing holes. The installation of both 3-pole and 4-pole systems is supported.

Economical

The Maxi-PLS busbar system minimises the use of copper despite its large dimensions. The underside of the bar was deliberately designed to save material. Maxi-PLS supports connected loads of up to 6300 A.

Continuity

Connecting PE or N conductors by directly screw-fastening the bar supports to the frame section ensures an identical, consistent arrangement of bars in the rear or front enclosure area across all section types.

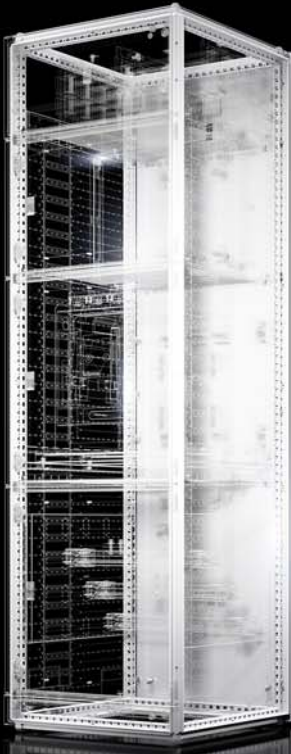


User-friendly planning
 The Rittal Power Engineering planning software makes it much easier to configure section types and equipment. When using the Rittal Power Engineering software to project-plan the plant (design verification), the connector kits are automatically generated and documented.

Stability
 The stabilisers mounted between the horizontal rails of the air circuit-breaker significantly improve short-circuit resistance.

Fast connection
 The connection brackets, which are planned using Rittal software for a precise fit, enable circuit-breakers to be connected to the main busbar system.

Fast installation
 The mounting bracket for the air circuit-breaker support rail is attached directly to the enclosure frame section. A fast, simple and stable solution which is very easy to assemble.



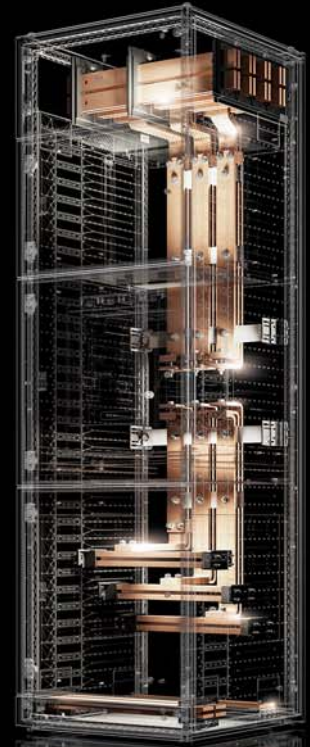
Basic framework

- Modular enclosure, 2000 mm high, from the VX25 baying enclosure system
- Base/plinth, 100 or 200 mm high, from the VX base/plinth system
- Base/plinth trim panel, side
- Side panel(s)
- Baying with bracket, block or connector
- Partial doors and front trim panels for modular front design
- Door lock(s) from the fastener system
- Roof plate depending on the protection category and function
- Cable entries



Compartment

- Compartment side panel
- Compartment dividers
- Partial mounting plates and accessories (depending on the Form separation type)
- Air circuit-breaker mounting bracket and support rail



Busbar system

- Flat copper busbars (Flat-PLS) for main busbar system and N/PE conductors
- Busbar supports for busbar system in roof or rear area, for busbar entry or baying
- End cover Flat-PLS
- Longitudinal connector for Flat-PLS
- Connection system for Flat-PLS
- Connection components for air circuit-breakers on bar systems or infeeds
- Infeed designed as compact infeed for Maxi-PLS
- Connection system for Maxi-PLS for cable connection on the infeed
- Accessories for busbar system, such as stabiliser, angle bracket, screws
- Busbar support, N conductor
- PE/PEN angle bracket
- Perforated cover plate with mounting bracket







THE OUTGOING SECTION

To combine switching and control functions

In the outgoing section, many different components may be connected under one roof, such as power distributors with control units. To achieve this, individual compartments, shielded from one another, are created within the section.

- Each compartment is configured to suit your requirements with VX25 Ri4Power system components and then individually populated e.g. with switchgear, power supply outgoing feeders or control units.
- The busbar distribution system may be positioned adjacent to or behind the compartments and is easily and safely connected to the main busbar systems using system components.
- The fully modular busbar system can be used across all sections and compartments and is exceptionally straightforward to plan and install. It also offers extensive individualisation options with uncompromising consistency.

Utilisation of the section

The modular partial door concept is quickly achieved. Compartment side panels matching the enclosure height simultaneously shield multiple compartments. The 25 mm pitch pattern of the frame section supports variable compartment heights to maximise use of the section.



Multi-functional

The compartment divider will fit any section type. Benefits: Fewer components, plus a high level of efficiency. The air-permeable grille supports thermal convection across the entire section, ensuring improved pressure equalisation throughout the compartment.



Flexibility

The pre-punched knock-outs in the compartment dividers may be removed without burrs, for flexible division of the openings depending on the planned cable routing and for a consistent, direct power supply to the control and wiring sections.



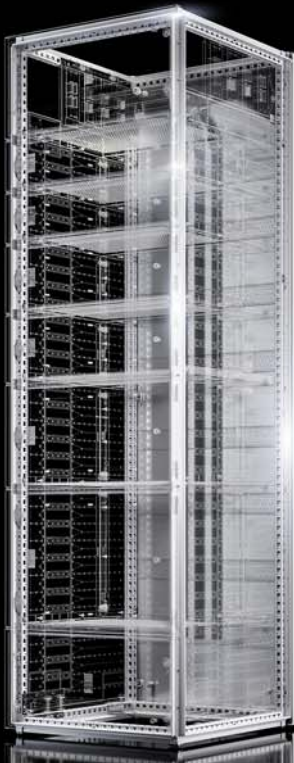
Continuity

Connecting PE or N conductors by directly screw-fastening the bar supports to the frame section ensures an identical, consistent arrangement of bars in the rear or front enclosure area across all section types.



Fewer parts

The compartment divider is screw-fastened directly to the side wall and the enclosure section to save time.



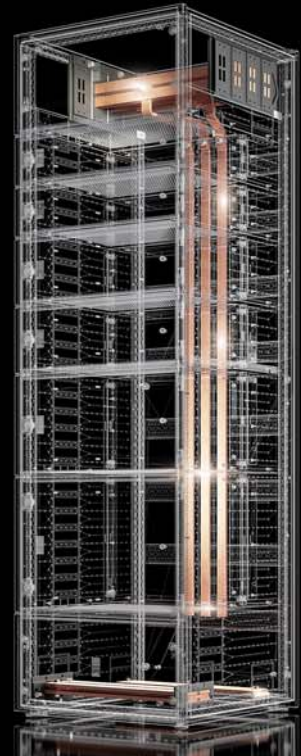
Basic framework

- Modular enclosure, 2000 mm high, from the VX25 baying enclosure system
- Base/plinth, 100 or 200 mm high, from the VX base/plinth system
- Base/plinth trim panel, side
- Side panel(s)
- Baying with bracket, block or connector
- Partial doors and front trim panels for modular front design
- Door lock(s) from the fastener system
- Roof plate depending on the protection category and function



Compartment

- Compartment side panel
- Compartment dividers
- Partial mounting plates and accessories (depending on the Form separation type)
- Plastic gland plates



Busbar system

- Flat copper busbars (Flat-PLS) for main and distributor busbar system and N/PE conductors
- Busbar supports for busbar system in the roof section, for busbar entry or baying
- End cover Flat-PLS
- Longitudinal connector for Flat-PLS
- Connection system for Flat-PLS
- Busbar supports for distribution busbar system
- Connection components for the T-connection
- Accessories for busbar system, such as stabiliser, mounting bracket, screws
- Busbar support, N conductor
- PE/PEN angle bracket
- Perforated cover plate with mounting bracket







FORM 2B

To ensure optimum contact hazard protection

The Form 2b designed as internal separation shields the busbar compartment from the functional space and the connection space.

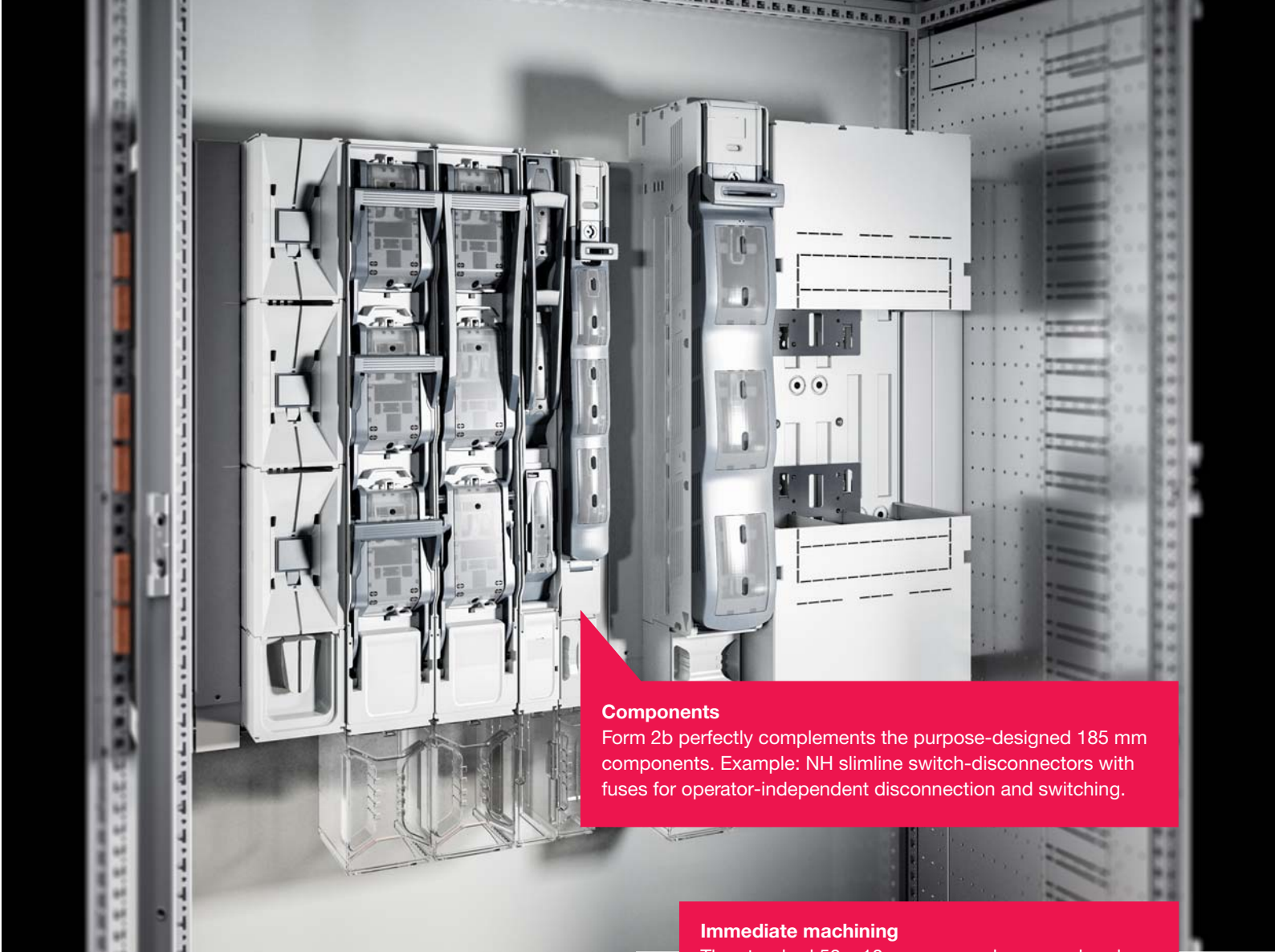
- All active parts are safe from finger-contact in line with IP 2X.
- When working in the functional space or connection space, the modular, width-flexible cover provides effective protection from contact with the busbars.
- Shielding to Form 2b also protects the equipment, by preventing the unwanted ingress of foreign bodies into the busbar compartment.
- Convenient plug-in and clip-in technology enables simple assembly of all components with no drilling required.



Fast installation
Component installation and finger-proof shielding is achieved by simply screw-fastening; no drilling required.



Modular benefits
The width of the contact hazard protection cover is easily adjusted thanks to its 50 mm subdivision and is always flush with the compartment side panel, in line with the Rittal system dimensions.



Components

Form 2b perfectly complements the purpose-designed 185 mm components. Example: NH slimline switch-disconnectors with fuses for operator-independent disconnection and switching.

Immediate machining

The standard 50 x 10 mm copper bars are already pre-punched and cut to the required length to match the enclosure widths. They may be fitted directly without machining.



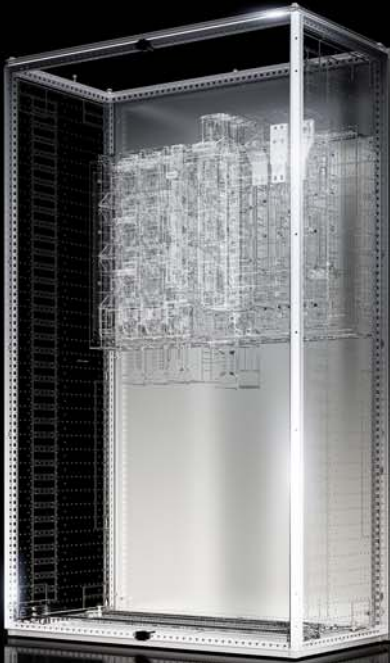
Fast attachment

The busbar support is secured to the enclosure section using just two screws. A pre-punched knock-out is provided so that a matching cut-out can be made quickly in the compartment side panel.

Continuity

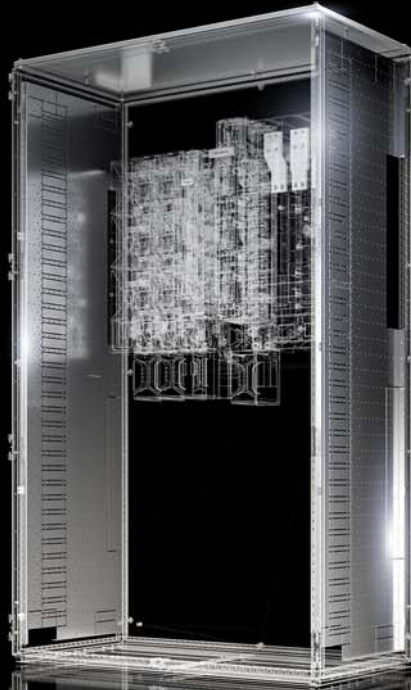
Connecting PE or N conductors by directly screw-fastening the bar supports to the frame section ensures an identical, consistent arrangement of bars in the rear or front enclosure area across all section types.





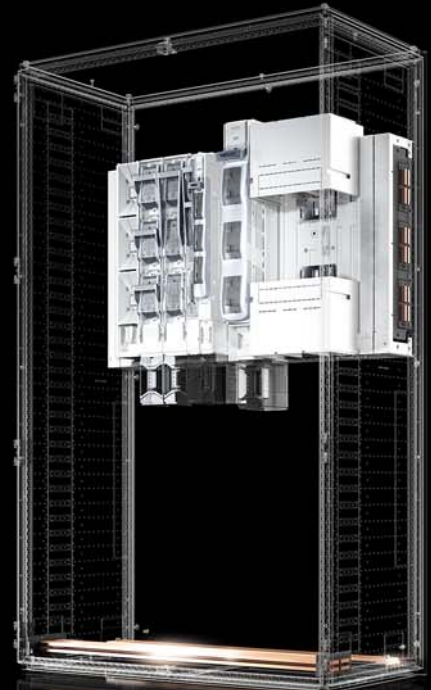
Basic framework

- Modular enclosure, 2000 mm high, from the VX25 baying enclosure system
- Base/plinth, 100 or 200 mm high, from the VX base/plinth system
- Base/plinth trim panel, side
- Side panel(s)
- Baying with bracket, block or connector
- Partial doors and front trim panels for modular front design
- Door lock(s) from the fastener system
- Roof plate depending on the protection category and function



Compartment

- Compartment side panel
- Contact hazard protection cover for Form 2b
- Blanking cover for contact hazard protection cover



Busbar system

- Flat copper busbars (Flat-PLS) for main busbar system and N/PE conductors
- Busbar supports for busbar system in the rear section, for busbar entry or baying
- End cover Flat-PLS
- Longitudinal connector for Flat-PLS
- Accessories for busbar system, such as stabiliser, mounting bracket, screws
- Busbar support, N conductor
- PE/PEN angle bracket
- Perforated cover plate with mounting bracket







THE COUPLING SECTION

For maintaining fail-safe operation

The coupling section is a combination of an air circuit-breaker section with a busbar riser positioned optionally on the left or right.

- This allows individual busbar sections to be de-energised without switching off the entire system. This avoids total system failures during malfunctions or maintenance work, and maintains system availability, especially for systems with multiple power supplies.
- With the VX25 Ri4Power, comprehensive, stable partitioning allows busbar sections to be safely disconnected. The high safety standards of the coupling section permit less stringent requirements for overall short-circuit resistance.
- The parts, accessories and required work steps are largely the same as when assembling the circuit-breaker section. The system synergies mean that assembly time is significantly reduced, while also offering major cost-saving potential.

COUPLING SECTION

Independence

The main busbars may optionally be routed in the roof section or central rear section.



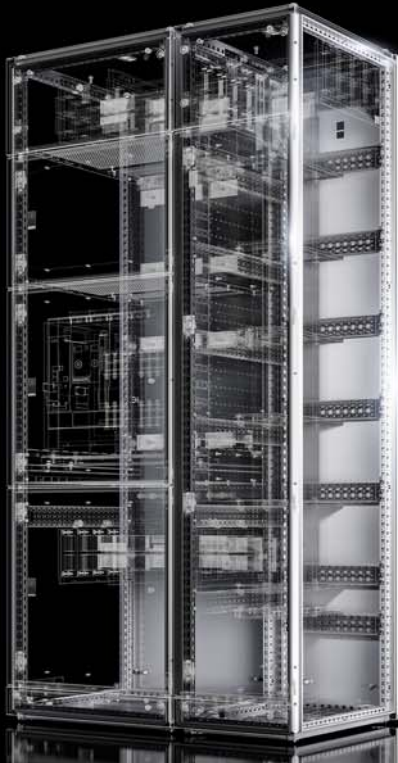
Modular benefits

The coupling power infeed towards the roof section is always based on the same side riser. It is always identical, regardless of whether it is integrated into a coupling section or accommodated in another enclosure as a separate section.



Continuity

Connecting PE or N conductors by directly screw-fastening the bar supports to the frame section ensures an identical, consistent arrangement of bars in the rear or front enclosure area across all section types.



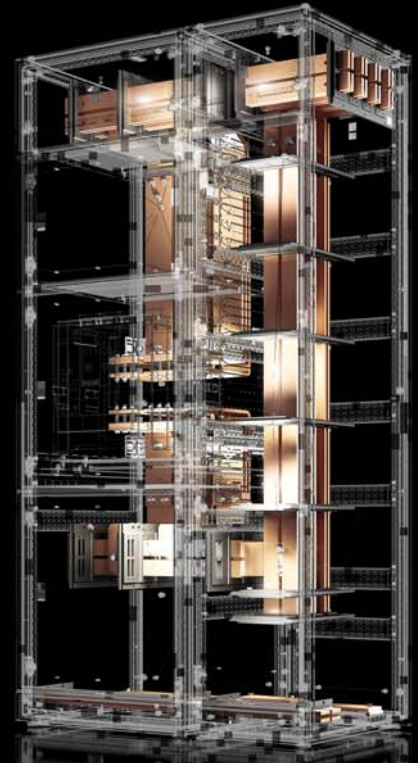
Basic framework

- Modular enclosure 2000 mm high, from the VX25 baying enclosure system (for coupling section and additional riser section)
- Base/plinth, 100 or 200 mm high, from the VX base/plinth system
- Base/plinth trim panel, side
- Side panel(s)
- Baying with bracket, block or connector
- Partial doors and front trim panels for modular front design
- Door lock(s) from the fastener system
- Roof plate depending on the protection category and function
- Cable entries



Compartment

- Compartment side panel
- Compartment dividers
- Partial mounting plates and accessories (depending on the Form separation type)
- Air circuit-breaker mounting bracket and support rail



Busbar system

- Flat copper busbars (Flat-PLS) for main and riser busbar system and N/PE conductors
- Busbar supports for busbar system in roof or rear area, or for busbar extension
- Punched section without mounting flange for busbar supports in the riser section
- End cover Flat-PLS
- Longitudinal connector for Flat-PLS
- Connection system for Flat-PLS
- Connection components for air circuit-breakers on the busbar system or for T-connection
- Accessories for busbar system, such as stabiliser, mounting bracket, screws
- Busbar support, N conductor
- PE/PEN angle bracket
- Perforated cover plate with mounting bracket



FUSE-SWITCH DISCONNECTOR SECTION & CABLE CHAMBER





THE FUSE-SWITCH DISCONNECTOR SECTION

For a reliable power supply

Distributing electrical energy as compactly as possible with maximum variability using fused switchgear – that is the task of the fuse-switch disconnecter section.

- The VX25 Ri4Power modular switchgear system is fully prepared for fast, safe installation of fuse-switch disconnectors, sizes 00 to 3, from Jean Müller or ABB/Siemens.
- The distribution busbars are economically dimensioned to meet the individual requirements. The main and distribution busbar systems can be configured for a short-circuit rating of up to 100 kA for 1 sec.
- Form 1 to Form 4b internal sub-division in the fuse-switch disconnecter section, depending on customer requirements, is achieved via the optional selection of components.

THE CABLE CHAMBER

For distributing cables and lines

The cable chamber is used for routing cables and lines to the compartments.

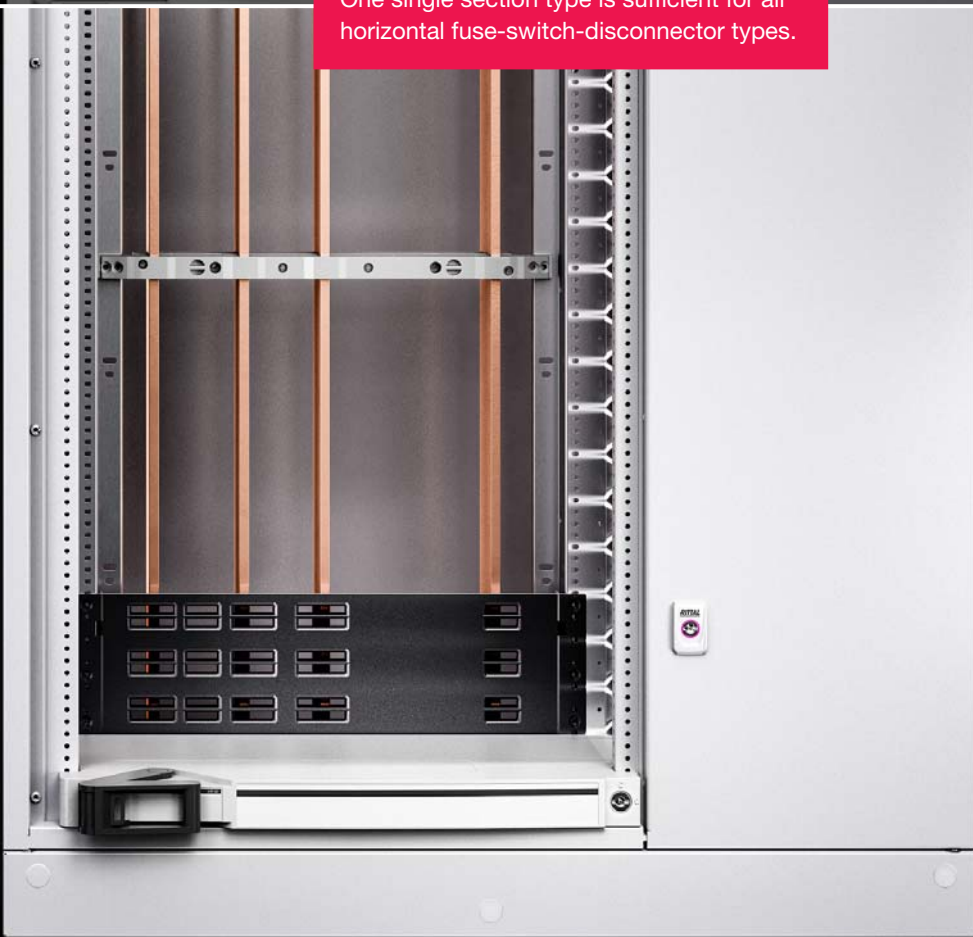
- The extensive range of VX25 Ri4Power system accessories ensures exceptionally time-saving and flexible configuration.
- Depending on the main busbar system chosen, cable entry may be either from below, above, or below and above.
- Choose from a range of cable entry glands for the roof plate.

FUSE-SWITCH DISCONNECTOR SECTION & CABLE CHAMBER



Universal benefit

One single section type is sufficient for all horizontal fuse-switch-disconnector types.





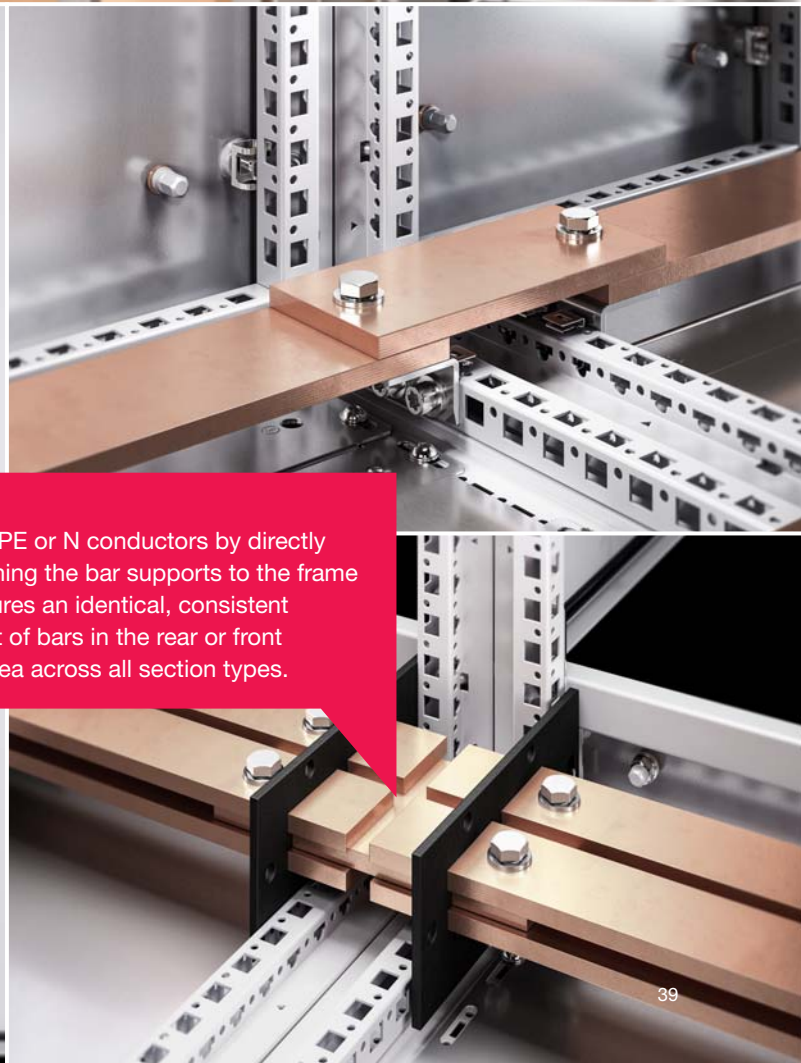
Planning confidence

The positioning of the vertical section is identical for all fuse-switch-disconnector types. This means the system is fully planned and implemented independently of the fuse-switch-disconnector manufacturer that is subsequently chosen.



Combination benefits

The fuse-switch disconnector section is available with integral cable chamber, fully pre-configured, including partitioning. No additional accessories are required. Benefits: Space-efficient and time-saving.



Continuity

Connecting PE or N conductors by directly screw-fastening the bar supports to the frame section ensures an identical, consistent arrangement of bars in the rear or front enclosure area across all section types.



Basic framework

- Fuse-switch-disconnector enclosure, 2000 mm high, from the VX25 baying enclosure system
- Base/plinth, 100 or 200 mm high, from the VX base/plinth system
- Base/plinth trim panel, side
- Side panel(s)
- Baying with bracket, block or connector
- Door lock(s) from the fastener system
- Cable entries



Compartment

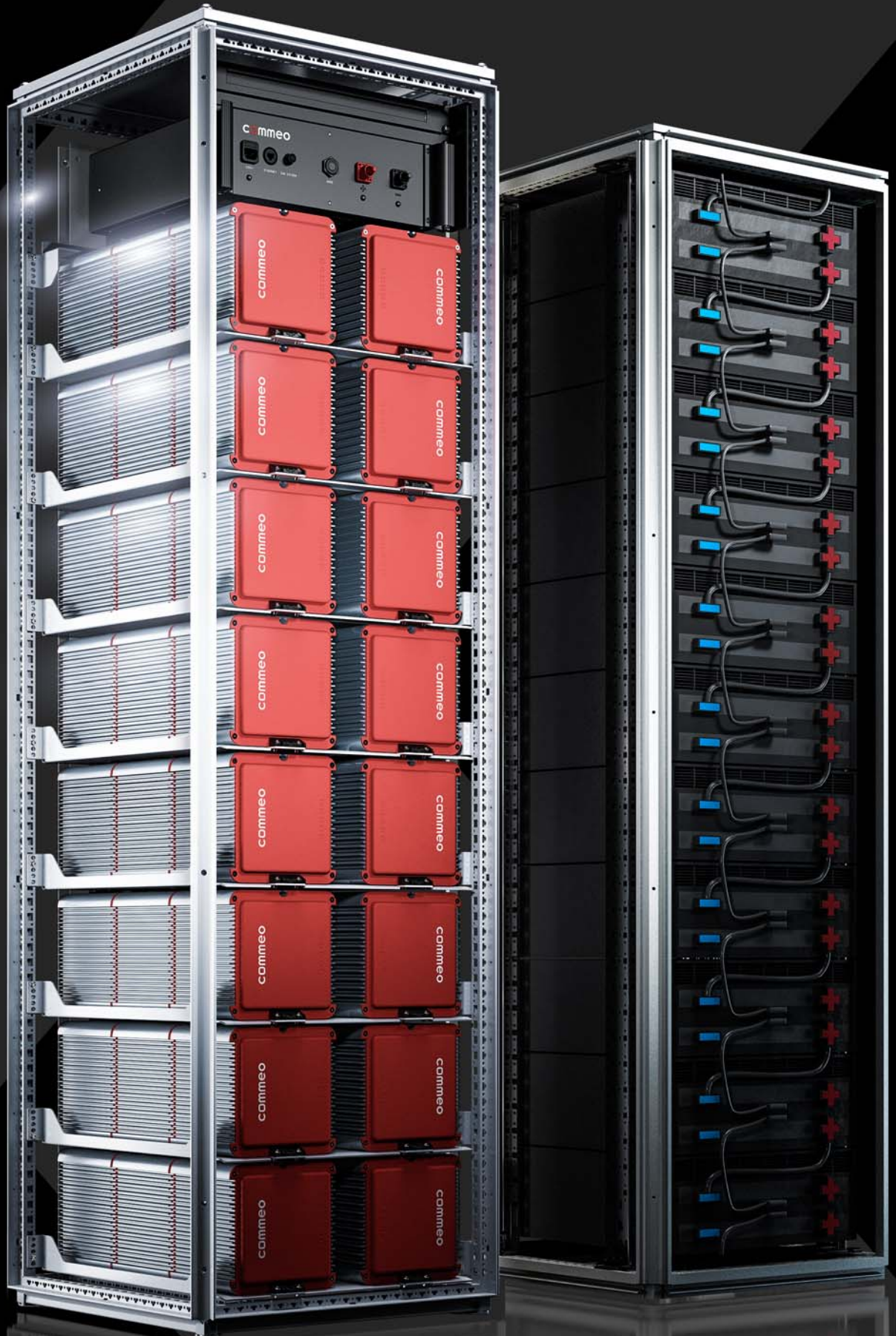
- Supplied already populated



Busbar system

- Flat copper busbars (Flat-PLS) for main and distributor busbar system and N/PE conductors
- Busbar supports for busbar system in roof or rear section
- Busbar support, end bracket and cover for fuse-switch disconnecter section
- End cover Flat-PLS
- Longitudinal connector for Flat-PLS
- Connection components for T-connector
- Busbar support, N conductor
- PE/PEN angle bracket
- Perforated cover plate with mounting bracket







THE ENERGY STORAGE SYSTEM ESS

For the supply of power reserves

ESS is a modular infrastructure solution for battery energy storage solutions (BESS).

- Together, Rittal standard components form a modular system which is used to configure bespoke enclosures tailored to your requirements.
- Depending on the manufacturer and design of the storage modules, the enclosure layout may be flexibly modified, for example with individual connection options.
- This very assembly-friendly solution allows easier rack scaling, power distribution, cooling and system configuration, thus helping to safeguard system availability.
- ESS is easily bayed and incorporated into existing systems.
- For seamless monitoring of performance and potential failures, ESS may be combined with CMC and RiZone for the monitoring system.
- Web connectivity is provided via the Rittal IoT module.



Modular

The battery rack with heavy-duty shelves can support a load of 100 kg per shelf, up to a maximum overall load of 1,500 kg. The design allows the flexible integration of different battery types into the rack. They may be contacted directly onto the busbar system. There is plenty of space in the roof section for battery management. Bypassing is straightforward and achievable at any time, for scalable storage capacity.



482.6 mm (19") enclosure

The battery rack with 482.6 mm (19") installation likewise supports loads of up to 1,500 kg. Depending on the rack height, up to 42 U are available for the use of 482.6 mm (19") modules. They may be contacted directly onto the busbar system. There is plenty of space in the roof section for battery management. Baying is straightforward and achievable at any time, for scalable storage capacity.

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ENCLOSURES

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VX25. SYSTEM PERFECTION.



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IT INFRASTRUCTURE

SOFTWARE & SERVICES



Baying enclosure system VX25



System accessories Page 52 **Modular front design** Page 55 **Compartment configuration** Page 80

Material and surface finish:

- Enclosure frame: Sheet steel, 1.5 mm, dipcoat-primed
- Rear panel: Sheet steel, 1.5 mm, dipcoat-primed, powder-coated on the outside, textured paint
- Gland plates: Sheet steel, 1.5 mm, zinc-plated

Colour:

- RAL 7035

Basis of test:

- IEC 61 439-1/-2
- IEC 61 641

Protection category IP to

IEC 60 529:

- Up to IP 54, depending on the panels

Supply includes:

- Enclosure frame
- Rear panel
- Gland plates

Modular enclosure, height 2000 mm

Width mm	Packs of	400	600	800	400	600	800	1000	Page
Height mm		2000	2000	2000	2000	2000	2000	2000	
Depth mm		600	600	600	800	800	800	800	
Model No.	1 pc(s).	9680.406	9680.606	9680.806	9680.408	9680.608	9680.808	9680.008	
Weight kg		43.8	51.0	61.0	46.0	53.7	64.2	135	

Accessories

Base/plinth corner pieces with base/plinth trim panels, front and rear, 100 mm	2 pc(s).	8660.001	8660.002	8660.003	8660.001	8660.002	8660.003	8660.005	52
Base/plinth trim panels, side, 100 mm	2 pc(s).	8660.033	8660.033	8660.033	8660.034	8660.034	8660.034	8660.034	53
Base/plinth corner pieces with base/plinth trim panels, front and rear, 200 mm	2 pc(s).	8660.021	8660.022	8660.023	8660.021	8660.022	8660.023	8660.024	52
Base/plinth trim panels, side, 200 mm	2 pc(s).	8660.043	8660.043	8660.043	8660.044	8660.044	8660.044	8660.044	53
Side panels, screw-fastened, sheet steel	2 pc(s).	8106.245	8106.245	8106.245	8108.245	8108.245	8108.245	8108.245	53
Baying bracket, internal	6 pc(s).	8617.500	8617.500	8617.500	8617.500	8617.500	8617.500	8617.500	54
Baying block, internal	6 pc(s).	8617.501	8617.501	8617.501	8617.501	8617.501	8617.501	8617.501	54
Baying connector, external	6 pc(s).	8617.502	8617.502	8617.502	8617.502	8617.502	8617.502	8617.502	54
Partial door		see page	see page	see page	see page	see page	see page	see page	55
Front trim panel, top, solid		see page	see page	see page	see page	see page	see page	9682.320	57
Front trim panel, bottom, vented	1 pc(s).	9682.354	9682.356	9682.358	9682.354	9682.356	9682.358	9682.350	58
Front trim panel, bottom, solid		see page	see page	see page	see page	see page	see page	see page	57
Roof plate IP 55, solid	1 pc(s).	9681.646	9681.666	9681.686	9681.648	9681.668	9681.688	-	61
Roof plate IP 2X with ventilation hole	1 pc(s).	9681.846	9681.866	9681.886	9681.848	9681.868	9681.888	see page	61
Roof plate for cable entry glands	1 pc(s).	9681.546	9681.566	9681.586	9681.548	9681.568	9681.588	-	61


Baying enclosure system VX25

Modular enclosure, height 2200 mm

Width mm	Packs of	400	600	800	400	600	800	Page
Height mm		2200	2200	2200	2200	2200	2200	
Depth mm		600	600	600	800	800	800	
Model No.	1 pc(s).	9680.426	9680.626	9680.826	9680.428	9680.628	9680.828	
Weight kg		43.2	54.0	59.4	46.1	55.8	66.0	

Accessories								
Base/plinth corner pieces with base/plinth trim panels, front and rear, 100 mm	2 pc(s).	8660.001	8660.002	8660.003	8660.001	8660.002	8660.003	52
Base/plinth trim panels, side, 100 mm	2 pc(s).	8660.033	8660.033	8660.033	8660.034	8660.034	8660.034	53
Base/plinth corner pieces with base/plinth trim panels, front and rear, 200 mm	2 pc(s).	8660.021	8660.022	8660.023	8660.021	8660.022	8660.023	52
Base/plinth trim panels, side, 200 mm	2 pc(s).	8660.043	8660.043	8660.043	8660.044	8660.044	8660.044	53
Side panels, screw-fastened, sheet steel	2 pc(s).	8126.245	8126.245	8126.245	8128.245	8128.245	8128.245	53
Baying bracket, internal	6 pc(s).	8617.500	8617.500	8617.500	8617.500	8617.500	8617.500	54
Baying block, internal	6 pc(s).	8617.501	8617.501	8617.501	8617.501	8617.501	8617.501	54
Baying connector, external	6 pc(s).	8617.502	8617.502	8617.502	8617.502	8617.502	8617.502	54
Partial door		see page	see page	see page	see page	see page	see page	55
Front trim panel, top, solid		see page	see page	see page	see page	see page	see page	57
Front trim panel, bottom, vented	1 pc(s).	9682.354	9682.356	9682.358	9682.354	9682.356	9682.358	58
Front trim panel, bottom, solid		see page	see page	see page	see page	see page	see page	57
Roof plate IP 55, solid	1 pc(s).	9681.646	9681.666	9681.686	9681.648	9681.668	9681.688	61
Roof plate IP 2X with ventilation hole	1 pc(s).	9681.846	9681.866	9681.886	9681.848	9681.868	9681.888	61
Roof plate for cable entry glands	1 pc(s).	9681.546	9681.566	9681.586	9681.548	9681.568	9681.588	61

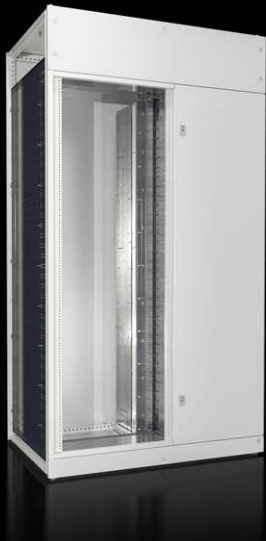
Rittal – The System.



VX25 Power Engineering

See page 106

Baying enclosure system VX25



System accessories Page 52 Compartment configuration Page 80 Fuse-switch disconnecter section Page 85

Material and surface finish:

- Enclosure frame: Sheet steel, 1.5 mm, dipcoat-primed
- Roof: Sheet steel, 1.5 mm, dipcoat-primed, powder-coated on the outside, textured paint
- Door: Sheet steel, 2 mm, dipcoat-primed, powder-coated on the outside, textured paint
- Rear panel: Sheet steel, 1.5 mm, dipcoat-primed, powder-coated on the outside, textured paint
- Gland plates: Sheet steel, 1.5 mm, zinc-plated

- Front panel: Sheet steel, 1.5 mm, dipcoat-primed, powder-coated on the outside, textured paint
- Compartment side panel: Sheet steel, 1.5 mm, zinc-plated

Colour:

- RAL 7035

Basis of test:

- IEC 61 439-1/-2
- IEC 61 641

Protection category IP to IEC 60 529:

- Up to IP 3X, depending on the panels

Supply includes:

- Enclosure frame
- Door
- Roof plate
- Rear panel
- Gland plates
- Front trim panels
- Lock: 3 mm double-bit
- Compartment side panels
- Locating frame for disconnectors with fuses (brands ABB SlimLine/Jean Müller SASIL)

Fuse-switch disconnecter enclosure, height 2000 – 2200 mm

Width mm	Packs of	1000	1200	1000	1200	Page
Height mm		2000	2000	2200	2200	
Depth mm		600	800	600	800	
Model No.	1 pc(s).	9680.005	9680.207	9680.025	9680.227	
Weight kg		125.3	149.6	135.2	158.9	

Accessories

Base/plinth corner pieces with base/plinth trim panels, front and rear, 100 mm	2 pc(s).	8660.005	8660.007	8660.005	8660.007	52
Base/plinth trim panels, side, 100 mm	2 pc(s).	8660.033	8660.034	8660.033	8660.034	53
Base/plinth corner pieces with base/plinth trim panels, front and rear, 200 mm	2 pc(s).	8660.024	8660.025	8660.024	8660.025	52
Base/plinth trim panels, side, 200 mm	2 pc(s).	8660.043	8660.044	8660.043	8660.044	53
Side panels, screw-fastened, sheet steel	2 pc(s).	8106.245	8108.245	8126.245	8128.245	53
Baying bracket, internal	6 pc(s).	8617.500	8617.500	8617.500	8617.500	54
Baying block, internal	6 pc(s).	8617.501	8617.501	8617.501	8617.501	54
Baying connector, external	6 pc(s).	8617.502	8617.502	8617.502	8617.502	54
Roof plate IP 2X with ventilation hole	1 pc(s).	9681.806	9681.828	9681.806	9681.828	61

System accessories VX

Base/plinth system VX

Modular base/plinth diversity

The new, innovative base/plinth system VX offers an unprecedented diversity of functions and applications. It combines all existing base/plinth functions in a single solution, as well as opening up many new applications. As if that isn't enough, it is also compatible with existing enclosure solutions VX, VX IT, VX SE, TX, PC, CX console systems and IW. In short, it is a base/plinth system.

The base/plinth system VX comprises the following components:

- Base/plinth corner pieces with base/plinth trim panels, front and rear
- Base/plinth trim panels, sides

The base/plinth system is designed for maximum stability and produces a flush surface in bayed suites. The vented trim panels and trim panels with brush strips available as accessories can also be attached at the sides or exchanged for front/rear trim panels.

Depending on the application, for example, users can dispense with the trim panels between bayed enclosure suites, or a 100 mm or 200 mm high trim panel may be used to stabilise the base/plinth corner pieces.

In combination with its extensive range of accessories, and thanks to its compatibility with enclosure accessories, the base/plinth system VX offers almost infinite possibilities in terms of siting, transportation, cable routing, cable attachment and base/plinth configuration.



One Model No. for the **base/plinth corner pieces with base/plinth trim panels**, front and rear

One Model No. for the **base/plinth trim panels**, side

One complete **VX base/plinth**

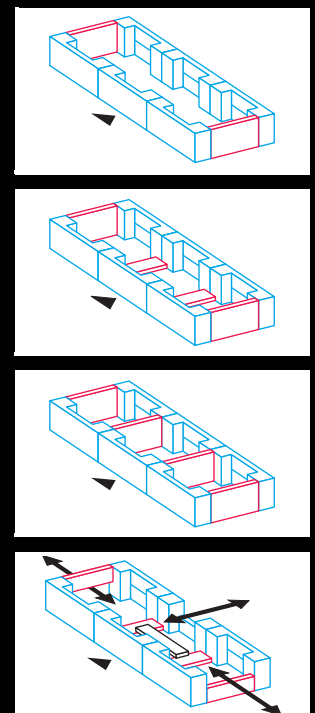
Base/plinth height	Basic form	Cable entry options				Stabilisation of bayed base/plinths
100 mm						
200 mm						

Configuration examples

Order includes	Functional benefits
3 packs of Base/plinth corner pieces with base/plinth trim panels 1 pack of Base/plinth trim panels, sides, 200 mm high	Continuous cable chamber
3 packs of Base/plinth corner pieces with base/plinth trim panels 1 pack of Base/plinth trim panels, sides, 200 mm high 1 pack of Base/plinth trim panels, sides, 100 mm high or 1 pack of Base/plinth trim panels, sides, 200 mm high VX base/plinth baying bracket (8660.140, packs of 20) 4 pc(s). are required for this solution	Additional stability during transportation with base/plinth trim panels rotated through 90°
3 packs of Base/plinth corner pieces with base/plinth trim panels 2 packs of Base/plinth trim panels, sides, 200 mm high	Shielding of the base/plinths from one another

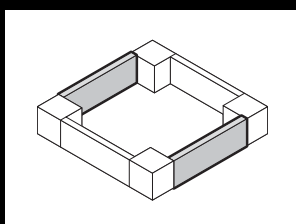
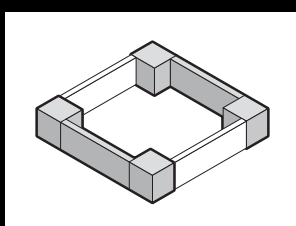
Other options:

- Cable entry at the side by fitting a 100 mm base/plinth trim panel with brush strip
- Cable entry from the rear by dismantling one or more trim panels from the base/plinth corner pieces and replacing them with trim panels with brush strips
- Cable routing in the base/plinth by using punched sections with mounting flanges on the base/plinth trim panels



System accessories VX

Base/plinth



Base/plinth corner pieces with base/plinth trim panels, front and rear

Sheet steel

High-load capacity base/plinth corner pieces with moulded self-positioning to the enclosure, may be used with or without trim panels depending on the application. Large openings in the corner piece for optimum access to the screw-fastening point, may be concealed with a plastic corner cover.

Material:

- Base/plinth corner piece: Sheet steel
- Base/plinth trim panel front/rear: Sheet steel
- Corner cover: Plastic

Colour:

- RAL 9005

100 mm high supply includes:

- 4 base/plinth corner pieces, 100 mm high
- 4 corner covers
- 2 base/plinth trim panels, front/rear, 100 mm high
- Assembly parts

200 mm high supply includes:

- 4 base/plinth corner pieces, 200 mm high
- 4 corner covers
- 1 base/plinth trim panel, front/rear, 200 mm high
- 2 base/plinth trim panels, front/rear, 100 mm high
- Assembly parts

100 mm high

For enclosure width mm	Model No.
400	8660.001
600	8660.002
800	8660.003
1000	8660.005
1200	8660.007

200 mm high

For enclosure width mm	Model No.
400	8660.021
600	8660.022
800	8660.023
1000	8660.024
1200	8660.025



Also required:

- Base/plinth trim panels, sides, to finish off a unit, for additional stabilisation between base/plinths, or for interior configuration, see page 52

Base/plinth trim panel, sides

Sheet steel

To finish off a base/plinth unit at the sides and for additional stability or interior configuration of bayed base/plinths. One 200 mm high or two 100 mm high trim panels may optionally be fitted on 200 mm high base/plinths.

Material:

- Sheet steel

Colour:

- RAL 9005

Supply includes:

- 2 base/plinth trim panels
- Assembly parts

100 mm high

For enclosure depth mm	Model No.
600	8660.033
800	8660.034

200 mm high

For enclosure depth mm	Model No.
600	8660.043
800	8660.044

Side panel, screw-fastened

Sheet steel

Benefits:

- Time-saving assembly thanks to clip-in side panel holders
- Automatic potential equalisation and higher EMC protection, thanks to enclosure panel holders with earthing inserts located on the inside
- Easy positioning in the height and depth with the location aid
- One-person assembly
- Earthing bolts with large, paint-free contact surface for optimum contact

Material:

- Sheet steel, 1.5 mm

Surface finish:

- Dipcoat-primed, powder-coated on the outside

Colour:

- RAL 7035

Protection category IP to IEC 60 529:

- IP 55 (in conjunction with enclosures from the VX series)

Supply includes:

- Assembly parts

For enclosure height mm	For enclosure depth mm	Packs of	Model No.
2000	600	2 pc(s).	8106.245
2000	800	2 pc(s).	8108.245
2200	600	2 pc(s).	8126.245
2200	800	2 pc(s).	8128.245



System accessories VX

Baying



Baying bracket, internal

Benefits:

- Fast, secure installation either from the front or from the side
- For all-round installation on the baying point
- May be flexibly positioned to avoid collisions with installed equipment

Material:

- Sheet steel

Surface finish:

- Zinc-plated

Supply includes:

- Baying bracket, internal
- Baying seal
- Assembly parts

Note:

- 1 pack is sufficient for one baying joint

Packs of	Model No.
6 pc(s).	8617.500

Possible alternative:

- Baying block, internal, see page 54
- Baying connector, external, see page 54

Baying block, internal

Benefits:

- Side mounting creates a flush surface to the extrusion, suitable for top mounting, thus avoiding collisions with installed equipment
- For all-round installation on the baying point

Material:

- Die-cast zinc

Supply includes:

- Baying block, internal
- Baying seal
- Assembly parts

Note:

- 1 pack is sufficient for one baying joint

Packs of	Model No.
6 pc(s).	8617.501

Possible alternative:

- Baying bracket, internal, see page 54
- Baying connector, external, see page 54

Baying connector, external

For mounting on the vertical enclosure sections from the outside.

Supply includes:

- Baying connector, external
- Baying seal
- Assembly parts

Note:

- 1 pack is sufficient for one baying joint

Material	Packs of	Model No.
Sheet steel, zinc-plated	6 pc(s).	8617.502
Stainless steel 1.4301 (AISI 304)	6 pc(s).	8617.503

Possible alternative:

- Baying bracket, internal, see page 54
- Baying block, internal, see page 54

System accessories VX

Modular front design

Partial door

Suitable for VX enclosures instead of a door or rear panel. The partial doors may be combined with one another as required. A trim panel is required at the top and bottom in each case. Door may be optionally hinged on the right or left. Standard double-bit lock insert may be exchanged for lock inserts, type A.

Material:

- Sheet steel, 2 mm

Surface finish:

- Textured paint

Colour:

- RAL 7035

Supply includes:

- Partial door
- Cross member
- Hinges
- Lock components
- Assembly parts

Note:

- Opening angle of partial doors max. 130°



Also required:

- Front trim panel, bottom, vented, see page 58
- Front trim panel, top, solid, see page 57
- Front trim panel, bottom, solid, see page 57



Accessories:

- Perforated mounting strip, see page 56
- Trim panel, hinged at the top, see page 58
- Mini comfort handle AX, see page 59
- Lock insert, see page 60



For enclosure width 400 mm

Width mm	Height mm	Protection category IP to IEC 60 529	Viewing window	Number of locks	Material	Packs of	Model No.
400	200	IP 54	-	1	-	1 pc(s).	9682.142
400	300	IP5 4	-	1	-	1 pc(s).	9682.143
400	400	IP 54	-	2	-	1 pc(s).	9682.144
400	600	IP 54	-	2	-	1 pc(s).	9682.146
400	800	IP 54	-	2	-	1 pc(s).	9682.148
400	1000	IP 54	-	3	-	1 pc(s).	9682.140
400	1200	IP 54	-	3	-	1 pc(s).	9682.152
400	1400	IP 54	-	3	-	1 pc(s).	9682.154
400	1600	IP 54	-	4	-	1 pc(s).	9682.156
400	1800	IP 54	-	4	-	1 pc(s).	9682.158
400	2000	IP 54	-	4	-	1 pc(s).	9682.150

For enclosure width 600 mm

Width mm	Height mm	Protection category IP to IEC 60 529	Viewing window	Number of locks	Material	Packs of	Model No.
600	150	IP 54	-	1	-	1 pc(s).	9682.161
600	200	IP 54	-	1	-	1 pc(s).	9682.162
600	300	IP 54	-	1	-	1 pc(s).	9682.163
600	400	IP 54	-	2	-	1 pc(s).	9682.164
600	600	IP 54	-	2	-	1 pc(s).	9682.166
600	600	IP 54	■	2	Viewing window: Single-pane safety glass, 3 mm	1 pc(s).	9682.167
600	800	IP 54	-	2	-	1 pc(s).	9682.168
600	800	IP 54	■	2	Viewing window: Single-pane safety glass, 3 mm	1 pc(s).	9682.169
600	1000	IP 54	-	3	-	1 pc(s).	9682.160
600	1200	IP 54	-	3	-	1 pc(s).	9682.172
600	1400	IP 54	-	3	-	1 pc(s).	9682.174
600	1600	IP 54	-	4	-	1 pc(s).	9682.176
600	1800	IP 54	-	4	-	1 pc(s).	9682.178
600	2000	IP 54	-	4	-	1 pc(s).	9682.170

System accessories VX

Modular front design



For enclosure width 800 mm

Width mm	Height mm	Protection category IP to IEC 60 529	Viewing window	Number of locks	Material	Packs of	Model No.
800	150	IP 54	–	1	–	1 pc(s).	9682.181
800	200	IP 54	–	1	–	1 pc(s).	9682.182
800	300	IP 54	–	1	–	1 pc(s).	9682.183
800	400	IP 54	–	2	–	1 pc(s).	9682.184
800	600	IP 54	–	2	–	1 pc(s).	9682.186
800	600	IP 54	■	2	Viewing window: Single-pane safety glass, 3 mm	1 pc(s).	9682.187
800	800	IP 54	–	2	–	1 pc(s).	9682.188
800	1000	IP 54	–	3	–	1 pc(s).	9682.180
800	1200	IP 54	–	3	–	1 pc(s).	9682.192
800	1400	IP 54	–	3	–	1 pc(s).	9682.194
800	1600	IP 54	–	4	–	1 pc(s).	9682.196
800	1800	IP 54	–	4	–	1 pc(s).	9682.198
800	2000	IP 54	–	4	–	1 pc(s).	9682.190

For enclosure width 1000 mm

Width mm	Height mm	Protection category IP to IEC 60 529	Viewing window	Number of locks	Material	Packs of	Model No.
1000	400	–	–	2	–	1 pc(s).	9682.104
1000	600	–	–	2	–	1 pc(s).	9682.106
1000	800	–	–	2	–	1 pc(s).	9682.108

For enclosure width 1200 mm

Width mm	Height mm	Protection category IP to IEC 60 529	Viewing window	Number of locks	Material	Packs of	Model No.
1200	400	–	–	2	–	1 pc(s).	9682.124
1200	600	–	–	2	–	1 pc(s).	9682.126
1200	800	–	–	2	–	1 pc(s).	9682.128



Perforated mounting strip

for partial door

For retrospective external mounting on partial doors. The perforated mounting strips have a 25 mm pitch pattern of holes and may be used for mounting individual accessories such as cable ducts, hose holders etc. on the rear of the door. Hole diameter of perforated mounting strip: 4.5 mm.

Material:

- Sheet steel, 1 mm

Surface finish:

- Zinc-plated

Supply includes:

- Assembly parts

For enclosure width mm	Length mm	For partial door height mm	Packs of	Model No.
400	198	200 - 800	10 pc(s).	9681.204
600	398	150 - 800	10 pc(s).	9681.206
800	598	150 - 800	10 pc(s).	9681.208



Assembly instruction:

- For enclosure width 1000 mm: 1 x 9681.204 and 1 x 9681.206
- For enclosure width 1200 mm: 2 x 9681.206

System accessories VX

Modular front design

Front trim panel, top, solid

To finish off the modular front design at the top when using partial doors. The front trim panels may be removed from the outside by unscrewing. The cross member required for mounting is included with the supply of the mounted partial doors.

Design:

- Solid

Material:

- Sheet steel, 1.5 mm

Surface finish:

- Textured paint

Colour:

- RAL 7035

Protection category IP to IEC 60 529:

- IP 54

Supply includes:

- Assembly parts

Height mm	For enclosure width mm	Packs of	Model No.
100	400	1 pc(s).	9682.314
300	400	1 pc(s).	9682.324
100	600	1 pc(s).	9682.316
300	600	1 pc(s).	9682.326
100	800	1 pc(s).	9682.318
300	800	1 pc(s).	9682.328
100	1000	1 pc(s).	9682.310
300	1000	1 pc(s).	9682.320
100	1200	1 pc(s).	9682.312
300	1200	1 pc(s).	9682.322



Front trim panel, bottom, solid

To finish off the modular front design at the bottom when using partial doors. The front trim panels may be removed from the outside by unscrewing.

Design:

- Solid

Material:

- Sheet steel, 1.5 mm

Surface finish:

- Textured paint

Colour:

- RAL 7035

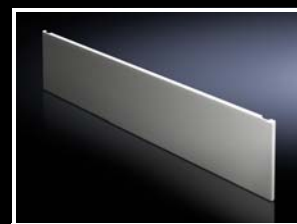
Protection category IP to IEC 60 529:

- IP 54

Supply includes:

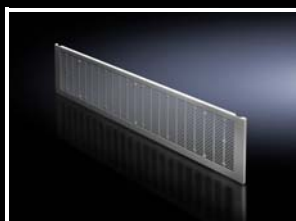
- Cross member
- Assembly parts

Height mm	For enclosure width mm	Packs of	Model No.
100	400	1 pc(s).	9682.334
300	400	1 pc(s).	9682.344
100	600	1 pc(s).	9682.336
300	600	1 pc(s).	9682.346
100	800	1 pc(s).	9682.338
300	800	1 pc(s).	9682.348
100	1000	1 pc(s).	9682.330
300	1000	1 pc(s).	9682.340
100	1200	1 pc(s).	9682.332
300	1200	1 pc(s).	9682.342



System accessories VX

Modular front design



Front trim panel, bottom, vented

To finish off the modular front design at the bottom when using partial doors. The front trim panels may be removed from the outside by unscrewing.

Design:

- With louvres

Material:

- Sheet steel, 1.5 mm

Surface finish:

- Textured paint

Colour:

- RAL 7035

Protection category IP to IEC 60 529:

- IP 2X

Supply includes:

- Cross member
- Assembly parts

Note:

- When using front trim panels IP 2X, select a roof plate with protection category IP 2X for the top ventilation

Height mm	For enclosure width mm	Packs of	Model No.
300	400	1 pc(s).	9682.354
300	600	1 pc(s).	9682.356
300	800	1 pc(s).	9682.358
300	1000	1 pc(s).	9682.350
300	1200	1 pc(s).	9682.352



Also required:

- Roof plate IP 2X with ventilation hole, see page 61



Trim panel, hinged at the top

For the installation of control and display components, in conjunction with a modular front design and protective bar.

Material:

- Sheet steel, 2 mm

Surface finish:

- Textured paint

Colour:

- RAL 7035

Protection category IP to IEC 60 529:

- IP 54

Supply includes:

- Hinges
- Cam lock with 3 mm double-bit insert
- Assembly parts

Height mm	For enclosure width mm	Packs of	Model No.
300	600	1 pc(s).	8620.500
300	800	1 pc(s).	8620.501
300	1200	1 pc(s).	8620.502



Accessories:

- Stay, see page 58
- Lock insert, see page 60



Support stay

for trim panel, hinged at the top

5 pitch pattern positions up to a maximum opening angle of approx. 85°.

Material:

- Sheet steel

Surface finish:

- Zinc-plated



Packs of	Model No.
2 pc(s).	8801.260

Mini-comfort handle AX

for partial doors with cam lock

The lock is opened by swivelling the unlocked handle. Prepared for the installation of lock inserts or for the installation of standard commercially available 40 or 45 mm profile half-cylinders, as well as lock and push-button inserts.

Other variants prepared for ASSA oval profile half-cylinder up to a maximum overall length of 26.9 mm and KESO/KABA profile half-cylinder up to a maximum overall length of 42.5 mm and a Ø of 22 mm.

				
	For lock inserts or profile half-cylinders	For padlocks and lock inserts or profile half-cylinders	Prepared for ASSA	Prepared for KESO/KABA
	Model No.			
Die-cast zinc RAL 7035	2537.100	2537.300	2537.400	2537.500
Lock inserts, type A				
7 mm square	2460.000	2460.000	–	–
8 mm square	2461.000	2461.000	–	–
7 mm triangular	2462.000	2462.000	–	–
8 mm triangular	2463.000	2463.000	–	–
Screwdriver	2464.000	2464.000	–	–
Daimler insert	2465.000	2465.000	–	–
3 mm double-bit	2466.000	2466.000	–	–
Fiat	2307.000	2307.000	–	–
6.5 mm triangular	2460.650	2460.650	–	–
Lock and push-button inserts				
Lock insert, lock no. 3524 E ¹⁾	2467.000	2467.000	–	–
Push-button insert	2468.000	2468.000	–	–
Push-button and lock insert ¹⁾	2469.000 ²⁾	2469.000 ²⁾	–	–
Profile half-cylinders				
to DIN 18 252 ³⁾	9785.040 ⁵⁾	9785.040 ⁵⁾	–	–
	9785.042 ⁴⁾	9785.042 ⁴⁾	–	–

¹⁾ With 2 keys

²⁾ Lock no. 2123; no other lock is possible

³⁾ With 3 keys for each lock insert

⁴⁾ Packs of two, simultaneous locking within the same pack, no simultaneous locking for different packs

⁵⁾ Different closures





System accessories VX

Lock system



Lock inserts

for mini-comfort handle AX

		
	Model No.	
Lock insert, lock no. 3524 E ¹⁾	2467.000	-
Push-button insert	2468.000	-
Push-button and lock insert ¹⁾	2469.100²⁾	-
Profile half-cylinders to DIN 18 252 ³⁾	-	9785.040⁵⁾
	-	9785.042⁴⁾

¹⁾ With two keys

²⁾ Lock no. 2123; no other lock is possible

³⁾ With 3 keys for each lock insert





⁴⁾ Packs of two, simultaneous locking within the same pack, no simultaneous locking for different packs

⁵⁾ Different closures



Enclosure key

For lock inserts. Enclosure, case and lock systems are supplied as standard with matching keys.

				
	Model No.			
	-	-	2549.000	2549.500²⁾
Double-bit no. 5	2531.000	-	■	■
Security lock no. 3524 E	-	2532.000¹⁾	-	-
7 mm triangular	2545.000	-	-	■
8 mm triangular	2546.000	-	■	■
7 mm square	2547.000	-	-	■
8 mm square	2548.000	-	■	■
for Daimler	2521.000	-	-	-
for Fiat	2308.000	-	-	-

¹⁾ Packs of 2

²⁾ With bit adaptor and reversible bit for multi-tooth size 25 and Phillips-head (Ph 2)

Roof plate IP 55, solid

For enclosures without roof plate and in exchange for the standard roof.

Material:

- Sheet steel, 1.5 mm

Surface finish:

- Textured paint

Colour:

- RAL 7035

Protection category IP to IEC 60 529:

- IP 55

Supply includes:

- Assembly parts

For width mm	For depth mm	Packs of	Model No.
400	600	1 pc(s).	9681.646
400	800	1 pc(s).	9681.648
600	600	1 pc(s).	9681.666
600	800	1 pc(s).	9681.668
600	1000	1 pc(s).	9681.660
600	1200	1 pc(s).	9681.662
800	600	1 pc(s).	9681.686
800	800	1 pc(s).	9681.688
800	1000	1 pc(s).	9681.680
800	1200	1 pc(s).	9681.682



+ **Accessories:**

- Pressure stoppers, see page 62
- Arc flash kit, class A, see page 63
- Arc flash kit, class B, see page 63

Roof plate IP 2X with ventilation hole

For enclosures without roof plate and in exchange for the standard roof.

Material:

- Sheet steel, 1.5 mm

Surface finish:

- Textured paint

Colour:

- RAL 7035

Protection category IP to IEC 60 529:

- IP 2X

Supply includes:

- Assembly parts

For width mm	For depth mm	Build height mm	Packs of	Model No.
400	600	72	1 pc(s).	9681.846
400	800	72	1 pc(s).	9681.848
600	600	72	1 pc(s).	9681.866
600	800	72	1 pc(s).	9681.868
800	600	72	1 pc(s).	9681.886
800	800	72	1 pc(s).	9681.888
1000	600	72	1 pc(s).	9681.806
1000	800	72	1 pc(s).	9681.808
1200	600	72	1 pc(s).	9681.826
1200	800	72	1 pc(s).	9681.828



Roof plate for cable entry glands

For enclosures without roof plate and in exchange for the standard roof.

Material:

- Sheet steel, 1.5 mm

Surface finish:

- Textured paint

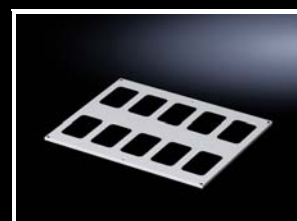
Colour:

- RAL 7035

Supply includes:

- Assembly parts

For width mm	For depth mm	Required no. of glands	Packs of	Model No.
400	600	3	1 pc(s).	9681.546
400	800	4	1 pc(s).	9681.548
600	400	2	1 pc(s).	9681.564
600	600	4	1 pc(s).	9681.566
600	800	8	1 pc(s).	9681.568
800	600	8	1 pc(s).	9681.586
800	800	8	1 pc(s).	9681.588
850	400	3	1 pc(s).	9681.594
850	600	6	1 pc(s).	9681.596
1100	400	4	1 pc(s).	9681.514
1100	600	8	1 pc(s).	9681.516

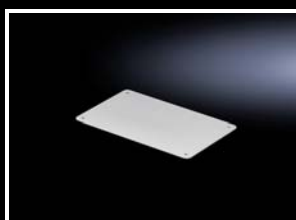
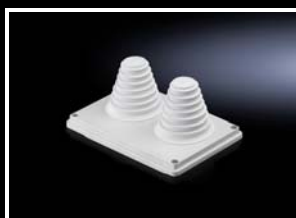
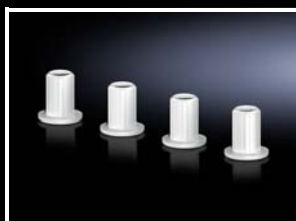


! **Also required:**

- Cable entry gland, see page 62

System accessories VX

Roof



Pressure stoppers

for roof plate

For converting the IP 55 roof plate into a roof plate with pressure relief function. The pressure relief function is essential for compliance with health and safety regulations for arc-proofing to IEC/TR 61 641. After fitting the pressure stopper, a protection category of IP 54 is achieved.

Material:

- Polyamide

Supply includes:

- 4 warning stickers

Note:

- 2 pressure stoppers and 1 warning sticker are required for one roof plate
- The arc-proofing compliance limits are dependent on the busbar system used

Packs of	Model No.
4 pc(s).	9674.790

Cable entry gland

for roof plate

For simple, secure cable entry in the roof zone.

Colour:

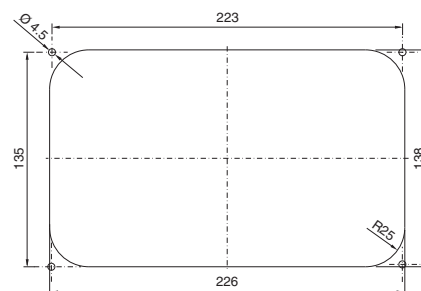
- RAL 7035

Protection category IP to IEC 60 529:

- IP 55

Supply includes:

- Seal



Cut-out dimensions for 9665.750 to 9665.785

Design	Material	Width mm	Depth mm	Packs of	Model No.
14 x M25/32	Insulating material	250	160	1 pc(s).	9665.750
2 x M25/32/40, 1 x M32/40/50, 2 x M40/50/63	Insulating material	250	160	1 pc(s).	9665.760
With sealing membranes 32 x Ø 7 – 16 mm, 4 x Ø 10 – 20 mm, 3 x Ø 14 – 26 mm	Insulating material	250	160	1 pc(s).	9665.770
With entry fittings up to Ø 66 mm	Insulating material	250	160	1 pc(s).	9665.780
Solid	Sheet steel, spray-finished	250	160	4 pc(s).	9665.785

Arc flash kit, class A

To achieve arc flash class A (human safety) to IEC/TR 61 641. Suitable for two enclosure panels.

Material:

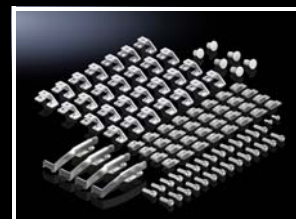
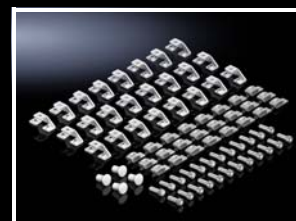
- Steel
- Plastic

Supply includes:

- 4 plugs for roof plate
- 4 warning stickers
- Certificate
- Assembly parts

Note:

- A pressure relief function for the roof plate is essential for compliance with health and safety regulations for accidental arcing protection to IEC/TR 61 641. The IP 55 roof plate may be converted by fitting the pressure stopper, which achieves a protection category of IP 54.
- 2 pressure stoppers and 1 warning sticker are required for one roof plate
- The arc-proofing compliance limits are dependent on the busbar system used
- The enclosure panel holders for the side and rear panel already attached to the enclosure section should be replaced with the enclosure panel holders from the accidental arcing kit



For enclosure width mm	For enclosure depth mm	Design	Product-specific scope of supply	Packs of	Model No.
600 800 1000 1200	600 800	For single-door VX	24 enclosure panel holders	1 pc(s).	9686.400
600 800 1000 1200	600 800	For two-door VX	28 enclosure panel holders 2 plugs for roof plate 4 reinforcements for door locking bar	1 pc(s).	9686.410

Arc flash kit, class B

To achieve arc flash class B (human safety and protection of equipment) to IEC/TR 61 641. Suitable for one enclosure panel.

Material:

- Steel
- Plastic
- Silicone

Supply includes:

- 2 metal covers
- 2 roof mounting brackets for sacrificial anodes
- Certificate
- Assembly parts

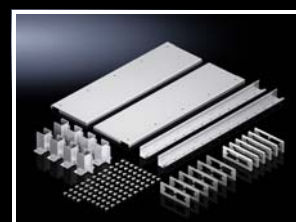
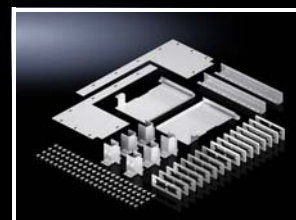
Note:

- To achieve arc flash class B in single-door enclosures, the accidental arcing kit 9640.400 is additionally required and for two-door enclosures, kit 9640.410.



Also required:

- Arc flash kit, class A, see page 63



For enclosure width mm	For enclosure depth mm	Design	Product-specific scope of supply	Packs of	Model No.
600 800 1000 1200	600 800	For busbar system assembly in the roof section	2 metal partitions 6 sacrificial anodes 8 seals 8 plastic covers	1 pc(s).	9686.420
600 800 1000 1200	600 800	For busbar system assembly in the rear section	8 sacrificial anodes 6 seals 6 plastic covers	1 pc(s).	9686.430

Busbar system

Flat-PLS



Busbar support

for distribution busbar system

For assembling vertical distribution busbar systems (2 x 30 x 10mm, 3-/4-pole, 70 mm centre-to-centre spacing) or busbar systems (30 x 5/10 mm, 3-/4-pole, 60 mm centre-to-centre spacing) with RiLine components in modular outgoing sections.

Material:

- Duroplastic
- Fire protection corresponding to UL 94

Colour:

- Similar to RAL 9005

Supply includes:

- Assembly parts

For busbar mm	Bar centre distance mm	Packs of	Model No.
30 x 5/10 30 x 10	60 70	2 pc(s).	9686.100



Also required:

- Busbars E-Cu, see page 91



Accessories:

- End cover, see page 66



Busbar support

for busbar entry (roof section)

For inserting 3- or 4-pole flat copper busbar systems into the roof section.

Material:

- Duroplastic
- Fire protection corresponding to UL 94

Colour:

- Similar to RAL 9005

Supply includes:

- Assembly parts



Also required:

- Busbars E-Cu, see page 91
- Cage nuts, see page 90



Assembly instruction:

- For the installation of max. 4 busbars (sub-conductors) per phase
- Cage nut (M8) 4165.500 is required to attach the busbar support to the enclosure section.



Accessories:

- End cover, see page 66



For busbar mm	Bar centre distance mm	Approvals	Packs of	Model No.
30 x 10	80	-	2 pc(s).	9686.010
50 x 10	80	UL	2 pc(s).	9686.040

Busbar system

Flat-PLS

Busbar support

for busbar baying (roof section)

For baying 3- or 4-pole flat copper busbar systems from enclosure to enclosure in the roof section.

Material:

- Duroplastic
- Fire protection corresponding to UL 94

Colour:

- Similar to RAL 9005

Supply includes:

- Assembly parts



Also required:

- Busbars E-Cu, see page 91
- Longitudinal connector E-Cu, see page 67
- Cage nuts, see page 90



Assembly instruction:

- For the installation of max. 4 busbars (sub-conductors) per phase
- Cage nut (M8) 4165.500 is required to attach the busbar support to the enclosure section



Accessories:

- End cover, see page 66



Possible alternative:

- Busbar E-Cu, slotted, see page 66

For busbar mm	Bar centre distance mm	Approvals	Packs of	Model No.
30 x 10	80	-	2 pc(s).	9686.000
50 x 10	80	UL	2 pc(s).	9686.030

Busbar support

for busbar entry (rear section)

For inserting 3-pole flat copper busbar systems into the rear section of the enclosure.

Material:

- Duroplastic
- Fire protection corresponding to UL 94

Colour:

- Similar to RAL 9005

Supply includes:

- Assembly parts



For busbar mm	Bar centre distance mm	Packs of	Model No.
50 x 10	185	2 pc(s).	9686.070

Also required:

- Busbars E-Cu, see page 91
- Cage nuts, see page 90



Assembly instruction:

- For the installation of max. 4 busbars (sub-conductors) per phase
- Cage nut (M8) 4165.500 is required to attach the busbar support to the enclosure section



Accessories:

- End cover, see page 66



Busbar system

Flat-PLS



Busbar support

for busbar baying (rear section)

For baying 3-pole flat copper busbar systems in the rear section from enclosure to enclosure.

Material:

- Duroplastic
- Fire protection corresponding to UL 94

Colour:

- Similar to RAL 9005

Supply includes:

- Assembly parts

For busbar mm	Bar centre distance mm	Packs of	Model No.
50 x 10	185	2 pc(s).	9686.060



Also required:

- Busbars E-Cu, see page 91
- Longitudinal connector E-Cu, see page 67
- Cage nuts, see page 90



Assembly instruction:

- For the installation of max. 4 busbars (sub-conductors) per phase
- Cage nut (M8) 4165.500 is required to attach the busbar support to the enclosure section



Accessories:

- End cover, see page 66



Possible alternative:

- Busbar E-Cu, slotted, see page 66



End cover

for busbar supports

For shock-hazard-protected covering of the busbar ends on the busbar holder.

Material:

- Polyamide
- Fire protection corresponding to UL 94

Colour:

- Similar to RAL 9005

Supply includes:

- Assembly parts

Width mm	Height mm	Packs of	Model No.
50	147	3 pc(s).	9686.080



Busbar E-Cu, slotted

Busbars with integral punchings.

Material:

- E-Cu F30

Standards:

- DIN EN 13 601



Accessories:

- Longitudinal connector E-Cu, see page 67

Dimensions mm	Length mm	Hole diameter mm	Approvals	Packs of	Model No.
50 x 10	385	11.5	-	1 pc(s).	9684.004
50 x 10	585	11.5	UL	1 pc(s).	9684.006
50 x 10	785	11.5	UL	1 pc(s).	9684.008
50 x 10	985	11.5	UL	1 pc(s).	9684.010
50 x 10	1185	11.5	UL	1 pc(s).	9684.012

Longitudinal connector E-Cu

for busbars

For connecting the main busbar system from enclosure to enclosure.

Material:

- E-Cu

Supply includes:

- Assembly parts



Design for main busbar 30 x 10 mm

Dimensions mm	Length mm	No. of sub-conductors per phase	Packs of	Model No.
35 x 10	195	1	1 pc(s).	9686.210
60 x 10	195	2 4	1 pc(s).	9686.200

Design for main busbar 50 x 10 mm

Dimensions mm	Length mm	No. of sub-conductors per phase	Approvals	Packs of	Model No.
55 x 10	195	1	UL	1 pc(s).	9686.260
100 x 10	195	2 4	UL	1 pc(s).	9686.250

Busbar system

Connection system Flat-PLS



Busbar claw

for flat copper busbars

For mechanical stabilisation of busbar stacks. Suitable for 10 mm bar thickness.

Material:

- Stainless steel



For no. of busbars	Mounting dimension mm	Packs of	Model No.
2	20	1 pc(s).	9676.017
4	20	1 pc(s).	9676.019



Also required:

- M10 screw, see page 70



Assembly instruction:

- The required screw length must be selected in line with the busbar width W, i.e. length = W + fastening measurement. Screws are not included with the supply.
- Busbar claw with threaded insert M10



Busbar claw

for connection components

For mechanical connection of connection components such as connection brackets. Suitable for 10 mm bar thickness.

Material:

- Stainless steel

For no. of busbars	Mounting dimension mm	Packs of	Model No.
2	40	8 pc(s).	9676.832



Also required:

- M10 screw, see page 70



Assembly instruction:

- The required screw length must be selected in line with the busbar width W, i.e. length = W + fastening measurement. Screws are not included with the supply.
- Busbar claw with threaded insert M10



Direct connection terminal

for round conductors

For connecting round conductors to a busbar distributor system made from flat copper. Suitable for 10 mm bar thickness.

Material:

- Connection clamp: Brass, tin-plated
- Busbar claw: Stainless steel

Supply includes:

- Assembly parts (excluding screws)

No. of sub-conductors per phase	Connection of round conductors mm ²	Mounting dimension mm	Packs of	Model No.
2	95 - 300	60	1 pc(s).	9676.730



Also required:

- M10 screw, see page 70



Assembly instruction:

- The required screw length must be selected in line with the busbar width W, i.e. length = W + fastening measurement. Screws are not included with the supply.
- Busbar claw with threaded insert M10

Busbar system

Connection system Flat-PLS

Connection plate

for laminated copper bars

For connecting laminated copper bars to a busbar distributor system made from flat copper. Suitable for 10 mm bar thickness.

Material:

- Connection plate: E-Cu
- Thrust piece: Stainless steel
- Busbar claw: Stainless steel

Supply includes:

- Assembly parts (excluding screws)

No. of sub-conductors per phase	Clamping area for laminated copper bars (W x H) mm	Mounting dimension mm	Packs of	Model No.
2	32 x 20	50	1 pc(s).	9676.747
2	63 x 20	50	1 pc(s).	9676.748
2	100 x 20	50	1 pc(s).	9676.749



Also required:

- M10 screw, see page 70



Assembly instruction:

- The required screw length must be selected in line with the busbar width W, i.e. length = W + fastening measurement. Screws are not included with the supply.
- Busbar claw with threaded insert M10



Accessories:

- Laminated copper bar, see page 91



Connection plate

for ring terminals

For connecting ring terminals to a busbar distributor system made from flat copper. Suitable for 10 mm bar thickness.

Material:

- Connection plate: E-Cu, nickel-plated
- Busbar claw: Stainless steel

Supply includes:

- Assembly parts (excluding screws)

Thread	No. of sub-conductors per phase	Mounting dimension mm	Product-specific scope of supply	Packs of	Model No.
M10	2	40	-	1 pc(s).	9676.710
M12	2	20	Grub screw	1 pc(s).	9676.700



Also required:

- M10 screw, see page 70



Assembly instruction:

- The required screw length must be selected in line with the busbar width W, i.e. length = W + fastening measurement. Screws are not included with the supply.
- Busbar claw with threaded insert M10



Busbar system

Connection system Flat-PLS



Connection set

for Flat-PLS

For attaching NH slimline fuse-switch disconnectors and NH slimline switch-disconnectors (185 mm) or for connecting busbars. Suitable for busbar system with flat copper 50 x 10 mm

Material:

- Sheet steel, zinc-plated

Note:

- Screws are not included with the supply

Thread	For no. of busbars	Packs of	Model No.
M8	2 4	3 pc(s).	9686.800
M10	2 4	3 pc(s).	9686.810

Assembly instruction:

- The connection set may only be used with top-mounting components with screw fastening
- NH slimline fuse-switch disconnectors:
The required screw length when using busbars is 2 x 50 x 10 mm = 35 mm and 4 x 50 x 10 mm = 55 mm
- NH slimline switch-disconnectors:
Only suitable for attaching to busbars 2 x 50 x 10 mm
- When using 4 busbars per phase, a filler piece is additionally required

Accessories:

- M10 screw, see page 70
- Filler piece, see page 70



Filler piece

for connection set

When using top-mounting components on a busbar system with 4 busbars per phase, a filler piece is additionally required between the bars.

Material:

- E-Cu

Dimensions mm	Length mm	Packs of	Model No.
25 x 10	110	3 pc(s).	9686.820



M10 screw

For attaching the busbar claw or connection components to a flat copper busbar system.

Material:

- Stainless steel

Screw design mm	Packs of	Model No.
M10 x 60	8 pc(s).	9676.806
M10 x 70	8 pc(s).	9676.807
M10 x 80	8 pc(s).	9676.808
M10 x 90	8 pc(s).	9676.809
M10 x 100	8 pc(s).	9676.810
M10 x 110	8 pc(s).	9676.811
M10 x 120	8 pc(s).	9676.812
M10 x 130	8 pc(s).	9676.813
M10 x 140	8 pc(s).	9676.814
M10 x 150	8 pc(s).	9676.815
M10 x 160	8 pc(s).	9676.816
M10 x 170	8 pc(s).	9676.817
M10 x 190	8 pc(s).	9676.819

Busbar system

Maxi-PLS

End support

for Maxi-PLS busbars

For attaching Maxi-PLS busbars when used as a cable connection system. The stepped configuration ensures simple cable installation.

Material:

- Polyamide
- Fire protection corresponding to UL 94

Colour:

- Similar to RAL 9011

Supply includes:

- Assembly parts

Approvals:

- UL

For system	Packs of	Model No.
Maxi-PLS 45 S Maxi-PLS 45	2 pc(s).	9649.010
Maxi-PLS 60	2 pc(s).	9659.010



Also required:

- Maxi-PLS busbar, E-Cu for Maxi-PLS 45 S system, see page 71
- Maxi-PLS busbar, E-Cu for Maxi-PLS 45 system, see page 71
- Maxi-PLS busbar, E-Cu for Maxi-PLS 60 system, see page 72



Maxi-PLS busbar E-Cu

for Maxi-PLS 45 S system

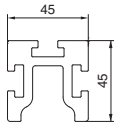
For assembling cable connection systems.

Material:

- E-Cu

Note:

- May be cut individually to required length



Maxi-PLS 45 S



Cross-section 974 mm²

For enclosure width mm	Length mm	Approvals	Packs of	Model No.
600	451	UL	1 pc(s).	9640.207
800	651	UL	1 pc(s).	9640.237
1000	851	UL	1 pc(s).	9640.267
1200	1051	UL	1 pc(s).	9640.297
-	2400	-	3 pc(s).	9640.365

Maxi-PLS busbar E-Cu

for Maxi-PLS 45 system

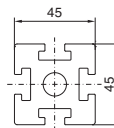
For assembling cable connection systems.

Material:

- E-Cu

Note:

- May be cut individually to required length



Maxi-PLS 4



Cross-section 1354 mm²

For enclosure width mm	Length mm	Approvals	Packs of	Model No.
600	451	UL	1 pc(s).	9640.202
800	651	UL	1 pc(s).	9640.232
1000	851	UL	1 pc(s).	9640.262
1200	1051	UL	1 pc(s).	9640.292
-	2400	-	3 pc(s).	9640.360
-	2400	-	4 pc(s).	9649.360

Busbar system

Maxi-PLS



Maxi-PLS busbar E-Cu

for Maxi-PLS 60 system

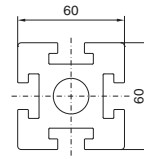
For assembling cable connection systems.

Material:

- E-Cu

Note:

- May be cut individually to required length



Maxi-PLS 60

Cross-section 2323 mm²

For enclosure width mm	Length mm	Approvals	Packs of	Model No.
600	451	UL	1 pc(s).	9650.202
800	651	UL	1 pc(s).	9650.232
1000	851	UL	1 pc(s).	9650.262
1200	1051	UL	1 pc(s).	9650.292
-	2400	-	3 pc(s).	9650.360
-	2400	-	4 pc(s).	9659.360



Busbar system

Connection system Maxi-PLS

Connection clamp

for round conductors

For the connection of round conductors.

Material:

- Connection clamp: Brass, tin-plated
- Terminal stud: Steel, zinc-plated
- Sliding block: Copper alloy

Supply includes:

- Connection clamp
- Terminal studs
- Sliding block
- Assembly parts

For system	Connection of round conductors mm ²	Packs of	Model No.
Maxi-PLS 45 S/45	95 - 300	1 pc(s).	9640.325
Maxi-PLS 60	95 - 300	1 pc(s).	9650.325



Connection plate

for laminated copper bars

For the connection of laminated flat copper bars.

Material:

- Connection plate: E-Cu, silver-plated
- Thrust piece: Stainless steel

Supply includes:

- Assembly parts

Approvals:

- UL

For system	Clamping area for laminated copper bars (W x H) mm	Packs of	Model No.
Maxi-PLS 45 S/45	32 x 20	3 pc(s).	9640.330
Maxi-PLS 45 S/45	63 x 20	3 pc(s).	9640.340
Maxi-PLS 45 S/45	100 x 20	3 pc(s).	9640.350
Maxi-PLS 60	32 x 20	3 pc(s).	9650.330
Maxi-PLS 60	63 x 20	3 pc(s).	9650.340



Accessories:

- Laminated copper bar, see page 91

Terminal studs

for Maxi-PLS

For connecting cables with ring terminals

Material:

- Terminal stud: Steel, zinc-plated
- Sliding block: Copper alloy

Supply includes:

- Terminal studs
- Sliding blocks
- Assembly parts

Approvals:

- UL

For system	Thread	Thread length mm	Packs of	Model No.
Maxi-PLS 45 S/45	M12	30	3 pc(s).	9640.370
Maxi-PLS 45 S/45	M16	30	3 pc(s).	9640.380
Maxi-PLS 60	M12	32	3 pc(s).	9650.370
Maxi-PLS 60	M16	32	3 pc(s).	9650.380



Sliding block

for Maxi-PLS busbars

For attaching flat copper bars and connection components to Maxi-PLS busbars. For sliding into the busbar section at the side and tightening the threaded bolts.

Material:

- Copper alloy

Approvals:

- UL

For system	Length mm	Thread	Packs of	Model No.
Maxi-PLS 45 S/45	20	M8	15 pc(s).	9640.970
Maxi-PLS 45 S/45	25	M10	15 pc(s).	9640.980
Maxi-PLS 60	25	M10	15 pc(s).	9650.980
Maxi-PLS 60	35	M12	15 pc(s).	9650.990



Also required:

- Threaded bolts, see page 74



Busbar system

Connection system Maxi-PLS



Sliding nut

for Maxi-PLS busbars

For attaching flat copper bars and connection components to Maxi-PLS busbars. For sliding into the busbar section retrospectively and tightening the threaded bolts.

Material:

- E-Cu



Also required:

- Threaded bolts, see page 74

For system	Thread	Approvals	Packs of	Model No.
Maxi-PLS 45 S/45	M6	UL	15 pc(s).	9640.900
Maxi-PLS 45 S/45	M8	UL	15 pc(s).	9640.910
Maxi-PLS 45 S/45	M10	UL	15 pc(s).	9640.920
Maxi-PLS 60	M6	UL	15 pc(s).	9650.900
Maxi-PLS 60	M8	-	3 pc(s).	9650.905
Maxi-PLS 60	M10	UL	15 pc(s).	9650.910
Maxi-PLS 60	M12	UL	15 pc(s).	9650.920



Threaded bolts

for sliding blocks and sliding nuts

For individual connection options

Material:

- Steel

Supply includes:

- Assembly parts

Approvals:

- UL



Also required:

- Sliding block, see page 73
- Sliding nut, see page 74

For system	Thread	Thread length mm	Packs of	Model No.
Maxi-PLS 45 S/45 Maxi-PLS 60	M6	35	6 pc(s).	9640.930
Maxi-PLS 45 S/45 Maxi-PLS 60	M8	35	6 pc(s).	9640.940
Maxi-PLS 45 S/45 Maxi-PLS 60	M10	35	8 pc(s).	9676.971
Maxi-PLS 45 S/45 Maxi-PLS 60	M10	45	8 pc(s).	9676.972
Maxi-PLS 45 S/45 Maxi-PLS 60	M10	55	8 pc(s).	9676.973
Maxi-PLS 45 S/45 Maxi-PLS 60	M10	70	8 pc(s).	9676.976
Maxi-PLS 45 S/45 Maxi-PLS 60	M10	80	8 pc(s).	9676.977
Maxi-PLS 60	M12	40	8 pc(s).	9676.981
Maxi-PLS 60	M12	50	8 pc(s).	9676.982
Maxi-PLS 60	M12	60	8 pc(s).	9676.983
Maxi-PLS 60	M12	70	8 pc(s).	9676.986
Maxi-PLS 60	M12	80	8 pc(s).	9676.987



Compact infeed

for Maxi-PLS

For individual use as a 3-pole cable connection bar system. Direct mounting on the mounting plate or punched section without mounting flange.

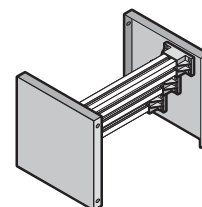
Material:

- End support: Polyamide
- Retaining plate: Sheet steel, zinc-plated
- Punched rail: Sheet steel, zinc-plated

Supply includes:

- 6 end supports
- 2 support plates for end supports
- 1 punched rail 23 x 23 mm (length 495 mm)
- Assembly parts

For system	Packs of	Model No.
Maxi-PLS 45 S/45	1 pc(s).	9660.980



Busbar system

Accessories for connection components

Screw

for connection components

For connecting components such as connection brackets and connection kits.

Material:

– Steel, zinc-plated

Supply includes:

– 8 nuts and 16 washers.

Screw design mm	Packs of	Model No.
M10 x 40	8 pc(s).	9676.966
M10 x 45	8 pc(s).	9686.845
M10 x 55	8 pc(s).	9686.865
M10 x 60	8 pc(s).	9676.967
M10 x 80	8 pc(s).	9676.968



Support set (stabiliser)

for connector kit

To support connector kits, top or bottom, for air circuit-breakers (ACB).

Material:

– Stabiliser: Fibreglass-reinforced polyester
– Angle bracket: Sheet steel

Supply includes:

– 4 plastic stabilisers
(length per stabiliser 1100 mm)
– 2 angle brackets
– Assembly parts

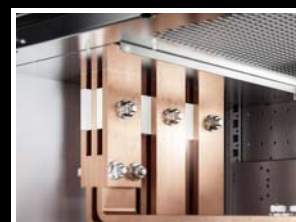
Approvals:

– UL

Note:

– The angle brackets included with the supply are only suitable for use in TS enclosures
– When using the support set in VX enclosures, angle bracket 9686.495 is additionally required

Packs of	Model No.
1 pc(s).	9660.205



Angle bracket

for support set (stabiliser)

For positioning and securing the holder set (stabiliser) to the enclosure section.

Material:

– Sheet steel, zinc-plated

Supply includes:

– Assembly parts

Note:

– An angle bracket consists of one bracket to be fastened to the enclosure section or the compartment side panel, and one bracket for mounting plastic stabilisers

Packs of	Model No.
4 pc(s).	9686.495



Busbar system

Connection components

Connection components for air circuit-breakers and busbar connections

For connecting air circuit-breakers (ACB) or for connecting horizontal and vertical busbar systems (T-connectors).

Material:

- E-Cu

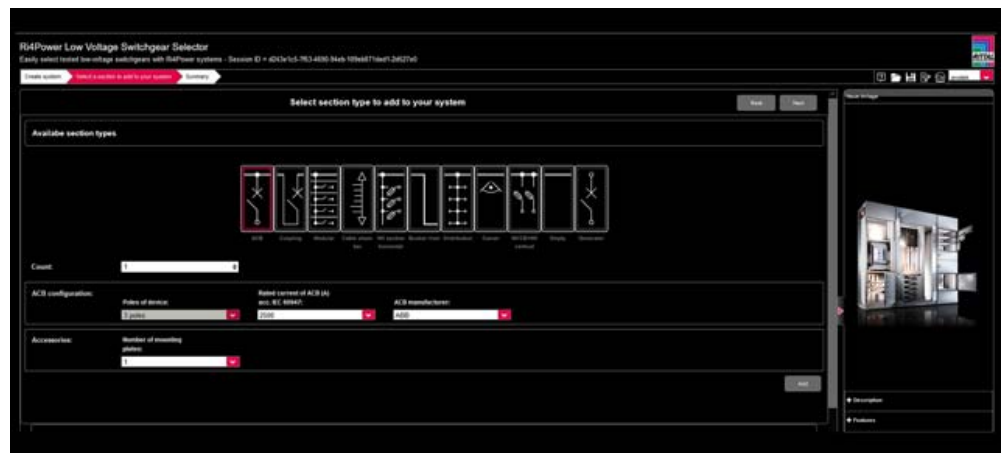
Note:

- The design code required for the configuration code is generated by the VX25 Rittal Power Engineering software (www.rittal.com/rpevx25/)
- Please quote the complete configuration code on all enquiries and orders (see example)

Configuration code = order number + design code	Description	Section types
Model No. 9686.912 + design code	Connector kit for top/bottom	Air circuit-breakers (ACB), coupling section, cable transition section
Model No. 9686.924 + design code	T-connector kit for top/bottom	Modular outgoing feeder section, fuse-switch disconnecter section horizontal/vertical, multi-terminal busbar section, riser section, corner section

Example of creating the configuration code

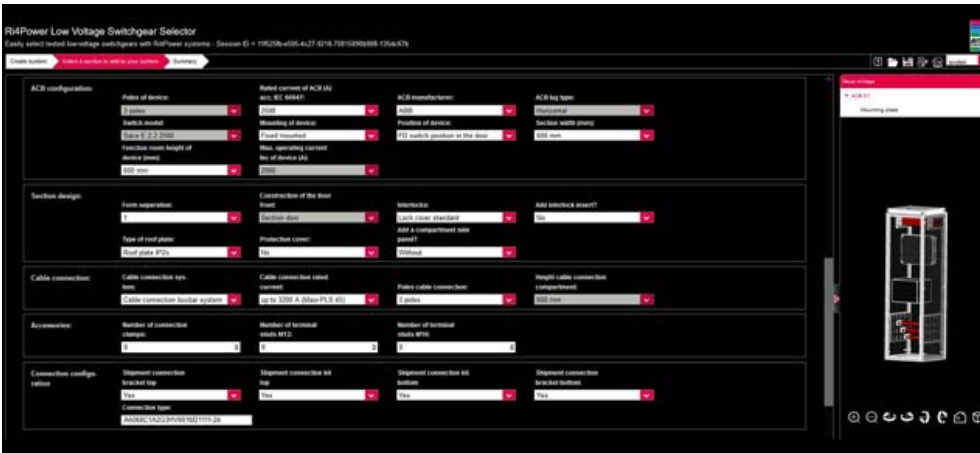
1. Select section type "air circuit-breaker"



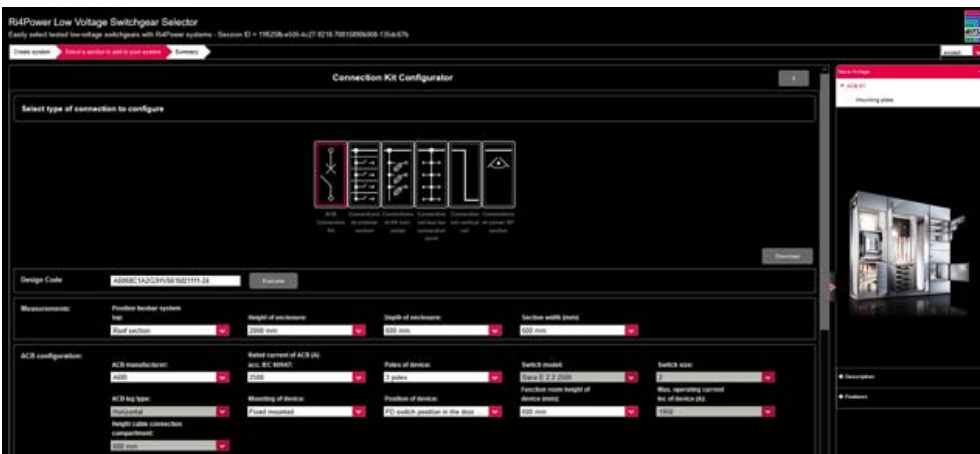
Busbar system

Connection components

2. Select switch and manufacturer and enter other technical parameters, such as busbar position, number of poles, rated current etc.

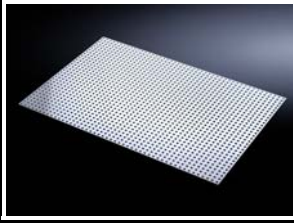


3. The connector kit data is output using the "Determine prices and weights" function. Design code and associated drawings (.dwg, .pdf) are available via the "Download" function. The configuration code for the enquiry or order will then look like this:
Air circuit-breaker (ACB) Model No. 9686.912 + A6068C1A2G3HV661M21111-24



Cover systems

Form 1



Cover plate

Slotted

To cover live parts and comply with the internal protection category IP 2X and IP XXB within low-voltage switchgear and controlgear. Integral vent holes allow convection inside a system.

Material:

- PVC

Width mm	Height mm	Packs of	Model No.
1200	800	1 pc(s).	9674.990

Accessories:

- Mounting bracket, see page 78



Mounting bracket

for contact hazard protection cover

For the attachment of contact hazard protection covers. Tapped hole M6. The mounting bracket is fitted to the enclosure frame.

Material:

- Sheet steel

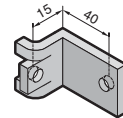
Surface finish:

- Zinc-plated

Supply includes:

- Assembly screws

Packs of	Model No.
24 pc(s).	9660.090



Contact hazard protection cover

for enclosures with NH slimline fuse-switch disconnectors

To cover outgoing sections with NH slimline fuse-switch disconnectors and busbar system in the rear enclosure section so that they are safe from finger contact (IP 2X).

Material:

- Sheet steel, 1.5 mm

Surface finish:

- Zinc-plated

Supply includes:

- 2 side panels (left/right side)
- 2 side panels (top/bottom)
- Assembly parts

Note:

- The specified installation width when using the contact hazard protection cover only applies when using busbar support 9686.060/9686.070

For enclosure width mm	Free installation width when using Flat-PLS mm	Packs of	Model No.
600	400	1 pc(s).	9684.960
800	600	1 pc(s).	9684.980
1000	800	1 pc(s).	9684.900
1200	1000	1 pc(s).	9684.920



Accessories:

- Blanking cover, see page 79



Blanking cover

for contact hazard protection cover

To cover free NH slimline fuse-switch disconnector slots.

Material:

- Sheet steel, 1.5 mm

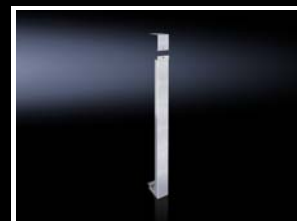
Surface finish:

- Zinc-plated

Supply includes:

- 2 covers
- 2 cover brackets
- Assembly parts

Width mm	Packs of	Model No.
50	2 pc(s).	9684.990



Cover

for form separation in the roof section

To achieve form separation for main busbar systems in the roof section with compartment dividers without compartment side panels.

Material:

- Sheet steel

Supply includes:

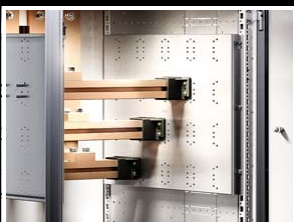
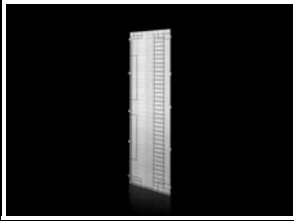
- Assembly parts

For enclosure depth mm	Packs of	Model No.
600/800	2 pc(s).	9683.720



Compartment configuration

Form 1-4



Compartment side panel

Side divider panel for attaching partial mounting plates and compartment dividers.

Material:

- Sheet steel, 1.5 mm

Surface finish:

- Zinc-plated

Supply includes:

- Assembly parts

For busbar system assembly in the rear section

For enclosure height mm	For enclosure depth mm	Height mm	Depth mm	Packs of	Model No.
2000	600	1881	538	2 pc(s).	9683.006
2000	800	1881	738	2 pc(s).	9683.008

For busbar system assembly in the roof section

For enclosure height mm	For enclosure depth mm	Height mm	Depth mm	Packs of	Model No.
2000	600	1731	538	2 pc(s).	9683.016
2000	800	1731	738	2 pc(s).	9683.018
2200	600	1931	538	2 pc(s).	9683.036
2200	800	1931	738	2 pc(s).	9683.038

+ Accessories:

- Plastic gland plate, see page 80
- Compartment divider, see page 81
- Partial mounting plate, see page 83
- Cross member cutter, see page 92

Plastic gland plate

for compartment side panel
For closing cable entry openings.

Material:

- PVC, 3 mm

Colour:

- Similar to RAL 7045

Supply includes:

- Assembly parts

Width mm	Height mm	Packs of	Model No.
152	48	10 pc(s).	9683.040

Retaining plate

for cable connection space
For mounting Maxi-PLS busbars including end supports in the cable connection area.

Material:

- Sheet steel, 1.5 mm

Surface finish:

- Zinc-plated

Supply includes:

- Assembly parts

Approvals:

- UL

For enclosure depth mm	Height mm	Depth mm	Packs of	Model No.
600	375	543	2 pc(s).	9683.200
800	375	743	2 pc(s).	9683.210

! Also required:

- End support, see page 71

Compartment configuration

Form 1-4

Compartment divider

For the horizontal separation of compartments. In combination with the side panels, this creates Form separation to Form 1 to 4. For attachment to the compartment side panel or the enclosure section. The integral cut-outs with pre-punched knock-out option are used for the vertical routing of control lines or cable ducts and for the routing of distribution busbars or connection kits.

Design:

- With louvres

Material:

- Sheet steel, 1.5 mm

Surface finish:

- Zinc-plated

Supply includes:

- Assembly parts



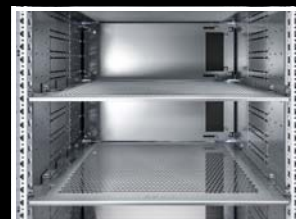
Assembly instruction:

- For assembling compartments as internal Form separation, compartment side panels are required



Accessories:

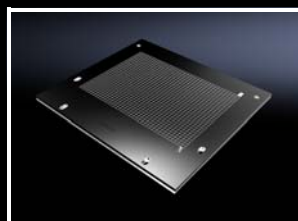
- Plastic gland plate, see page 82
- Compartment side panel, see page 80
- Cross member cutter, see page 92



For enclosure width mm	For enclosure depth mm	Width mm	Depth mm	Packs of	Model No.
400	400	311	380	2 pc(s).	9683.444
400	600	311	580	2 pc(s).	9683.446
400	800	311	780	2 pc(s).	9683.448
600	400	511	380	2 pc(s).	9683.464
600	600	511	580	2 pc(s).	9683.466
600	800	511	780	2 pc(s).	9683.468
800	400	711	380	2 pc(s).	9683.484
800	600	711	580	2 pc(s).	9683.486
800	800	711	780	2 pc(s).	9683.488
1000	600	911	580	2 pc(s).	9683.406
1000	800	911	780	2 pc(s).	9683.408
1200	600	1111	580	2 pc(s).	9683.426
1200	800	1111	780	2 pc(s).	9683.428

Compartment configuration

Form 1-4



Plastic gland plate

for compartment divider

To cover the compartment divider with gland.

Material:

- ABS

Colour:

- Similar to RAL 9005

Supply includes:

- Assembly parts

Width mm	Height mm	Packs of	Model No.
250	251	2 pc(s).	9683.504
450	251	2 pc(s).	9683.506
650	251	2 pc(s).	9683.508
850	251	2 pc(s).	9683.500



Air circuit-breaker support bar

For the configuration of air circuit-breakers (ACB) in compartments.

Material:

- Sheet steel, 2.5 mm

Surface finish:

- Zinc-plated

Supply includes:

- Assembly parts

For enclosure width mm	Length mm	Packs of	Model No.
400	296	2 pc(s).	9683.304
600	496	2 pc(s).	9683.306
800	696	2 pc(s).	9683.308
1000	896	2 pc(s).	9683.310
1200	1096	2 pc(s).	9683.312



Also required:

- Mounting bracket, see page 82



Mounting bracket

for air circuit-breaker support rail

For attaching the air circuit-breaker support rail to the enclosure section or compartment side panel.

Material:

- Sheet steel, 2.5 mm

Surface finish:

- Zinc-plated

Supply includes:

- Assembly parts

For enclosure depth mm	Packs of	Model No.
600	2 pc(s).	9683.326
800	2 pc(s).	9683.328

Compartment configuration

Form 1-4

Partial mounting plate

for compartment side panel

For direct attachment to the compartment side panel for internal compartmentalisation. Universal interior installation with switchgear and controlgear. Creation of additional mounting levels. In combination with compartment dividers and side panel, internal compartmentalisation in accordance with Form 1 to 4 is possible.

Material:

- Sheet steel, 2 mm

Surface finish:

- Zinc-plated

Supply includes:

- Angle brackets and assembly parts

Solid design

For enclosure width mm	For compartment height mm	Width mm	Height mm	Packs of	Model No.
400	200	302	193	1 pc(s).	9683.642
400	300	302	293	1 pc(s).	9683.643
400	400	302	393	1 pc(s).	9683.644
400	600	302	593	1 pc(s).	9683.646
400	800	302	793	1 pc(s).	9683.648
600	1000	502	993	1 pc(s).	9683.660
600	150	502	143	1 pc(s).	9683.661
600	200	502	193	1 pc(s).	9683.662
600	300	502	293	1 pc(s).	9683.663
600	400	502	393	1 pc(s).	9683.664
600	600	502	593	1 pc(s).	9683.666
600	800	502	793	1 pc(s).	9683.668
800	1000	702	993	1 pc(s).	9683.680
800	150	702	143	1 pc(s).	9683.681
800	200	702	193	1 pc(s).	9683.682
800	300	702	293	1 pc(s).	9683.683
800	400	702	393	1 pc(s).	9683.684
800	600	702	593	1 pc(s).	9683.686
800	800	702	793	1 pc(s).	9683.688
1000	400	902	393	1 pc(s).	9683.604
1000	600	902	593	1 pc(s).	9683.606
1000	800	902	793	1 pc(s).	9683.608
1200	400	1102	393	1 pc(s).	9683.624
1200	600	1102	593	1 pc(s).	9683.626
1200	800	1102	793	1 pc(s).	9683.628

Design with gland made from insulating material

For enclosure width mm	For compartment height mm	Width mm	Height mm	Packs of	Model No.
600	150	502	143	1 pc(s).	9683.561
600	200	502	193	1 pc(s).	9683.562
600	300	502	293	1 pc(s).	9683.563
600	400	502	393	1 pc(s).	9683.564



Compartment configuration

Form 1-4



Support frame

for DIN rail-mounted devices

Support frame set for accepting DIN rail-mounted devices (e.g. MCBs). The support rails are fastened with two mounting brackets to the compartment side panel. The cover is fastened to the support frame with knurled screws. In combination with compartment dividers, partial mounting plates and side panel modules, internal compartmentalisation in accordance with Form 2, 3 or 4 is possible.

Material:

- Support frame: Sheet steel, zinc-plated, passivated, 1.5 mm
- Cover: Sheet steel, spray finished, 1.5 mm

Supply includes:

- Support rails
- 2 mounting brackets
- 1 cover with cut-out
- Assembly parts

For enclosure width mm	For compartment height mm	Number of pitch units 17.5 mm	Packs of	Model No.
600	300	2 x 24	1 pc(s).	9683.763
800	300	2 x 36	1 pc(s).	9683.783

Fuse-switch disconnecter section

Busbar support

for fuse-switch disconnecter section

Busbar support for the distribution busbar system of the fuse-switch disconnecter section.

Material:

- Duroplastic polyester

Supply includes:

- Mounting bracket and screws

For busbars mm	Number of poles	Packs of	Model No.
60 x 10	3-pole 4-pole	1 pc(s).	9674.416
80 x 10	3-pole 4-pole	1 pc(s).	9674.418
100 x 10	3-pole 4-pole	1 pc(s).	9674.410



Also required:

- Busbars E-Cu, see page 91
- End support, see page 85



End support

for fuse-switch disconnecter section

End support for the distribution busbar system of the fuse-switch disconnecter section, for vertical support of the distribution busbar system with infeed from above.

Material:

- Duroplastic polyester

Supply includes:

- Mounting bracket and screws

For busbars mm	Number of poles	Packs of	Model No.
60 x 10	3-pole 4-pole	1 pc(s).	9674.436
80 x 10	3-pole 4-pole	1 pc(s).	9674.438
100 x 10	3-pole 4-pole	1 pc(s).	9674.430



Also required:

- Busbars E-Cu, see page 91



Cover

Set for distribution busbar (Jean Müller fuse-switch disconnecter section)

To cover the distribution busbar system of a fuse-switch disconnecter section, designed to accommodate Jean Müller devices. The 150 mm high busbar and cable connection space covers shield the busbar compartment from the functional space so that it is safe from finger contact, with a protection category of IP 20.

Material:

- PVC, black

Supply includes:

- Set consisting of 12 busbar covers and cable connection space covers

For enclosure height mm	Packs of	Model No.
2000 2200	1 pc(s).	9674.380



Also required:

- Punched rail, see page 86



Fuse-switch disconnecter section



Punched rail

Set for cover of distribution busbar (Jean Müller fuse-switch disconnecter section)

Required for mounting the distribution busbar cover.

Material:

- Sheet steel, zinc-plated

Supply includes:

- Set consisting of 2 punched rails
- Assembly parts

Note:

- For 1 fuse-switch disconnecter section, 1 pack of punched rails is required.

For enclosure height mm	Packs of	Model No.
2000 2200	1 pc(s).	9674.381

Cover

for distribution busbar (ABB/Siemens fuse-switch disconnecter section)

To cover the distribution busbar system of a fuse-switch disconnecter section, designed to accommodate ABB (SlimLine) or Siemens (3NJ62) devices. The 200 mm high busbar compartment covers shield the busbar compartment from the functional space so that it is safe from finger contact, with a protection category of IP 20.

Material:

- PVC, black

Note:

- The cover may be ordered from ABB under model number NHP 407062R000X
- For enclosure height 2000 mm, a height of 1500 mm should be covered, and for enclosure height 2200 mm, a height of 1700 mm should be covered

Busbar support

N conductor

For assembling 1-pole neutral or PEN conductors. The busbar holder is mounted onto the enclosure section.

Material:

- Polyamide
- Fire protection corresponding to UL 94

Colour:

- Similar to RAL 9005

Supply includes:

- Assembly parts

For busbar mm	Packs of	Model No.
50 x 10	2 pc(s).	9686.300



Also required:

- Busbars E-Cu, see page 91



Assembly instruction:

- For the installation of max. 4 busbars (sub-conductors) per phase



Accessories:

- Longitudinal connector E-Cu, see page 67



PE/PEN busbar E-Cu

With integral punchings.

Material:

- E-Cu

Standards:

- DIN EN 13601



Accessories:

- PE/PEN angle bracket, see page 88
- PE/PEN baying bracket E-Cu, see page 88



Dimension 30 x 5 mm

For enclosure width mm	Length mm	Hole Ø mm	Approvals	Packs of	Model No.
400	300	11.5	-	2 pc(s).	9686.524
600	500	11.5	UL	2 pc(s).	9686.526
800	700	11.5	UL	2 pc(s).	9686.528
1000	900	11.5	UL	2 pc(s).	9686.520
1200	1100	11.5	UL	2 pc(s).	9686.522

Dimension 30 x 10 mm

For enclosure width mm	Length mm	Hole Ø mm	Approvals	Packs of	Model No.
400	300	11.5	-	2 pc(s).	9686.534
600	500	11.5	UL	2 pc(s).	9686.536
800	700	11.5	UL	2 pc(s).	9686.538
1000	900	11.5	UL	2 pc(s).	9686.530
1200	1100	11.5	UL	2 pc(s).	9686.532

Dimension 40 x 10 mm

For enclosure width mm	Length mm	Hole Ø mm	Approvals	Packs of	Model No.
400	300	11.5	-	2 pc(s).	9686.544
600	500	11.5	UL	2 pc(s).	9686.546
800	700	11.5	UL	2 pc(s).	9686.548
1000	900	11.5	UL	2 pc(s).	9686.540
1200	1100	11.5	UL	2 pc(s).	9686.542

Dimension 80 x 10 mm

For enclosure width mm	Length mm	Hole Ø mm	Approvals	Packs of	Model No.
400	300	11.5	-	2 pc(s).	9686.584
600	500	11.5	UL	2 pc(s).	9686.586
800	700	11.5	UL	2 pc(s).	9686.588
1000	900	11.5	UL	2 pc(s).	9686.580
1200	1100	11.5	UL	2 pc(s).	9686.582



Interior installation

Earthing



PE/PEN angle bracket

For attaching the PE/PEN busbar to the enclosure section.

Material:

- Sheet steel, 3.0 mm

Supply includes:

- Assembly parts

For busbar mm	Packs of	Model No.
30 x 5 30 x 10 40 x 10 80 x 10	2 pc(s).	9686.350



PE/PEN baying bracket E-Cu

For connecting the busbars from enclosure to enclosure.

Material:

- E-Cu

Approvals:

- UL

Standards:

- DIN EN 13601

Dimensions mm	Length mm	Packs of	Model No.
30 x 5	180	2 pc(s).	9686.529
30 x 10	180	2 pc(s).	9686.539
40 x 10	180	2 pc(s).	9686.549
80 x 10	180	2 pc(s).	9686.589



Interior installation

Rail systems/assembly components

Punched section without mounting flange, 23 x 64 mm

For variable, individual interior installation of the enclosure frame on the inner mounting level.

Benefits:

- Easily attached to the enclosure section, even with the mounting panel in the rearmost position
- With slots at the top and bottom for cage nuts, for attaching your own components via metric screws
- System punchings on all four sides

Installation options:

- On the inner mounting level, on the enclosure section
- Upright or flat between two punched sections on the inner mounting level
- Between two punched sections on the inner mounting level

Material:

- Sheet steel

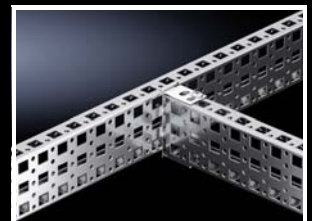
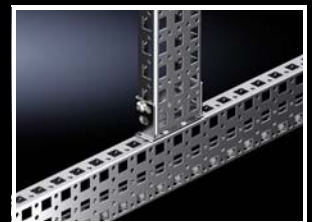
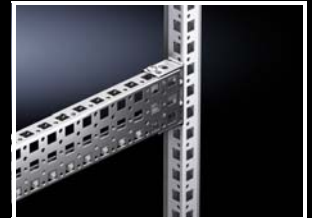
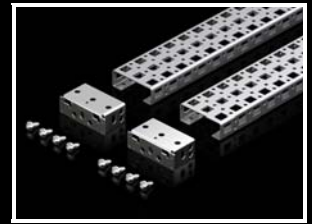
Surface finish:

- Zinc-plated

Supply includes:

- 2 punched sections without mounting flanges
- 4 mounting brackets
- Assembly parts

For enclosure width/height/depth mm	Packs of	Model No.
400	2 pc(s).	8100.740
600	2 pc(s).	8100.742
800	2 pc(s).	8100.743



Punched section with mounting flange, 23 x 64 mm

For variable, individual interior installation of the enclosure frame on the inner mounting level.

Benefits:

- Simply locate into the system punchings and screw-fasten
- System punchings on all four sides
- With slots at the top and bottom for cage nuts, for attaching your own components via metric screws

Installation options:

- On the inner mounting level, on the enclosure section
- In the base/plinth system VX, in the width and depth, combined with a base/plinth installation bracket
- On identical punched sections with mounting flanges

Material:

- Sheet steel

Surface finish:

- Zinc-plated

Supply includes:

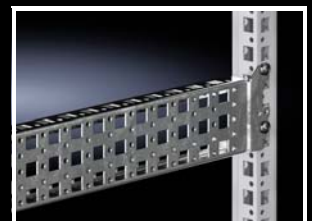
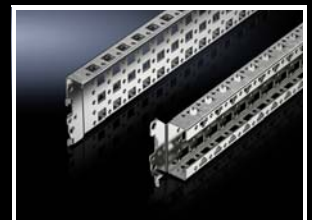
- Assembly parts

For enclosure width/height/depth mm	Packs of	Model No.
600	4 pc(s).	8617.130
800	4 pc(s).	8617.140
2000	4 pc(s).	8617.200



Accessories:

- Cage nuts, see page 90



Interior installation

Rail systems/assembly components/wiring system



Cage nut

For all-round metric mounting on the enclosure section.

Benefits:

- For all-round mounting on the enclosure section
- The compression spring, designed as an insertion aid, ensures reliable mechanical and electrical connection in the system punchings
- Simply slides in from the side
- Safely and easily released with a screwdriver

Installation options:

- On the horizontal and vertical VX enclosure section
- On punched sections with mounting flanges, 23 x 64 mm
- On punched sections with mounting flanges, 23 x 89 mm, stainless steel

Thread	Packs of	Model No.
M8	20 pc(s).	4165.500



Copper spacer roll

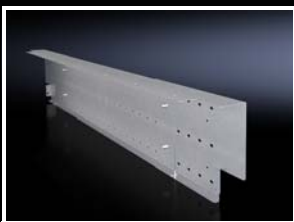
for Maxi-PLS busbars and flat copper bars

For use as a universal spacer.

Material:

- E-Cu

Height mm	Diameter mm	Hole Ø mm	Packs of	Model No.
20	30	13	4 pc(s).	9676.503
20	40	13	4 pc(s).	9676.504
20	50	13	4 pc(s).	9676.505



Wiring trim panel

Inner front cover of the main busbar system with the option of mounting a 40 x 20 mm (W x D) wiring channel. Suitable for use in Ri4Power switchgear with 300 mm high front trim panels. Horizontal cable routing behind the front trim panels. Also supports the installation of support rails with DIN rail mounted devices.

Material:

- Sheet steel

Surface finish:

- Zinc-plated

Supply includes:

- 1 wiring trim panel, 3-part
- Assembly parts

Note:

- For vertical cable routing, compartment dividers enable the installation of a wiring channel, thanks to pre-punched cut-outs

For enclosure width mm	Packs of	Model No.
600 800	1 pc(s).	9683.736
1000 1200	1 pc(s).	9683.738

Busbars

Busbars and laminated copper bars

E-Cu busbars

To DIN EN 13 601

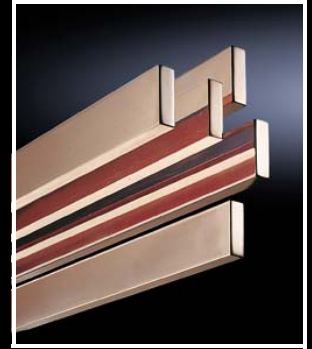
Length: 2400 mm/bar

Material:

– E-Cu F30

Dimensions mm	Length mm	Approvals	Packs of	Model No.
30 x 5	2400	UL	6 pc(s).	3584.000
30 x 10	2400	UL	3 pc(s).	3586.005
50 x 10	2400	–	2 pc(s).	3588.005
50 x 10	385	–	1 pc(s).	9684.004¹⁾
50 x 10	585	UL	1 pc(s).	9684.006¹⁾
50 x 10	785	UL	1 pc(s).	9684.008¹⁾
50 x 10	985	UL	1 pc(s).	9684.010¹⁾
50 x 10	1185	UL	1 pc(s).	9684.012¹⁾
60 x 10	2400	–	1 pc(s).	3589.005
80 x 10	2400	–	1 pc(s).	3590.005
100 x 10	2400	–	1 pc(s).	3590.015

¹⁾ With integral holes



Laminated copper bars

Length: 2000 mm/bar

Material:

Cu membranes

– High-purity electrolyte copper F20

Insulation

- High-strength vinyl compound
- Expansion 370%
- Temperature range: -30 °C...+105 °C
- Fire protection corresponding to UL 94
- Dielectric strength: 20 kV/mm

Configuration ¹⁾ mm	I _n at 70 K ²⁾ A	I _n at 50 K ²⁾ A	I _n at 30 K ²⁾ A	Packs of	Model No.
6 x 9 x 0.8	285	240	180	1 pc(s).	3565.005
6 x 15.5 x 0.8	415	350	265	1 pc(s).	3568.005
10 x 15.5 x 0.8	575	480	365	1 pc(s).	3569.005
5 x 20 x 1	525	435	330	1 pc(s).	3570.005
5 x 24 x 1	605	510	385	1 pc(s).	3571.005
10 x 24 x 1	920	770	585	1 pc(s).	3572.005
5 x 32 x 1	770	645	485	1 pc(s).	3573.005
10 x 32 x 1	1155	965	730	1 pc(s).	3574.005
5 x 40 x 1	930	780	590	1 pc(s).	3575.005
10 x 40 x 1	1370	1145	865	1 pc(s).	3576.005
5 x 50 x 1	1125	940	710	1 pc(s).	3577.005
10 x 50 x 1	1635	1365	1030	1 pc(s).	3578.005
10 x 63 x 1	1950	1610	1230	1 pc(s).	3579.005

¹⁾ Number of membranes x membrane width x membrane thickness

²⁾ The conductor temperature of the laminated flat copper bar is derived by adding the ambient temperature and the temperature increase together

Example:

3565.005 carrying 180 A, i.e. the temperature increases by 30 K. At an ambient temperature of 35 °C, this produces a resultant conductor temperature of 35 °C + 30 K = 65 °C



Cutting tool



Cross member cutter

For cutting through micro webs or sheet steel cross members on Ri4Power interior installation components (for example, compartment dividers) or for cutting thin sheets of sheet steel, aluminium or copper up to 1.2 mm thick.

Benefits:

- Cutting of materials without deformation
- Clean edge cuts, no reworking of the cut section required
- Easy to use
- Ergonomically styled handles for fatigue-free, non-slip working

Material:

- Tool body: Special tool steel, rolled, oil-hardened

Supply includes:

- Cross member cutter including swarf deflector

To fit Model No.	Length mm	Design	Packs of	Model No.
9680.005				
9680.025				
9680.207				
9680.227				
9683.006				
9683.008				
9683.016				
9683.018				
9683.036				
9683.038				
9683.406				
9683.408	280	Straight	1 pc(s).	4054.870
9683.426				
9683.428				
9683.444				
9683.446				
9683.448				
9683.464				
9683.466				
9683.468				
9683.484				
9683.486				
9683.488				

Connection adaptors



Busbar system Page 65/66 **Component adaptors** Page 94 **NH slimline switch-disconnectors** Page 95

Material:

- Chassis: Fibreglass-reinforced polyester
- Fire protection corresponding to UL 94

Colour:

- RAL 7035

Rated current max. 800 – 1400 A

Rated current max. A	Packs of	800	1400	Page
Rated operating voltage V, ~		690, 3~	690, 3~	
Number of poles		3-pole	3-pole	
Cable outlet		Top/bottom	Top/bottom	
Connection type		Screw M12	Screw M12	
Connection of round conductors mm ²		6 - 240	6 - 300	
Width mm		100	100	
Height mm		665	960	
For bar systems with centre-to-centre spacing mm		185	185	
For bar thickness mm		10	10	
Model No.	1 pc(s).	9677.900	9677.905	
Product-specific scope of supply				
Contact hazard protection cover		–	■	
Accessories				
Current converter		see page	–	103

Component adaptor



Busbar system Page 65/66 **Connection adaptors** Page 93 **NH slimline switch-disconnectors** Page 95

Material:

- Polyamide
- Fire protection corresponding to UL 94

Colour:

- RAL 7035

Note:

- Cable outlet: Switch outlet or as outgoing cable from the switchgear
- Suitable for the use of switchgear with front screw terminal
- For attaching to busbars with holes. Please ensure that there is no cover section installed in the vicinity of the device.

Rated current max. 630 – 1600 A, clamping attachment

Rated current max. A	Packs of	630	1000	1600	Page
Rated operating voltage V, ~		690, 3~	690, 3~	690, 3~	
Number of poles		3-pole	3-pole	3-pole	
Installation type		Screw attachment	Screw attachment	Screw attachment	
Cable outlet		Bottom	Bottom	Bottom	
For switchgear make (model)		ABB (Tmax XT5) Eaton (NZM3) Schneider Electric (NSX630) Siemens (3VA23, 3VA24, 3VL4)	ABB (Tmax XT7 - 800 A/1000 A) Eaton (NZM4 - 800 A/1000 A) Schneider Electric (NS - 800 A/1000 A) Siemens (3VA27 - 1000 A, VL1250/3VL7 - 1000 A)	ABB (Tmax XT7 - 1250 A/1600 A) Eaton (NZM4 - 1250 A/1600 A) Schneider Electric (NS - 1250 A/1600 A) Siemens (3VA27 - 1600 A, VL1250/3VL7 - 1250 A, VL1600/3VL8 - 1600 A)	
Width mm		150	300	300	
Height mm		585	652	652	
For bar systems with centre-to-centre spacing mm		185	185	185	
For bar thickness mm		10	10	10	
Model No.	1 pc(s).	9677.780	9677.705	9677.715	
Product-specific scope of supply					
Connection straps		■	-	-	
Also required					
Connector kit		-	see page	see page	101
Contact hazard protection cover		-	see page	see page	101
Accessories					
Current converter		see page	-	-	103

NH slimline fuse-switch disconnecter



Busbar system Page 65/66 **Connection adaptors** Page 93 **Component adaptors** Page 94

Material:

- Polyamide
- Fire protection corresponding to UL 94
- Contact tracks: Partially silver-plated hard copper

Colour:

- Chassis: RAL 7035
- Cover: RAL 7001
- Handle: RAL 7016

Basis of test:

- IEC/DIN EN 60 947-3
- DIN EN 60 269-2 (fuse inserts)

Size 00 – 3, design single-pole, switchable

Size	Packs of	00	1	2	3	Page
Rated operating current max. A		160	250	400	630	
Rated operating voltage V, ~		690, 3~	690, 3~	690, 3~	690, 3~	
Number of poles		3-pole	3-pole	3-pole	3-pole	
Cable outlet		Top/bottom	Top/bottom	Top/bottom	Top/bottom	
Connection type		Screw M8	Bolt M12	Bolt M12	Bolt M12	
Connection of round conductors mm ²		1.5 - 95	6 - 240	6 - 240	6 - 240	
Width mm		50	100	100	100	
Height mm		670	670	670	670	
For converter installation		■	■	■	■	
For bar systems with centre-to-centre spacing mm		185	185	185	185	
For bar thickness mm		10	10	10	10	
Model No.	1 pc(s).	9677.010	9677.110	9677.210	9677.310	
Accessories						
Connection space cover	1 pc(s).	see page	9677.410	9677.410	9677.410	102
Prism terminal	3 pc(s).	9677.420	-	-	-	102
V connection terminal	3 pc(s).	-	9677.430	9677.430	9677.440	102
Micro-switch	5 pc(s).	3071.000	3071.000	3071.000	3071.000	105
Current converter	1 pc(s).	9677.810	see page	see page	see page	103
Cover	5 pc(s).	-	9677.415	9677.415	9677.415	104
Trim strip	2 pc(s).	9677.407	9677.407	9677.407	9677.407	104

NH slimline fuse-switch disconnecter

Size 00 – 1, design 3-pole, switchable

Size	Packs of	00	00	1	Page
Rated operating current max. A		160	160	250	
Rated operating voltage V, ~		690, 3~	690, 3~	690, 3~	
Number of poles		3-pole	3-pole	3-pole	
Cable outlet		Top/bottom	Top/bottom	Top/bottom	
Connection type		Screw M8	Box terminal	Bolt M12	
Connection of round conductors mm ²		1.5 - 95	1.5 - 95	6 - 240	
Width mm		50	50	100	
Height mm		670	670	670	
For converter installation		■	■	■	
For bar systems with centre-to-centre spacing mm		185	185	185	
For bar thickness mm		10	10	10	
Model No.	1 pc(s).	9677.000	9677.025	9677.100	

Accessories

Connection space cover	1 pc(s).	see page	see page	9677.410	102
Prism terminal	3 pc(s).	9677.420	–	–	102
V connection terminal	3 pc(s).	–	–	9677.430	102
Micro-switch	5 pc(s).	3071.000	3071.000	3071.000	105
Current converter	1 pc(s).	9677.810	9677.810	see page	103
Cover	5 pc(s).	–	–	9677.415	104
Trim strip	2 pc(s).	9677.407	9677.407	9677.407	104

Size 2 – 3, design 3-pole, switchable

Size	Packs of	2	3	3 (twin track)	Page
Rated operating current max. A		400	630	1250	
Rated operating voltage V, ~		690, 3~	690, 3~	690, 3~	
Number of poles		3-pole	3-pole	3-pole	
Cable outlet		Top/bottom	Top/bottom	Bottom	
Connection type		Bolt M12	Bolt M12	Bolt M12	
Connection of round conductors mm ²		6 - 240	6 - 240	6 - 240	
Width mm		100	100	200	
Height mm		670	670	670	
For converter installation		■	■	■	
For bar systems with centre-to-centre spacing mm		185	185	185	
For bar thickness mm		10	10	10	
Model No.	1 pc(s).	9677.200	9677.300	9677.340	

Accessories

Connection space cover	1 pc(s).	9677.410	9677.410	–	102
Prism terminal		–	–	–	
V connection terminal	3 pc(s).	9677.430	9677.440	–	102
Micro-switch	5 pc(s).	3071.000	3071.000	3071.000	105
Current converter		see page	see page	see page	103
Cover	5 pc(s).	9677.415	9677.415	–	104
Trim strip	2 pc(s).	9677.407	9677.407	9677.407	104

NH slimline fuse-switch disconnecter



Busbar system Page 65/66 **Connection adaptors** Page 93 **Component adaptors** Page 94

Material:

- Polyamide
- Fire protection corresponding to UL 94
- Contact tracks: Partially silver-plated hard copper

Colour:

- Chassis: RAL 7035
- Cover: RAL 7001
- Handle: RAL 7016

Basis of test:

- IEC/DIN EN 60 947-3
- DIN EN 60 269-2 (fuse inserts)

Size 00 – 3, with electronic fuse monitoring

Design	Packs of	3-pole, switchable	3-pole, switchable	3-pole, switchable	3-pole, switchable	Page
Size		00	1	2	3	
Rated operating current max. A		160	250	400	630	
Rated operating voltage V, ~		400, 3~	400, 3~	400, 3~	400, 3~	
Number of poles		3-pole	3-pole	3-pole	3-pole	
Cable outlet		Top/bottom	Top/bottom	Top/bottom	Top/bottom	
Connection type		Screw M8	Bolt M12	Bolt M12	Bolt M12	
Connection of round conductors mm ²		1.5 - 95	6 - 240	6 - 240	6 - 240	
Width mm		50	100	100	100	
Height mm		830	830	830	830	
For converter installation		■	■	■	■	
For bar systems with centre-to-centre spacing mm		185	185	185	185	
For bar thickness mm		10	10	10	10	
Model No.	1 pc(s).	9677.015	9677.115	9677.215	9677.315	
Accessories						
Connection space cover	1 pc(s).	see page	9677.410	9677.410	9677.410	102
Prism terminal	3 pc(s).	9677.420	-	-	-	102
V connection terminal	3 pc(s).	-	9677.430	9677.430	9677.440	102
Micro-switch	5 pc(s).	3071.000	3071.000	3071.000	3071.000	105
Current converter	1 pc(s).	9677.810	see page	see page	see page	103
Cover	5 pc(s).	-	9677.415	9677.415	9677.415	104
Trim strip	2 pc(s).	9677.407	9677.407	9677.407	9677.407	104

NH slimline switch-disconnector



Busbar system Page 65/66 Connection adaptors Page 93 Component adaptors Page 94

Functions:

- Automatic quick-break contact allows operator-independent switching
- Double-break for reliable disconnection of the contacts

Material:

- Polyamide
- Fire protection corresponding to UL 94
- Contact tracks: Partially silver-plated hard copper

Colour:

- Chassis: RAL 7035
- Cover: RAL 7001
- Handle: RAL 7016

Basis of test:

- IEC/DIN EN 60 947-3
- DIN EN 60 269-2 (fuse inserts)

Size 00 – 1, design 3-pole, switchable

Size	Packs of	00	00	1	1	Page
Rated operating current max. A		160	160	250	250	
Rated operating voltage V, ~		690, 3~	690, 3~	690, 3~	690, 3~	
Number of poles		3-pole	3-pole	3-pole	3-pole	
Installation type		Screw attachment	Screw attachment	Screw attachment	Screw attachment	
Cable outlet		Bottom	Top	Bottom	Top	
Connection type		Screw M8	Screw M8	Screw M12	Screw M12	
Connection of round conductors mm ²		1.5 - 95	1.5 - 95	6 - 240	6 - 240	
Width mm		50	50	100	100	
Height mm		676	676	772	772	
For converter installation		■	■	-	-	
For bar systems with centre-to-centre spacing mm		185	185	185	185	
For bar thickness mm		10	10	10	10	
Model No.	1 pc(s).	9677.065	9677.075	9677.160	9677.165	
Accessories						
Connection space cover	1 pc(s).	9677.400	9677.400	9677.410	9677.410	102
Connection space cover, rear	1 pc(s).	9677.402	9677.402	9677.412	9677.412	104
Box terminal		-	-	see page	see page	105
Micro-switch	1 pc(s).	9677.418	9677.418	9677.418	9677.418	105
Current converter	1 pc(s).	9677.810	9677.810	-	-	103
Trim strip	2 pc(s).	9677.407	9677.407	9677.407	9677.407	104

NH slimline switch-disconnector

Size 2 – 3, design 3-pole, switchable

Size	Packs of	2	2	3	3	Page
Rated operating current max. A		400	400	630	500	
Rated operating voltage V, ~		690, 3~	690, 3~	690, 3~	690, 3~	
Number of poles		3-pole	3-pole	3-pole	3-pole	
Installation type		Screw attachment	Screw attachment	Screw attachment	Screw attachment	
Cable outlet		Bottom	Top	Bottom	Top	
Connection type		Screw M12	Screw M12	Screw M12	Screw M12	
Connection of round conductors mm ²		6 - 240	6 - 240	6 - 240	6 - 240	
Width mm		100	100	100	100	
Height mm		772	772	772	772	
For converter installation		–	–	–	–	
For bar systems with centre-to-centre spacing mm		185	185	185	185	
For bar thickness mm		10	10	10	10	
Model No.	1 pc(s).	9677.260	9677.265	9677.360	9677.365	
Accessories						
Connection space cover	1 pc(s).	9677.410	9677.410	9677.410	9677.410	102
Connection space cover, rear	1 pc(s).	9677.412	9677.412	9677.412	9677.412	104
Box terminal		see page	see page	see page	see page	105
Micro-switch	1 pc(s).	9677.418	9677.418	9677.418	9677.418	105
Current converter		–	–	–	–	
Trim strip	2 pc(s).	9677.407	9677.407	9677.407	9677.407	104

Rittal – The System.



VX25 Power Engineering

See page 106

NH slimline switch-disconnector



Busbar system Page 65/66 Connection adaptors Page 93 Component adaptors Page 94

Functions:

- Automatic quick-break contact allows operator-independent switching
- Double-break for reliable disconnection of the contacts

Material:

- Polyamide
- Fire protection corresponding to UL 94
- Contact tracks: Partially silver-plated hard copper

Colour:

- Chassis: RAL 7035
- Cover: RAL 7001
- Handle: RAL 7016

Basis of test:

- IEC/DIN EN 60 947-3
- DIN EN 60 269-2 (fuse inserts)

Size 00 – 3, with electronic fuse monitoring

Design	Packs of	3-pole, switchable	3-pole, switchable	3-pole, switchable	3-pole, switchable	Page
Size		00	1	2	3	
Rated operating current max. A		160	250	400	630	
Rated operating voltage V, ~		400, 3~	400, 3~	400, 3~	400, 3~	
Number of poles		3-pole	3-pole	3-pole	3-pole	
Installation type		Screw attachment	Screw attachment	Screw attachment	Screw attachment	
Cable outlet		Bottom	Bottom	Bottom	Bottom	
Connection type		Screw M8	Screw M12	Screw M12	Screw M12	
Connection of round conductors mm ²		1.5 - 95	6 - 240	6 - 240	6 - 240	
Width mm		50	100	100	100	
Height mm		860	941	941	941	
For converter installation		■	-	-	-	
For bar systems with centre-to-centre spacing mm		185	185	185	185	
For bar thickness mm		10	10	10	10	
Model No.	1 pc(s).	9677.085	9677.180	9677.280	9677.380	
Accessories						
Connection space cover	1 pc(s).	9677.400	9677.410	9677.410	9677.410	102
Connection space cover, rear	1 pc(s).	9677.402	9677.412	9677.412	9677.412	104
Box terminal		-	see page	see page	see page	105
Micro-switch	1 pc(s).	9677.418	9677.418	9677.418	9677.418	105
Current converter	1 pc(s).	9677.810	-	-	-	103
Trim strip	2 pc(s).	9677.407	9677.407	9677.407	9677.407	104

Accessories for top-mounting components

185 mm bar centre distance

Adaptor for RiLine Compact components

For mounting RiLine Compact components on 185 mm busbar systems. The adaptor consists of two connection points with 160 A each.

Material:

- Fire protection corresponding to UL 94

Colour:

- RAL 7035

Note:

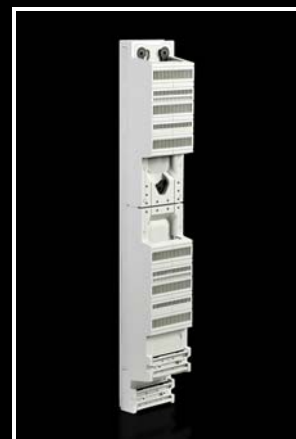
- For attaching to busbars with holes. Please ensure that there is no cover section installed in the vicinity of the device.
- Further information on the RiLine Compact system can be found on the Internet

Rated current max. A	320
Rated operating voltage V, ~	690, 3~
Number of poles	3-pole
Cable outlet	Top/bottom
Installation type	Screw attachment
Width mm	100
Height mm	670
Packs of	1 pc(s).
Model No.	9677.930



Accessories:

- Current converter, see page 103



Connector kit

for component adaptors

Preassembled connector kit for common brands of moulded-case circuit-breaker (MCCB).

For electrical connection between the switch and the component adaptor (3-pole).

Material:

- E-Cu

Supply includes:

- Assembly parts



For switchgear make (model)	To fit Model No.	Packs of	Model No.
ABB (Tmax XT7 - 800 A/1000 A) Schneider Electric (NS - 800 A/1000 A) Siemens (3VA27 - 800 A/1000 A)	9677.700/9677.705	1 pc(s).	9677.730
Eaton (NZM4 - 800 A/1000 A) Siemens (VL1250/3VL7 - 1000 A)	9677.700/9677.705	1 pc(s).	9677.740
ABB (Tmax XT7 - 1250 A/1600 A) Schneider Electric (NS - 1250 A/1600 A) Siemens (3VA27 - 1250 A/1600 A)	9677.710/9677.715	1 pc(s).	9677.750
Eaton (NZM4 - 1250 A/1600 A) Siemens (VL1250/3VL7 - 1250 A, VL1600/VL8 - 1600 A)	9677.710/9677.715	1 pc(s).	9677.760

Contact hazard protection cover

for component adaptors

To cover the connector kit at the front. The cover may also optionally be used for the switchgear cable connection. Open cable accesses in the contact hazard protection cover may be sealed using the side panels.

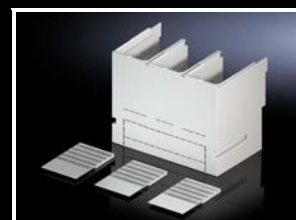
Material:

- Polyamide
- Fire protection corresponding to UL 94

Supply includes:

- Side panels

For switchgear make (model)	Packs of	Model No.
–	1 pc(s).	9677.790
ABB (Tmax T7)	1 pc(s).	9677.792
Eaton (NZM 4)	1 pc(s).	9677.794
Siemens (3VL7/3VL8)	1 pc(s).	9677.796
Schneider Electric (NS1600)	1 pc(s).	9677.798



Accessories for top-mounting components

185 mm bar centre distance



Connection space cover

for NH slimline fuse-switch-disconnectors/ NH slimline switch-disconnectors

Cascadable connection space cover to guarantee contact hazard protection in the cable connection zone when using ring terminals with a long collar.

Material:

- Polycarbonate
- Fire protection corresponding to UL 94

Note:

- When using NH slimline fuse-switch disconnectors with top cable outlet, use of the connection space cover is mandatory

For size	To fit Model No.	Cable outlet	Note on Model No.	Packs of	Model No.
00	9677.0X0/ 9677.0X5	Bottom	Also suitable for use with NH slimline switch-disconnectors with top cable outlet	1 pc(s).	9677.400
00	9677.000/ 9677.010/ 9677.015/ 9677.025	Top	–	1 pc(s).	9677.405
1 - 3	9677.1X0/ 9677.1X5/ 9677.2X0/ 9677.2X5/ 9677.300/ 9677.310/ 9677.3X5	Top/bottom	–	1 pc(s).	9677.410



Prism terminal

for NH slimline fuse-switch disconnectors

For the direct connection of round conductors.

Material:

- Brass

Surface finish:

- Tin-plated

For size	To fit Model No.	Connection of round conductors mm ²	Packs of	Model No.
00	9677.000/ 9677.010/ 9677.015	10 - 95	3 pc(s).	9677.420



V connection terminal

for NH slimline fuse-switch disconnectors

For the direct connection of round conductors.

Material:

- Brass

Surface finish:

- Tin-plated

For size	To fit Model No.	Connection of round conductors mm ²	Packs of	Model No.
1/2	9677.100/ 9677.110/ 9677.115/ 9677.200/ 9677.210/ 9677.215	70 - 240	3 pc(s).	9677.430
3	9677.300/ 9677.310/ 9677.315	120 - 300	3 pc(s).	9677.440

Accessories for top-mounting components

185 mm bar centre distance

Current converter

Compact design without altering the installation depth via mechanical integration into the top-mounting components (185 mm centre-to-centre spacing); this allows space-saving assembly.

Material:

– Polyamide

Basis of test:

– IEC 60 044-1
– EN 60 715
– DIN VDE 0414
– DIN 42 600-2

For NH slimline switch-disconnectors

Size	00	1 - 3	1 - 3	2/3	2/3	3	3	–
To fit Model No.	9677.000	9677.160	9677.100					
	9677.010	9677.165	9677.110					
	9677.015	9677.180	9677.115	9677.260	9677.200			
	9677.025	9677.260	9677.200	9677.265	9677.210			
	9677.060	9677.265	9677.210	9677.280	9677.215	9677.360	9677.300	
	9677.065	9677.280	9677.215	9677.360	9677.300	9677.365	9677.310	–
	9677.070	9677.360	9677.300	9677.365	9677.310	9677.380	9677.315	
	9677.075	9677.365	9677.310	9677.380	9677.315		9677.340	
	9677.080	9677.380	9677.315		9677.340			
	9677.085		9677.340					

For component adaptors/connection adaptors/adaptor for RiLine components

To fit Model No.	–	9677.930	9677.770 9677.780 9677.900	9677.930	9677.770 9677.780 9677.900	9677.930	9677.770 9677.780 9677.900	9677.930
Primary current A	150	250	250	400	400	500	600	800
Secondary current A	5	5	5	5	5	5	5	5
Accuracy class	1	1	1	1	1	1	1	1
Rated frequency Hz	50 – 60	50 – 60	50 – 60	50 – 60	50 – 60	50 – 60	50 – 60	50 – 60
Insulation class	E	H	H	H	H	H	H	H
Connection of round conductors mm ²	2.5 – 4	2.5 – 4	2.5 – 4	2.5 – 4	2.5 – 4	2.5 – 4	2.5 – 4	2.5 – 4
Connection type	Box terminal	Box terminal	Box terminal	Box terminal	Box terminal	Box terminal	Box terminal	Box terminal
Rated power input VA	2.5	1.5	2.5	1.5	2.5	1.5	2.5	2.5
Packs of	1 pc(s).	1 pc(s).	1 pc(s).	1 pc(s).	1 pc(s).	1 pc(s).	1 pc(s).	1 pc(s).
Model No.	9677.810	9677.950	9677.865	9677.951	9677.875	9677.952	9677.885	9677.958

Also required:

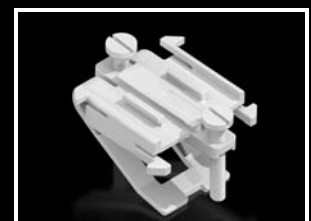
Mounting clamp	–	–	9677.895	–	9677.895	–	9677.895	9677.895
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Mounting clamp

for current converters

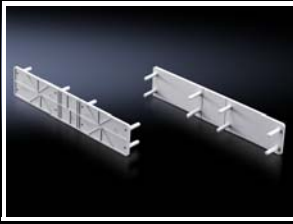
For fastening the current converters to connection and component adaptors as well as to NH slimline switch-disconnectors.

To fit Model No.	Packs of	Model No.
9677.865 9677.875 9677.885 9677.958	3 pc(s).	9677.895



Accessories for top-mounting components

185 mm bar centre distance



Cover

for NH slimline fuse-switch disconnectors

To increase rear contact hazard protection of the NH slimline fuse-switch-disconnector in the top section when mounting on a 185 mm bar system with contact hazard protection.

Material:

– Polyamide

Colour:

– RAL 7035

For size	Packs of	Model No.
1 - 3	5 pc(s).	9677.415

Trim strip

for NH slimline fuse-switch-disconnectors/ NH slimline switch-disconnectors

To create a contact surface for individual use of a front contact hazard protection cover. Mounted on the side of the NH strip enclosure.

For size	Packs of	Model No.
00 - 3	2 pc(s).	9677.407

Connection space cover, rear

for NH slimline switch-disconnectors

To guarantee contact hazard protection in the rear cable connection zone when using ring terminals with long press sleeves. In conjunction with the front connection space cover (9677.400/.410), this achieves all-round contact hazard protection of the connection space.

Material:

– Polyamide

Colour:

– RAL 7035

For size	Packs of	Model No.
00	1 pc(s).	9677.402
1 - 3	1 pc(s).	9677.412

Accessories for top-mounting components

185 mm bar centre distance

Box terminal

for NH slimline switch-disconnectors

For converting NH slimline switch-disconnectors to box terminal connection for round conductors.

Material:

- Aluminium
- E-Cu, silver-plated

Supply includes:

- Connection space cover, rear

For size	Connection of round conductors mm ²	Packs of	Model No.
1 - 3	70 - 240	3 pc(s).	9677.435
1 - 3	185 - 300	3 pc(s).	9677.445



Micro-switch

for NH fuse-switch disconnectors/NH slimline fuse-switch disconnectors (185 mm)

To indicate the switch position of the NH unit (cover).

For size	NH slimline fuse-switch disconnector size 00 - 3 (185 mm)
Rated operating current max. A	5
Rated operating voltage V	250
Packs of	5 pc(s).
Model No.	3071.000



Micro-switch

for NH slimline switch-disconnectors

To indicate the switch position of the NH unit (cover).

Supply includes:

- Bracket

For size	Rated operating current max. A	Rated operating voltage V	Packs of	Model No.
00 - 3	5	250	1 pc(s).	9677.418



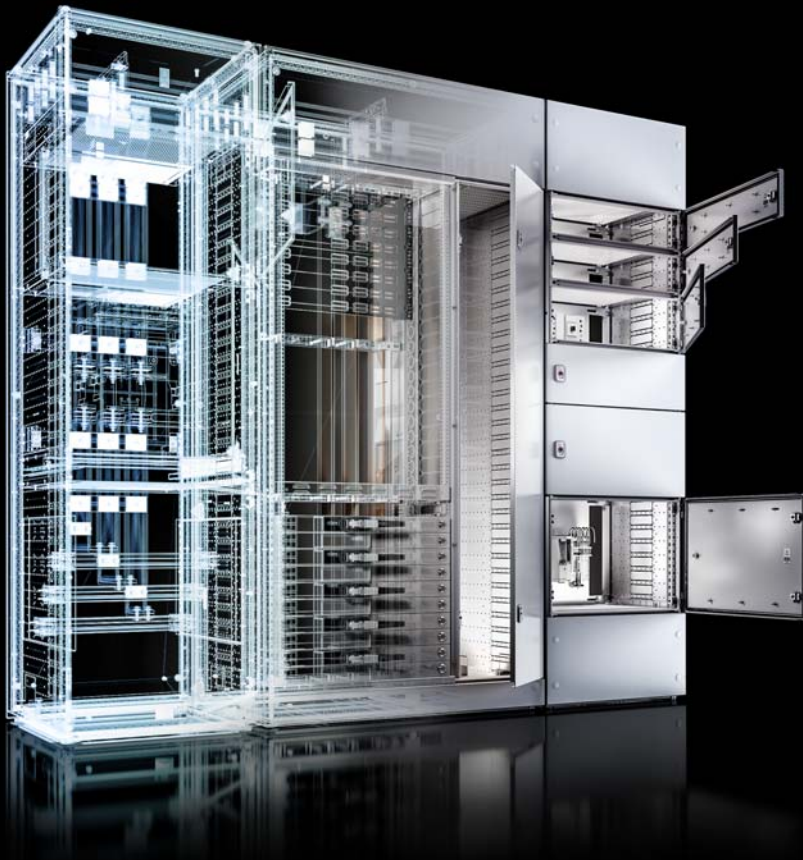
VX25 POWER ENGINEERING

The ultimate in user-friendly planning

Our Power Engineering planning tool heralds a new era. Just like the underlying VX25, our VX25 Power Engineering planning software sets new standards when planning low-voltage switchgear. The Web-based tool guides users quickly and efficiently through the entire planning process in simple, logical steps.

The benefits to you:

- The web-based application ensures that planning data is always up-to-date
- System configuration in either a simplified or detailed version
- Parts list and assembly based on a specific set of rules
- Automatic calculation and documentation of the copper busbars
- Generation of a design verification to IEC 61 439
- System documentation including assembly instructions
- Order immediately via a direct link to the online webshop
- Technical service support, including free assistance with project planning and quote preparation
- All planning data stored locally on your computer



Please specify your system

System name:

System type:

Protection category:

Form separation acc IEC:

Main busbar system: Rated current of assembly I_{NA} (A): Forced ventilation: Position of busbar system: Maximum operating current I_{nc} (A):

Number of poles busbar system: Dimension busbar: Short circuit capacity of the system I_{sc}:

Measurements: Height of system: Depth of system: Height of panels:

PE system: Net type: PE-protective conductor dimension: N-protective conductor dimension:

Copper calculation: With main busbar: With vertical busbar: With connection kits:

System definition

- Define system parameters to IEC 61 439
- Configure the main busbar system
- Input the key dimensions and planned PE system

Select cubicle type to add to your system

Available cubicle types

System: 'New System'

Count Custom

Detailed cubicle configuration

Section selection and configuration

- Compile tested sections into a complete switchgear
- Select certified components from brand-name manufacturers and Rittal power distribution products
- Individually configure sections with selected modules

Module configuration

Define the rated current of the circuits

Please enter the rated currents of the modules. This information will be needed for creation of the design verification.

Outgoing circuit	Device type	I _n [A] device acc IEC 60847	I _n [A] device / fuse insert	I _{nc} [A] admissible rated current	RDF rated diversity factor	I _{nc} /RDF [A] admissible rated current	Planned I _{nc} [A]	Device is feeder
+2F1	18-D0	100	100A	100	1.00	100	100	no
+2F2	18-D0	100	100A	100	1.00	100	100	no
+2F3	18-H1	250	250A	250	1.00	250	250	no
+2F4	18-H1	250	250A	250	1.00	250	250	no
+2F5	18-Q2	400	400A	375	0.9375	300	300	no
+2F6	18-Q2	400	400A	375	0.9375	300	300	no

State of power distribution: OK! The sum of the currents of the outgoing circuits/devices with 2517A are in range of the admissible load of the busbar system. The maximum rated current I of the busbar is 3000A.

Does the sum of current of the outgoing circuits exceed the max. rated current of the chosen busbar system, then the manufacturer has to define groups of outgoing circuits, which will work all the same time, to fulfil the design verification of IEC 61 439.

Circuit calculation

- Determine device-specific properties
- Calculate admissible rated currents I_{nc} (A)
- Calculate the specific rated diversity factor (RDF)

Download

Please select the content of your download file

Parts list

Design verification

Assembly plan

Configuration parameter

Connection kits

Download Close

new System

Output

- Automated generation of system documentation including design verification to IEC 61 439
- Documentation of copper bars including free drawings
- Order directly via the webshop link



VX25.
**SYSTEM
PERFECTION.**



RITTAL AUTOMATION SYSTEMS

Boost productivity at every process stage

Automating and optimising manual working processes in panel building and switchgear manufacturing helps enhance quality and increase productivity. This approach relies on digital integration and digital continuity throughout the entire value chain.

Work efficiently and ergonomically with busbars

With the aid of digitalisation we achieve the ideal workflow – from engineering right through to production.

- Cut busbars to the required length
- Bend busbars as per the design
- Precisely punch busbars



Find out more.

**Busbar machining,
static CW 120-S**

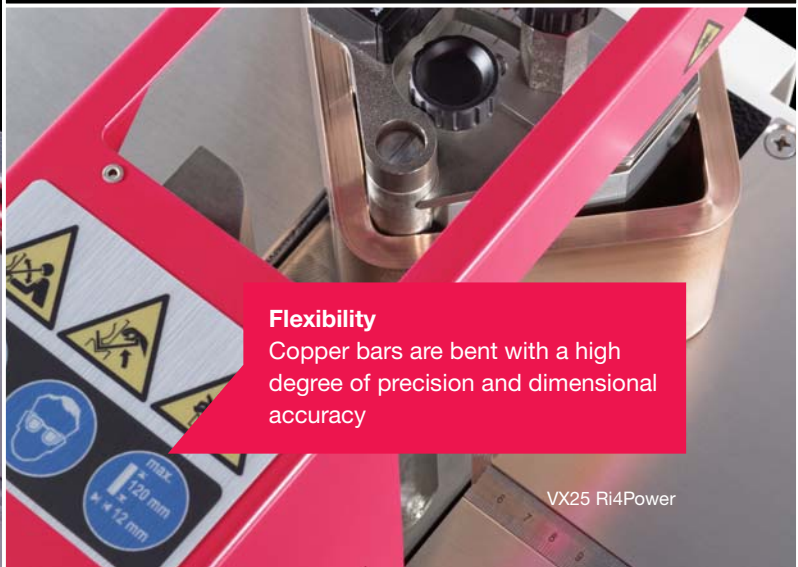


Speed

The integral precision laser speeds up the process of cutting copper bars to the exact required length

Precision

Perfect-fit holes for screw-fastening copper rails may be punched precisely with a simple tool change



Flexibility

Copper bars are bent with a high degree of precision and dimensional accuracy



**Busbar machining,
mobile CW 120-M**



User-friendly
The integral measuring system and folding end stop allows all functions to be conveniently used



Integrated
With the help of the electric protractor, cutting and bending operations are facilitated

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2460.000	59	8660.005	52	9674.416	85	9677.315	97
2460.650	59	8660.007	52	9674.418	85	9677.340	96
2461.000	59	8660.021	52	9674.430	85	9677.360	99
2462.000	59	8660.022	52	9674.436	85	9677.365	99
2463.000	59	8660.023	52	9674.438	85	9677.380	100
2464.000	59	8660.024	52	9674.790	62	9677.400	102
2465.000	59	8660.025	52	9674.990	78	9677.402	104
2466.000	59	8660.033	52	9676.017	68	9677.405	102
2467.000	59	8660.034	52	9676.019	68	9677.407	104
2468.000	59	8660.043	52	9676.503	90	9677.410	102
2469.100	59	8660.044	52	9676.504	90	9677.412	104
2521.000	60	8801.260	58	9676.505	90	9677.415	104
2531.000	60	9640.202	71	9676.700	69	9677.418	105
2532.000	60	9640.207	71	9676.710	69	9677.420	102
2537.100	59	9640.232	71	9676.730	68	9677.430	102
2537.300	59	9640.237	71	9676.747	69	9677.435	105
2537.400	59	9640.262	71	9676.748	69	9677.440	102
2537.500	59	9640.267	71	9676.749	69	9677.445	105
2545.000	60	9640.292	71	9676.806	70	9677.705	94
2546.000	60	9640.297	71	9676.807	70	9677.715	94
2547.000	60	9640.325	73	9676.808	70	9677.730	101
2548.000	60	9640.330	73	9676.809	70	9677.740	101
2549.000	60	9640.340	73	9676.810	70	9677.750	101
2549.500	60	9640.350	73	9676.811	70	9677.760	101
3071.000	105	9640.360	71	9676.812	70	9677.780	94
3565.005	91	9640.365	71	9676.813	70	9677.790	101
3568.005	91	9640.370	73	9676.814	70	9677.792	101
3569.005	91	9640.380	73	9676.815	70	9677.794	101
3570.005	91	9640.900	74	9676.816	70	9677.796	101
3571.005	91	9640.910	74	9676.817	70	9677.798	101
3572.005	91	9640.920	74	9676.819	70	9677.810	103
3573.005	91	9640.930	74	9676.832	68	9677.865	103
3574.005	91	9640.940	74	9676.966	75	9677.875	103
3575.005	91	9640.970	73	9676.967	75	9677.885	103
3576.005	91	9640.980	73	9676.968	75	9677.895	103
3577.005	91	9649.010	71	9676.971	74	9677.950	103
3578.005	91	9649.360	71	9676.972	74	9677.951	103
3579.005	91	9650.202	72	9676.973	74	9677.952	103
3584.000	91	9650.232	72	9676.976	74	9677.958	103
3586.005	91	9650.262	72	9676.977	74	9677.900	93
3588.005	91	9650.292	72	9676.981	74	9677.905	93
3589.005	91	9650.325	73	9676.982	74	9680.005	50
3590.005	91	9650.330	73	9676.983	74	9680.025	50
3590.015	91	9650.340	73	9676.986	74	9680.207	50
4054.870	92	9650.360	72	9676.987	74	9680.227	50
4165.500	90	9650.370	73	9677.000	96	9680.406	48
8100.740	89	9650.380	73	9677.010	95	9680.408	48
8100.742	89	9650.900	74	9677.015	97	9680.426	49
8100.743	89	9650.905	74	9677.025	96	9680.428	49
8106.245	53	9650.910	74	9677.065	98	9680.606	48
8108.245	53	9650.920	74	9677.075	98	9680.608	48
8126.245	53	9650.980	73	9677.085	100	9680.626	49
8128.245	53	9650.990	73	9677.100	96	9680.628	49
8617.130	89	9659.010	71	9677.110	95	9680.806	48
8617.140	89	9659.360	72	9677.115	97	9680.808	48
8617.200	89	9660.090	78	9677.160	98	9680.826	49
8617.500	54	9660.205	75	9677.165	98	9680.828	49
8617.501	54	9660.980	74	9677.180	100	9681.204	56
8617.502	54	9665.750	62	9677.200	96	9681.206	56
8617.503	54	9665.760	62	9677.210	95	9681.208	56
8620.500	58	9665.770	62	9677.215	97	9681.514	61
8620.501	58	9665.780	62	9677.260	99	9681.516	61
8620.502	58	9665.785	62	9677.265	99	9681.546	61
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9681.586	61	9682.196	56	9683.626	83	9686.539	88
9681.588	61	9682.198	56	9683.628	83	9686.540	87
9681.594	61	9682.314	57	9683.642	83	9686.542	87
9681.596	61	9682.316	57	9683.643	83	9686.544	87
9681.646	61	9682.318	57	9683.644	83	9686.546	87
9681.648	61	9682.320	57	9683.646	83	9686.548	87
9681.660	61	9682.322	57	9683.648	83	9686.549	88
9681.662	61	9682.324	57	9683.660	83	9686.580	87
9681.666	61	9682.326	57	9683.661	83	9686.582	87
9681.668	61	9682.328	57	9683.662	83	9686.584	87
9681.680	61	9682.330	57	9683.663	83	9686.586	87
9681.682	61	9682.332	57	9683.664	83	9686.588	87
9681.686	61	9682.334	57	9683.666	83	9686.589	88
9681.688	61	9682.336	57	9683.668	83	9686.800	70
9681.806	61	9682.338	57	9683.680	83	9686.810	70
9681.808	61	9682.340	57	9683.681	83	9686.820	70
9681.826	61	9682.342	57	9683.682	83	9686.845	75
9681.828	61	9682.344	57	9683.683	83	9686.865	75
9681.846	61	9682.346	57	9683.684	83	9686.912	76
9681.848	61	9682.348	57	9683.686	83	9686.924	76
9681.866	61	9682.350	58	9683.688	83	9785.040	59
9681.868	61	9682.352	58	9683.720	79	9785.042	59
9681.886	61	9682.354	58	9683.736	90		
9681.888	61	9682.356	58	9683.738	90		
9682.104	56	9682.358	58	9683.763	84		
9682.106	56	9683.006	80	9683.783	84		
9682.108	56	9683.008	80	9684.004	66, 91		
9682.124	56	9683.016	80	9684.006	66, 91		
9682.126	56	9683.018	80	9684.008	66, 91		
9682.128	56	9683.036	80	9684.010	66, 91		
9682.140	55	9683.038	80	9684.012	66, 91		
9682.142	55	9683.040	80	9684.900	79		
9682.143	55	9683.200	80	9684.920	79		
9682.144	55	9683.210	80	9684.960	79		
9682.146	55	9683.304	82	9684.980	79		
9682.148	55	9683.306	82	9684.990	79		
9682.150	55	9683.308	82	9686.000	65		
9682.152	55	9683.310	82	9686.010	64		
9682.154	55	9683.312	82	9686.030	65		
9682.156	55	9683.326	82	9686.040	64		
9682.158	55	9683.328	82	9686.060	66		
9682.160	55	9683.406	81	9686.070	65		
9682.161	55	9683.408	81	9686.080	66		
9682.162	55	9683.426	81	9686.100	64		
9682.163	55	9683.428	81	9686.200	67		
9682.164	55	9683.444	81	9686.210	67		
9682.166	55	9683.446	81	9686.250	67		
9682.167	55	9683.448	81	9686.260	67		
9682.168	55	9683.464	81	9686.300	87		
9682.169	55	9683.466	81	9686.350	88		
9682.170	55	9683.468	81	9686.400	63		
9682.172	55	9683.484	81	9686.410	63		
9682.174	55	9683.486	81	9686.420	63		
9682.176	55	9683.488	81	9686.430	63		
9682.178	55	9683.500	82	9686.495	75		
9682.180	56	9683.504	82	9686.520	87		
9682.181	56	9683.506	82	9686.522	87		
9682.182	56	9683.508	82	9686.524	87		
9682.183	56	9683.561	83	9686.526	87		
9682.184	56	9683.562	83	9686.528	87		
9682.186	56	9683.563	83	9686.529	88		
9682.187	56	9683.564	83	9686.530	87		
9682.188	56	9683.604	83	9686.532	87		

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