

wöhner

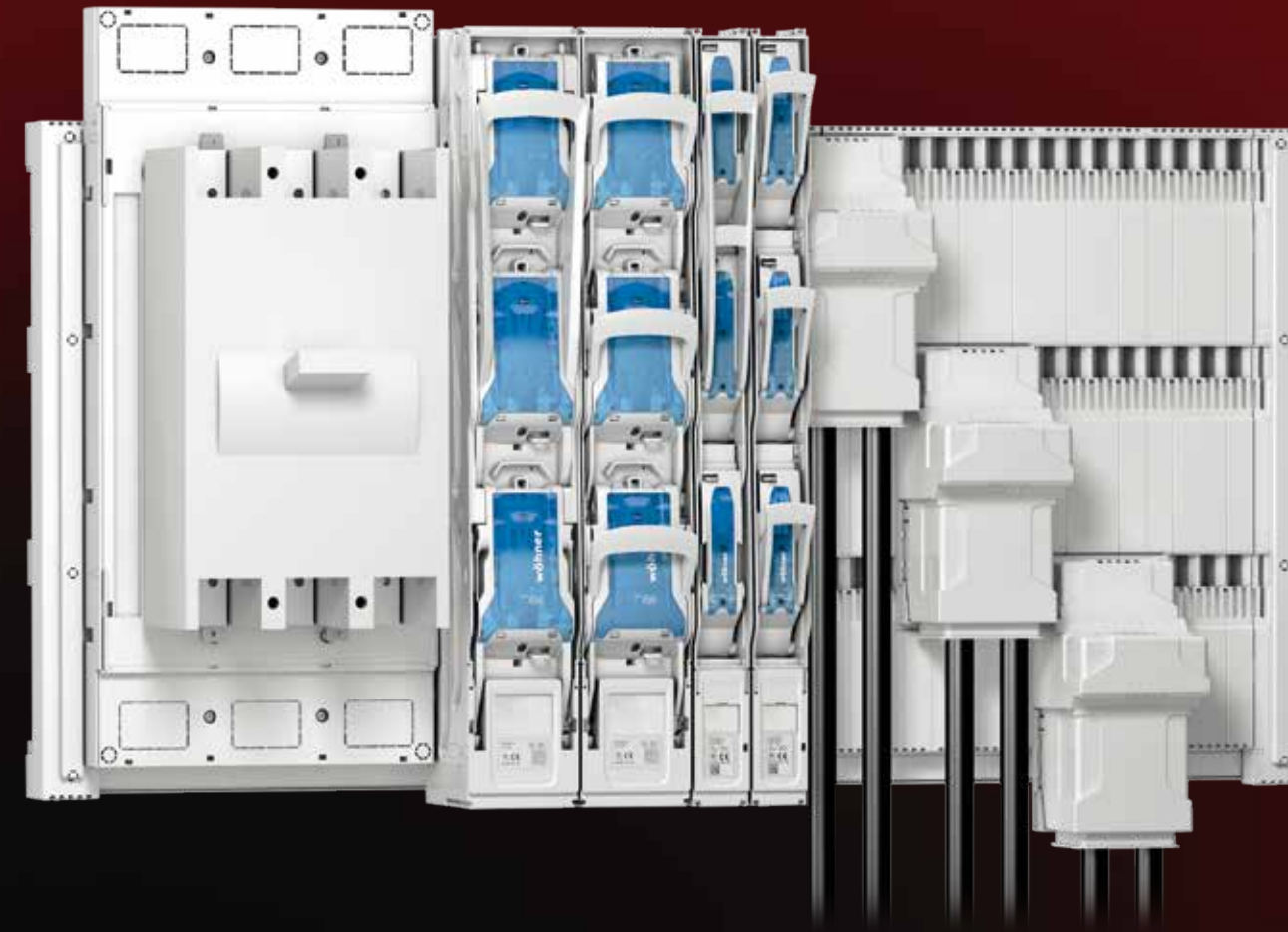


**185
POWER**

**WELCOME TO THE NEW
SYSTEM WORLD**

ALLES MIT SPANNUNG

ENTERING A NEW DIMENSION



This concept is now reality.
Wöhner presents the 185Power global innovation.
The first 185mm-based system solution.

Discover a perfectly matched system, with high-capacity components and maximized ease of mounting, thanks to CrossLink® technology. Wöhner 185Power provides you with the new QUADRON®185Power NH in-line fuse switch disconnecter series for NH-dimension fuses and the new EQUES®185Power adapter for mounting molded case circuit breakers. 185Power includes all of the required accessories in a sustainable system – from busbar supports to conductor terminals and touch-safe system covers.

BUSBAR SUPPORT AND CrossLink® COVERING SYSTEM

NEW

- + Drill-free mounting of all components through the touch safe CrossLink® covering system
- + CrossLink® covering system ensures phase segregation
- + Mounting and disassembly possible of the energized fuse bases

FROM PAGE 8

CIRCUIT BREAKER ADAPTER AND CONNECTION MODULES

NEW

- + Adapter to fit all the standard circuit breakers
- + Adapter for direct bonding on the busbar
- + Adapter module for flat conductor, circular conductor and cable lugs

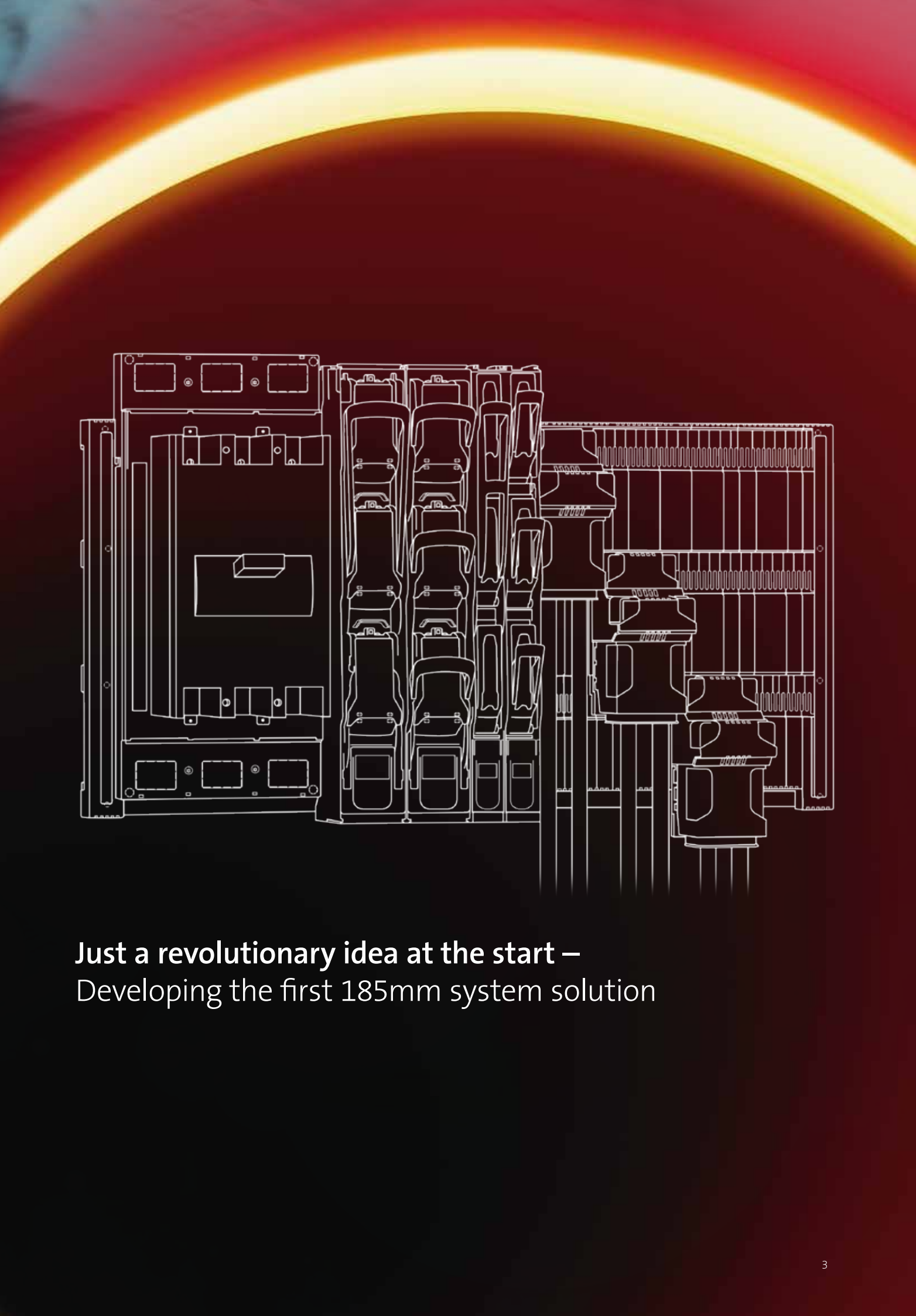
FROM PAGE 12

NH IN-LINE FUSE SWITCH DISCONNECTORS

NEW

- + NH-dimension in-line fuse-switch disconnectors Size 00 to 3, for 160A to 630A fuses, and applications to 1250A
- + Rapid, safe mounting of the components on the busbar system
- + Innovative heat dissipation and optimized venting of switching gases


FROM PAGE 14




Just a revolutionary idea at the start –
Developing the first 185mm system solution


ONE SYSTEM ALL THE BENEFITS





MODULARITY 
Thanks to the modular principle, the system can be easily, individually and flexibly applied to deliver an optimal panel design. All components and products fit together seamlessly.

SIMPLICITY 
Innovative CrossLink® bonding makes for easy, no-drill mounting. Clamp bonding permits all system components to be mounted effortlessly.

COMPATIBILITY 
Thanks to the EQUES®185Power Adapter all the standard circuit-breaker types can be quickly and easily mounted.

SAFETY 
As with all Wöhner products, the emphasis is on electrical safety – provided through touch-safe design for the system and components.

EFFICIENCY 
Perfectly matched components from a single source enable a substantial increase in efficiency. The result is a considerable saving of time in engineering, planning, purchasing and system assembly.

ORDERLY 
Standardized system components ensure order and a clean presentation of everything in the control cabinet.

EXPANDING OUR HORIZON

Innovation has been at the heart of Wöhner's history.

In the early 1980s Wöhner presented its innovative 60mm busbar system technology. The technology became the industry standard in Europe and is gaining broad acceptance in diverse markets around the globe. Innovation and improved design in pursuit of electrical safety and efficiency have been the hallmark of the Wöhner 60mm busbar system. The introduction of the 185Power system in 2014 will continue the success in a new dimension. Our horizon has been dramatically broadened.



1980
60Classic
busbar system
to 630A

1989
Double-T profiles
extend the 60mm
system to 1600A

1998
QUADRON®
disconnectors

2000
SECUR®LeanStreamer
NH in-line fuse switch
disconnectors

2001
SECUR®PowerLiner
switch disconnector

2002
EQUES®-
adapter Series

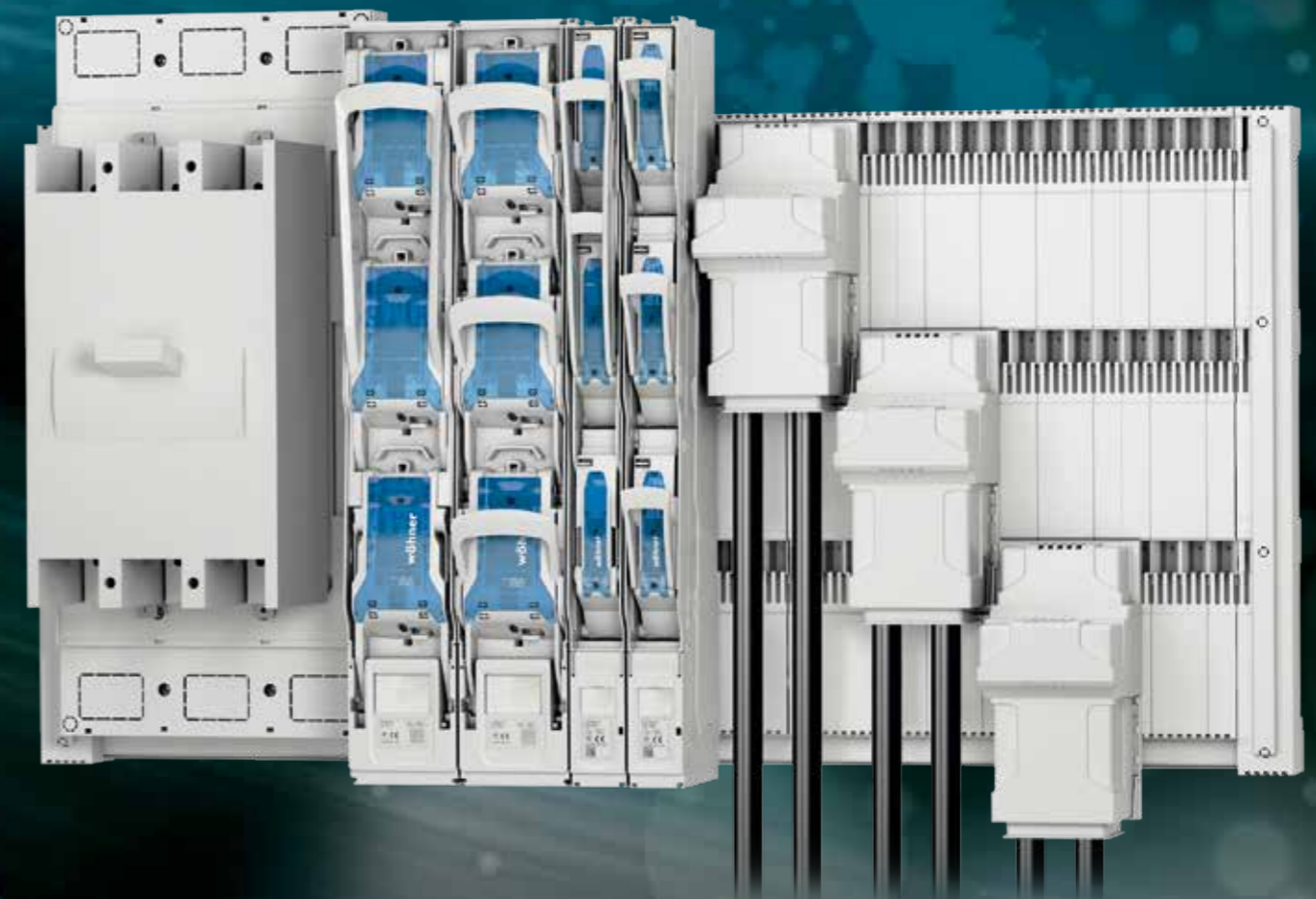
2006
AMBUS®EasyLiner
fuse holders

2008
CrossLink®
technology

2009
30Compact
busbar system

2012
MOTUS®
Hybrid Motor
Starter

2013
SECUR®EasyLiner
switch disconnector
with snap-lock wire
connection

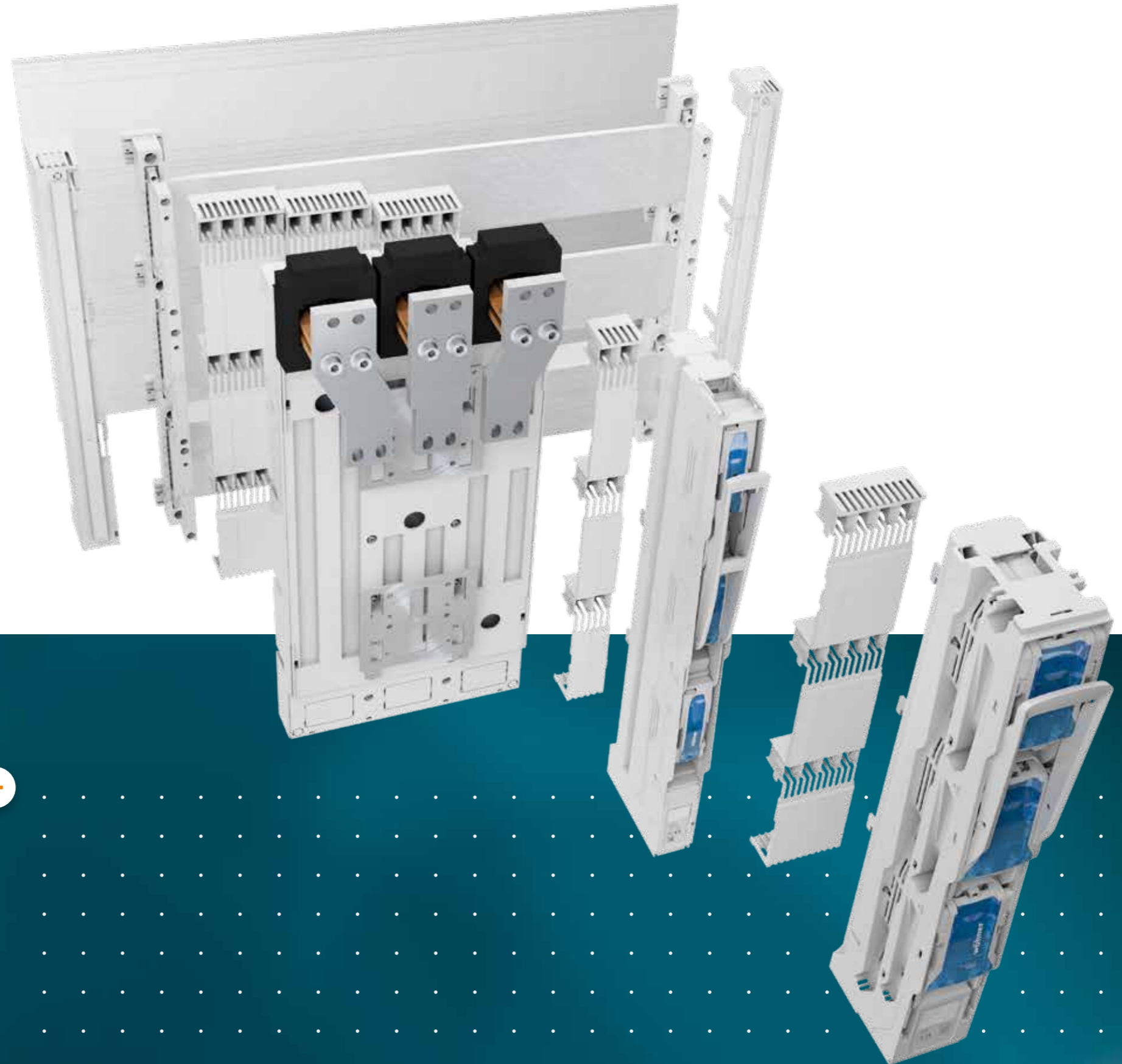


2014
185Power
busbar system

THIS SYSTEM IS ABOUT ELECTRICAL SAFETY

An all-round care-free package

Touch-safe protection of the bus system comes from the CrossLink®185Power accessories, including covering modules, base plate profile and the bus support covers. Integral system partitioning saves time when mounting and provides optimum safety thanks to the matched components.



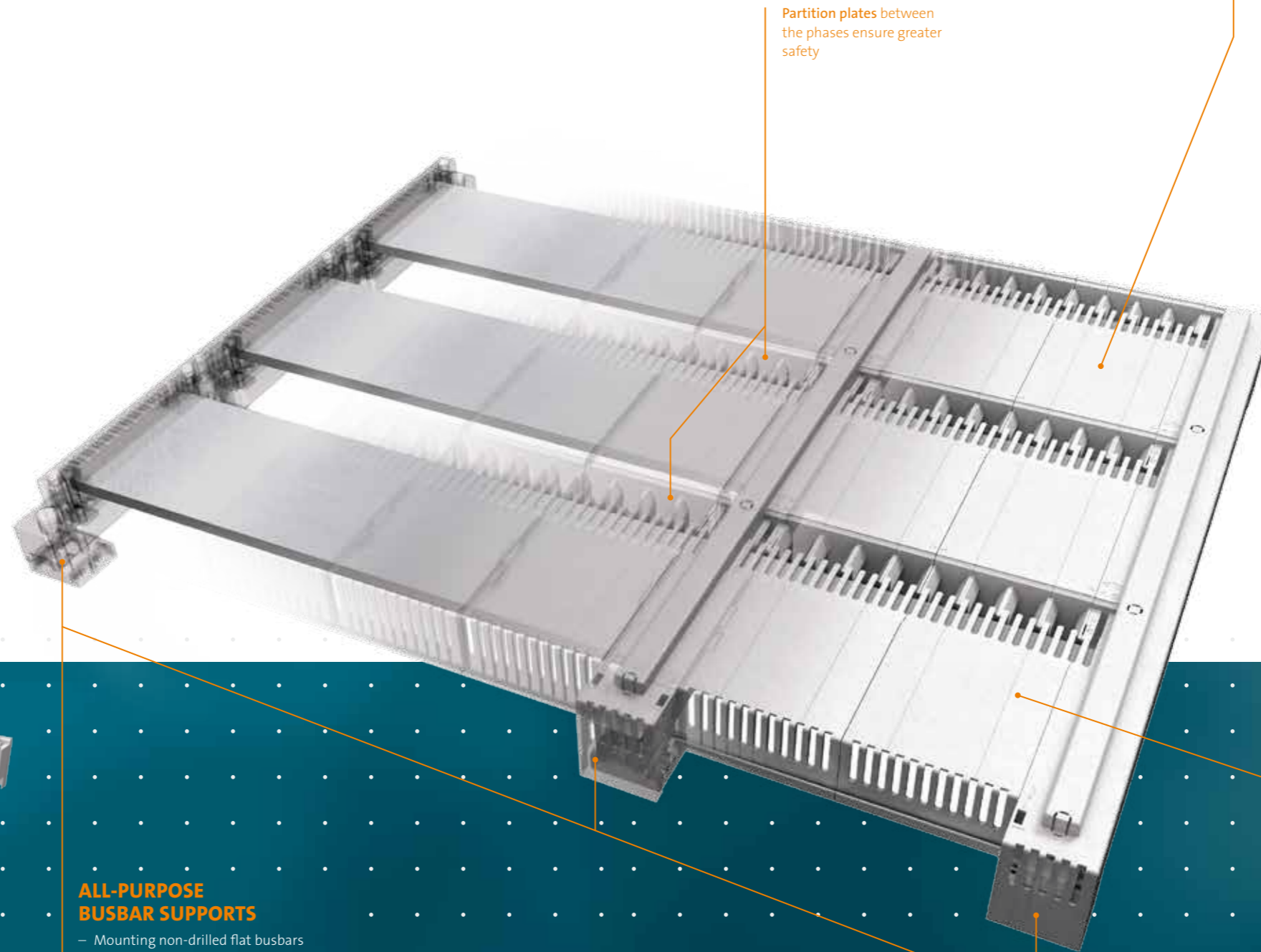
OPTIMUM CONTACT PROTECTION

The base plate profile for covering the back of the bus system provides all-round protection. When accessing the electrical system from the rear during maintenance or extension work, the electrician is optimally protected from accidentally touching current-carrying bus system components.

CONTACT PROTECTION RIGHT FROM THE START

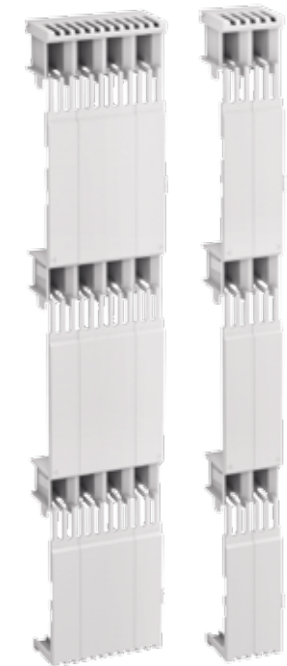
Bus support and CrossLink® covering system

The base of 185Power are the busbar supports which can be adjusted to various busbar widths. These allow the possibility for a drill-free mounting of flat bars. Thanks to the industrial production of 50mm and 100mm CrossLink touch protection modules, custom fabricated solutions are a thing of the past. The guidance of the CrossLink busbar covers allows for an easy, safe positioning of components at any time. The risk of an externally initiated arc is minimised.

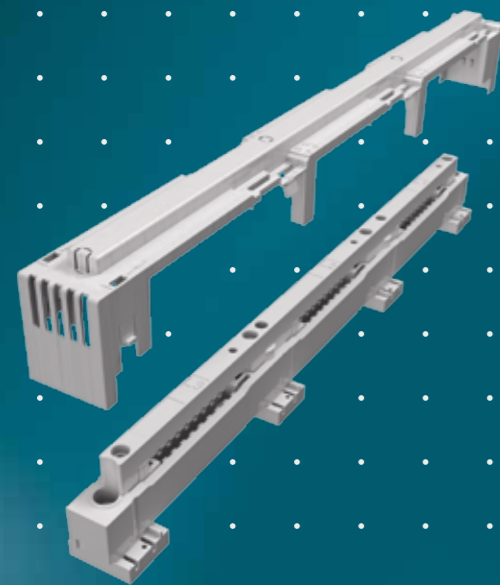


FULLY CONTACT-PROTECTED BUS SYSTEM

- Components can be mounted and removed from energized systems
- Base plate profiles make it possible for the bus system to be covered from the back; Base plate fasteners are eliminated as a path for arcs to develop
- Cover openings serve as a centering aid for connection clamps, making it easy to position components such as NH in-line fuse switch disconnectors or circuit breaker adapters



100 mm width 50 mm width



ALL-PURPOSE BUSBAR SUPPORTS

- Mounting non-drilled flat busbars
- Screwed upperpart fastening brackets ensure greater bus stability
- Accessories: Contact protection cover for bus supports
- Superstructuring possible with NH in-line fuse switch disconnectors – even with contact-protected bus supports



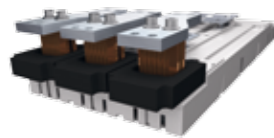
CrossLink® 185Power CONTACT PROTECTION MODULE

- CrossLink® technology provides optimum contact protection and also dimensional scope for direct and secure connecting of components to the busbar system
- Modules in 50 mm und 100 mm widths available
- Easy, no-tool mounting; However for safety reasons, tool-only disassembly
- For rear partitioning, base plate profiles can be snapped from the back onto the CrossLink® 185Power contact protection modules

THE EASIEST LINK BETWEEN EVERYTHING

EQUES®185Power adapter for circuit breakers

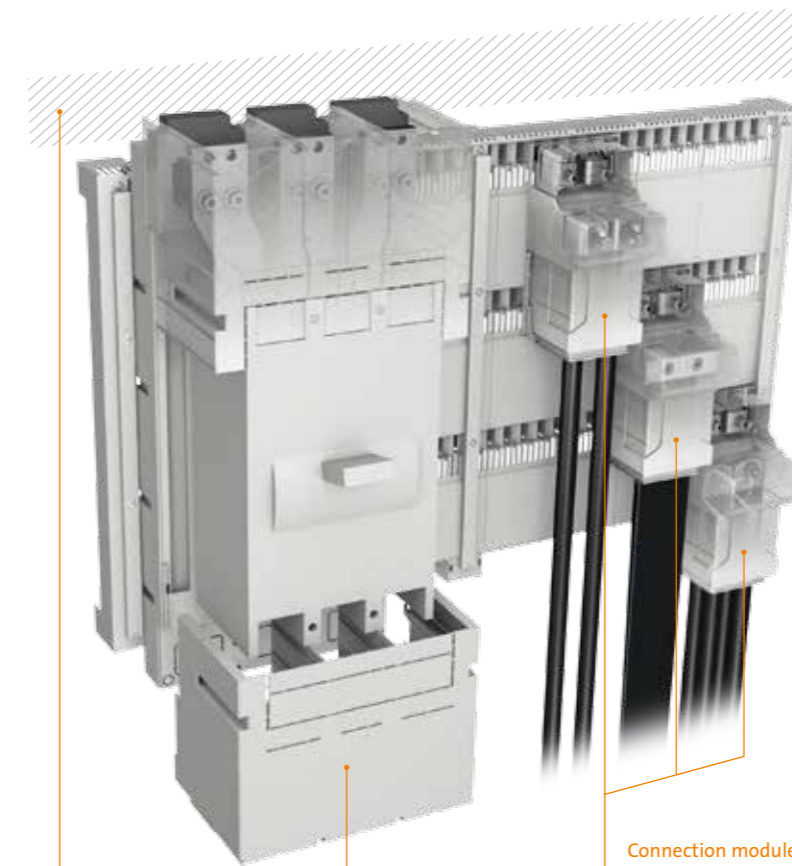
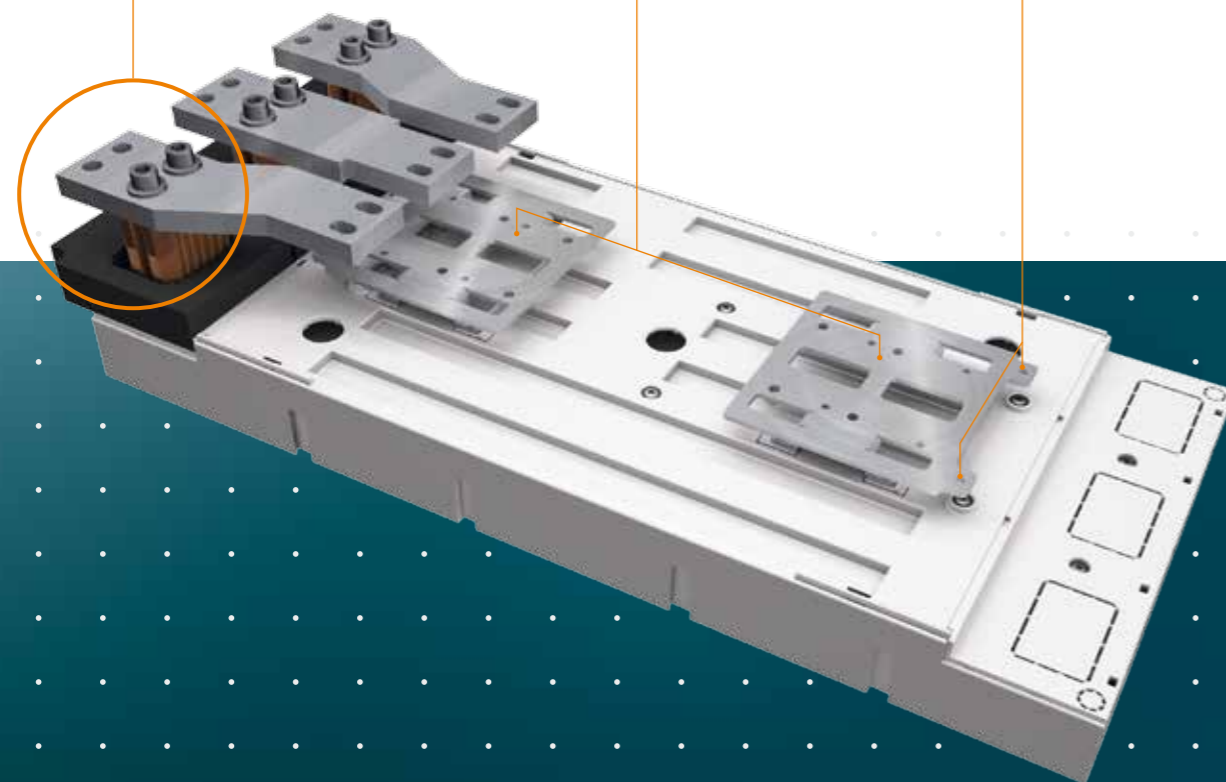
Our adapters enable circuit breakers to be quickly and easily mounted on the 185Power system. They can be used for both feed- and tap-mounting of circuit breakers to the bus system – something, of course, which applies to all the customary circuit breakers up to 1600A.



Integrated current measurement using standard current transformers

Mounting plate with various drilling templates for various brands of circuit breaker

As a **mounting aid** for the circuit breaker, two bolts can be fixed in the mounting plate. They act to support the weight of the circuit breaker during installation on the system adapter.



An additional **cross-beam** can support the weight of the circuit breaker and adapter. Threaded holes on the top of the adapter, to the right and left, are for mechanical fastening to this beam.

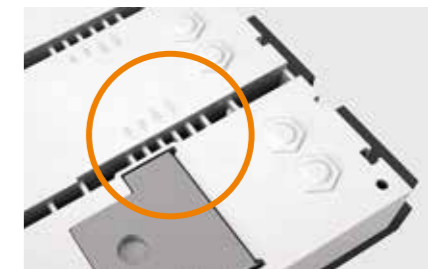
Contact protection shrouds for the connecting set and terminal compartment of the circuit breaker

Connection modules

Three contact-protected clamping methods are available for variable feed-in and connection of busbar systems:

- Connection module with 2 or 3 conductor terminals for copper and aluminium up to 240mm²
- Connection module for 4 or 6 cable lugs
- Connection module for 1 or 2 laminated copper bands 80 or 100 mm wide

The connection can be easily established on the contact-protected system and is variably adaptable at any connection point.



Mounting aid from plug-in type positioning elements with the screw-clamp connection equipped mounting variant. They can be plugged to fit all bus height cross-sections.



EQUES®185Power ADAPTER FOR CIRCUIT BREAKERS

- Connection possible from top and bottom from the busbar system to the circuit breaker
- The all-purpose mounting plates allow all standard circuit breakers to be mounted on the adapter
- Rated amperages: 630 A, 800 A, 1000 A, 1250 A, 1600 A
- Terminal shrouds are available for contact protection of the connecting set and the terminal connection. This provides complete partition from above and below
- The terminal compartment cover of the NH in-line fuse switch disconnectors – QUADRON®185Power – of Sizes NH1 to NH3 can easily be snapped on at the contact protector



ADAPTER MOUNTING

There are two possibilities for mounting the adapter onto the bus bars: One of them is direct bonding conventionally undertaken with screw clamp connection onto the drilled buses. The other is the extremely convenient and time-saving variant with tightener as a no-drill mounting on a contact-protected system. The tightener version can also be used for the non contact-protected system.

CIRCUIT BREAKER MOUNTING

Using extra fixations for screws as a mounting aid, the circuit breaker can be easily and rapidly mounted onto the adapter and securely bonded.

TRANSFORMER MEASUREMENT

To save space, three current transformers (CTs) can be directly integrated on the EQUES 185Power adapter. Transducers are easy to connect, and for efficient energy management purposes, provide data on power and consumption.

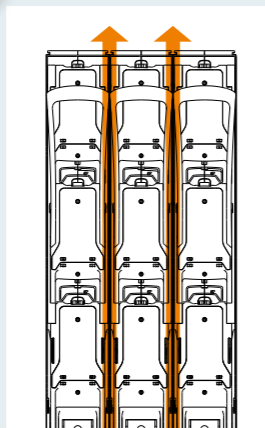
GREAT MOMENTS OF EFFICIENCY

QUADRON®185Power The new NH in-line fuse switch disconnectors

The newly devised, QUADRON®185Power NH in-line fuse switch disconnectors for NH00 to NH3 fuse sizes can be mounted rapidly, easily and securely. In a way that involves no drilling. The convenient-to-access line terminal and integration-type transformers (CTs) represent additional highlights of this innovative new family.



NEW



SMALL DUCTS BIG IMPACT

The lateral ducts of the QUADRON®185Power NH in-line fuse switch disconnectors produce a kind of draw-off chimney which acts as a cooling and ventilation system and pinpoints the discharge of switching gases and heat.



MAXIMUM CAPACITY ON THE BUS

The QUADRON®185Power NH in-line fuse switch disconnectors

Easily fit any combination of the QUADRON®185Power NH in-line fuse switch disconnectors of Sizes 00 to 3 to the 185Power system. Based on application specific requirements, the NH in-line fuse switch disconnectors can be conveniently, quickly and securely mounted with mechanical clamps without drilling or bolted directly to a drilled busbar.

YOUR BENEFITS

- + Hinged windows for time-saving mounting
- + Easily accessible cable terminal compartment
- + Lid can be locked in the open and closed positions
- + Lid position monitoring with two signaling switches per lid
- + Easy switching thanks to ergonomic operating handle
- + Considerable scope for cable connecting
- + Outgoing feeder top/bottom can be retrofitted
- + Lid can be lead-sealed

QUADRON®185Power NH IN-LINE FUSE SWITCH DISCONNECTOR Size 00/185mm, flat version

- Design 1- and 3-pole switchable
- Shallow depth allows for a space saving design
- Adapter also available for mounting two QUADRON®185Power NH in-line fuse switch disconnectors Size 00/185 at a 100 mm drilling interval

QUADRON®185Power NH IN-LINE FUSE SWITCH DISCONNECTOR Size 00/185mm, high version

- Design 1- and 3-pole switchable
- In the overall height compatible with Size NH1-NH3 in-line fuse switch disconnectors
- Optimized fulcrum position for easy fuse removal

QUADRON®185Power NH IN-LINE FUSE SWITCH DISCONNECTOR Size 1-3/185mm

- Type 1- and 3-pole switchable
- 910 A transformer strip for secondary connection of 630 kVA transformer


QUADRON®185Power DOUBLE SWITCHABLE NH IN-LINE FUSE SWITCH DISCONNECTOR

- 1250 A, 2 x NH Size 3
- Outgoing feeder possible from top or bottom
- Sufficiently large terminal compartment cover
- 4 cable lugs per phase can be connected



+ **QUADRON®185Power FUSE BLOCK**
Open version, Size NH00-NH3

- Mounting possible in a contact-protected condition
- Optional labelling on phase separating bar

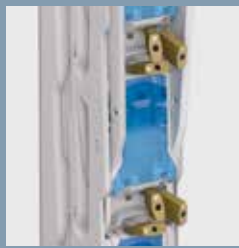


+ **LOCKABILITY**
NH in-line fuse switch disconnecter, Size NH00

- 3-pole switchable, closed with 3 pad locks, 5 mm shackle diameter
- 3-pole switchable, open with 2 pad locks, 5 mm shackle diameter
- 1-pole switchable, closed with 1 pad lock per lid


NH in-line fuse switch disconnecter, Sizes 1-3

- 1- and 3-pole switchable, closed with 3x3 pad locks, 5 mm shackle diameter
- 3-pole switchable, open with 3x2 pad locks, 5 mm shackle diameter



PARKING POSITION

The lids of the 1-pole switching NH in-line fuse switch disconnectors can be unhinged. A safe parking position is assured from them being turned over and re-mounted. The lid can no longer be inadvertently closed.



+ **MORE VARIANTS OF THE NH IN-LINE FUSE SWITCH DISCONNECTORS QUADRON®185POWER**

- Size NH00 to NH3 available with electronic fuse monitoring
- Available with LED fuse indicator for indicating the fuse condition



Simple fuse withdrawal and insertion from optimally positioned fulcrum point of the fuse carrier of the Size NH00, high version, NH in-line fuse switch disconnecter.



Easy fuse unlocking

COMPLETE FLEXIBILITY IN MOUNTING

One bus – three connection possibilities

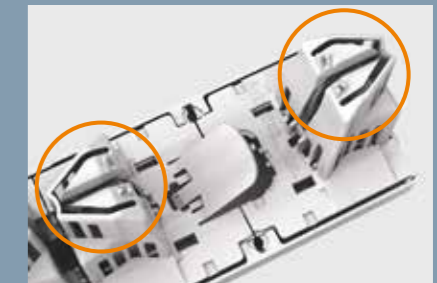
NH in-line fuse switch disconnectors offer tremendous versatility of mounting to the Wöhner 185Power system from their innovative design. All Size NH00 to Size NH3 models can be mounted in three ways on the busbar:

- ① **No-drill mounting on the CrossLink-protected busbar system using a mechanical fastener**
- ② **No-drill mounting with a mechanical fastener directly to a busbar structure**
- ③ **Mounting with a bolt connection (M8/M12) to a drilled busbar**

All QUADRON®185Power NH in-line fuse switch disconnectors can be installed with outgoing terminals at the top or bottom. The lower section can be turned and the fuse clip housing re-fitted in the same position; in so doing, there is no change to the supporting wedges of the CrossLink covering system.

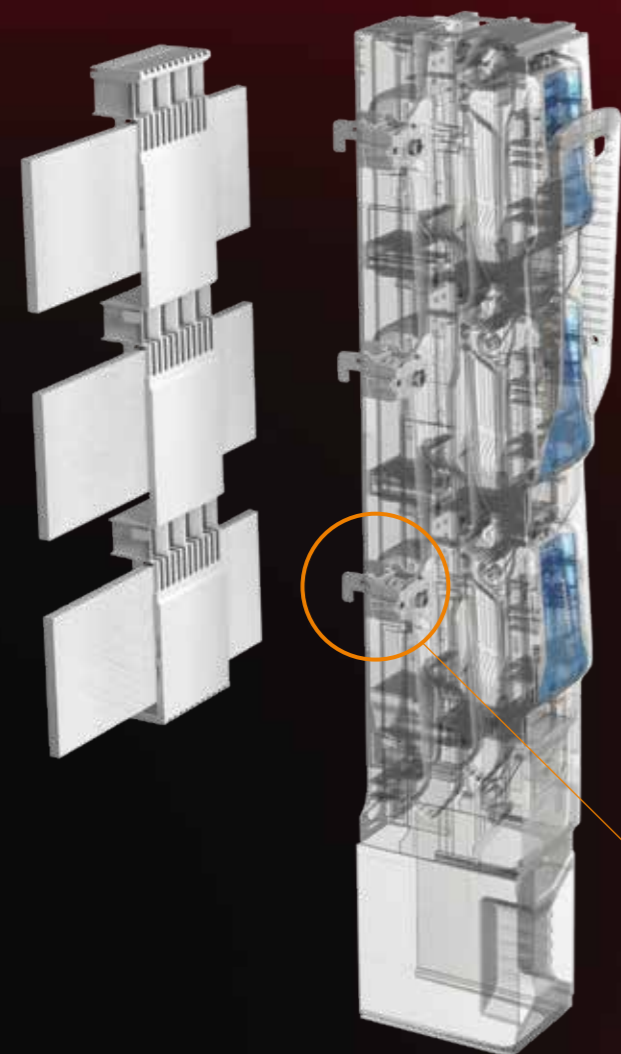
NEW

NO DISMANTLING – MOUNTING CONVENIENCE



The QUADRON®185Power NH in-line fuse switch disconnectors can be directly mounted on the busbar through a hinged window – without them having to be dismantled beforehand.

- Contacts are IP10 protected with the lid dismantled
- IP20 touch-safe when completely assembled



① Easy, safe, efficient: Mounting with mechanical clamp on the CrossLink contact protection cover

In order to not unnecessarily interrupt the operation of equipment, mechanical clamp-deployed mounting can also be done in an energized state. This ensures maximum safety for a qualified electrician – with due consideration given to BGV A3.



② No-drill mounting with a mechanical clamp

Mounting with mechanical clamps to a system without CrossLink contact protection is also possible. In so doing, the strip can be easily attached onto the bus without this added level of protection.



③ Mounting with M8/M12 bolt connection

Three M8/M12 screws can be used to fix the NH in-line fuse switch disconnector onto either drilled or stamped buses in the traditional method after the added labor of drilling holes in the busbars.



VARIABILITY IN THE CONNECTION METHOD

Easily accessible terminal compartment

The requirements placed on the connection method are varied. To simplify handling the QUADRON®185Power NH in-line fuse switch disconnectors across the wide range of connection types, Wöhner has devised a particularly accessible terminal compartment.

INNOVATIVE COOLING AND VENTILATION

Effective discharge of switching gases

The full-length lateral ducts of the QUADRON® 185Power NH in-line fuse switch disconnectors produce a kind of draw-off chimney which acts as a cooling and ventilation system for the pinpoint discharging of switching gases and heat. The need for arcing chambers is no longer necessary thanks to this simplified and effective discharge opening method.

CONNECTION ARRANGEMENT 1

Box terminal

No additional terminal compartment cover is needed when using a box terminal for the connection.



CONNECTION ARRANGEMENT 2

Drawer-type method

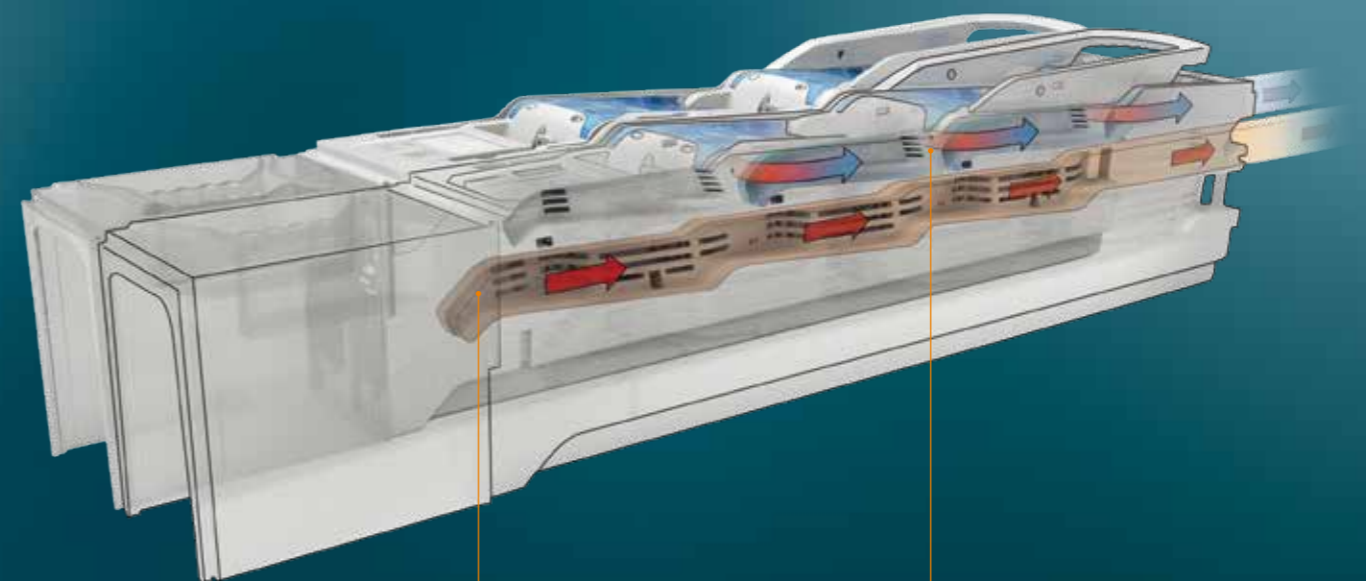
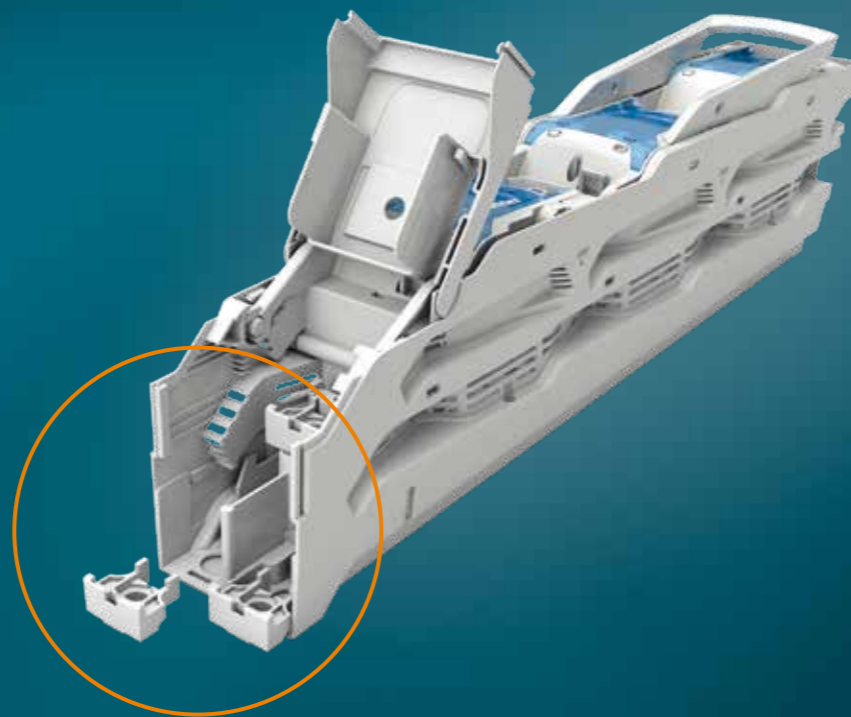
The drawer-type method allows for a considerable variation in connections. Connection can be flexibly made with either nut or stud bolt – depending on installation requirements. An additional terminal housing cover is needed when using a cable lug for the connection. These covers can be linked in series to form longer covers.



Screw-clamp connection with insertion nut



Screw-clamp connection with a stud bolt



Two QUADRON®185Power NH in-line fuse switch disconnectors fitted next to each other create at their centre a **full length ventilation duct** which - like a chimney - discharges hot air.

Pinpointed diversion of the switching gases for rapidly extinguishing arcs



CURRENT TRANSFORMER MOUNTING

Intelligently solved

Without any extra space required, current transformers can be easily swung into the strip structure. CTs are available in all standard measuring ranges and precision classes.



LEAVE BEHIND A GOOD IMPRESSION

The attractive appearance of your switchgear assembly is what ultimately leaves a lasting impression of you on your customer.

The 50 mm and 100 mm grid units of the CrossLink contact protection modules make planning easier and provide you with a maximum degree of safety. For their part, the matched components raise safety levels and simplify installing, maintaining, servicing and extending the system. Deployment of the 185Power system is synonymous with both skill and a sense for operating efficiency.



 **MODULARITY** ✓

 **SAFETY** ✓

 **SIMPLICITY** ✓

 **EFFICIENCY** ✓

 **COMPATITIBILITY** ✓

 **ORDERLY** ✓

ORDERING DATA

Type	Size	Pack Size	Part No.
QUADRON®185Power, NH in-line fuse switch disconnecter, 3-pole switching, bottom/top connection			
NH in-line fuse switch disconnecter screw M8 deep version suitable for CT mounting	NH00	1	33 700 *
NH in-line fuse switch disconnecter screw M8 flat version	NH00	1	33 704 *
NH in-line fuse switch disconnecter screw M12	NH1	1	33 701 *
NH in-line fuse switch disconnecter screw M12	NH2	1	33 702 *
NH in-line fuse switch disconnecter screw M12	NH3	1	33 703 *
QUADRON®185Power, NH in-line fuse switch disconnecter, 3-pole switching, special designs			
Double NH in-line fuse switch disconnecter, 2x size 3, 1250 A, 4x screw M12	2 x NH3	1	33 731 *
NH in-line fuse switch disconnecter 910A	NH3	1	33 730 *
QUADRON®185Power, NH in-line fuse switch disconnecter, 3-pole switching, bottom/top connection with fuse monitoring			
NH in-line fuse switch disconnecter screw M8 deep version suitable for CT mounting	NH00	1	33 720 *
NH in-line fuse switch disconnecter screw M8 flat version	NH00	1	33 724 *
NH in-line fuse switch disconnecter screw M12	NH1	1	33 721 *
NH in-line fuse switch disconnecter screw M12	NH2	1	33 722 *
NH in-line fuse switch disconnecter screw M12	NH3	1	33 723 *
QUADRON®185Power, NH in-line fuse switch disconnecter, 1-pole switching, bottom/top connection			
NH in-line fuse switch disconnecter screw M8 deep version suitable for CT mounting	NH00	1	33 715 *
NH in-line fuse switch disconnecter screw M8 flat version	NH00	1	33 719 *
NH in-line fuse switch disconnecter screw M12	NH1	1	33 716 *
NH in-line fuse switch disconnecter screw M12	NH2	1	33 717 *
NH in-line fuse switch disconnecter screw M12	NH3	1	33 718 *
QUADRON®185Power, NH fuse block, open version, bottom/top connection			
NH fuse block M8 flat version	NH00	1	33 705 *
NH fuse block screw M12	NH1	1	33 706 *
NH fuse block screw M12	NH2	1	33 707 *
NH fuse block screw M12	NH3	1	33 708 *
Connection accessories			
Wedge clamp terminal 10mm² - 95mm²	NH00	1	33 734 *
V-direct connection terminal	NH1/2	1	33 735 *
V-direct connection terminal	NH3	1	33 736 *
Terminal compartment cover size 00, 50mm wide	NH00	1	33 732 *
Terminal compartment cover size 1-3, 100mm wide	NH1/2/3	1	33 733 *


Type	Size	Pack Size	Part No.
Pilot switch			
Pilot switch for monitoring lid position	NH00/1/2/3	1	33156 *
CrossLink®185Power, system cover (frontal)			
Shock protection module 50mm		5	01 433 *
Shock protection module 100mm		5	01 434 *
Accessories for mounting without drilling			
Terminal clamp for the touch-protected busbar system	NH00	3	33 737 *
Terminal clamp for the touch-protected busbar system	NH1/2/3	3	33 738 *
Terminal clamp	NH00	3	33 739 *
Terminal clamp	NH1/2/3	3	33 740 *
Integrable current transformer, precision class 1, rated secondary current 5 A			
Current transformer 80A	NH00	3	33 741 *
Current transformer 150A	NH00	3	33 742 *
Current transformer 100A	NH1/2/3	3	33 743 *
Current transformer 150A	NH1/2/3	3	33 744 *
Current transformer 200A	NH1/2/3	3	33 745 *
Current transformer 250A	NH1/2/3	3	33 746 *
Current transformer 400A	NH1/2/3	3	33 747 *
Current transformer 600A	NH1/2/3	3	33 748 *
Integrable current transformer, suitable for calibration, precision class 0,5, rated secondary current 5 A			
Current transformer 80A	NH00	3	33 749 *
Current transformer 150A	NH00	3	33 750 *
Current transformer 100A	NH1/2/3	3	33 751 *
Current transformer 150A	NH1/2/3	3	33 752 *
Current transformer 200A	NH1/2/3	3	33 753 *
Current transformer 250A	NH1/2/3	3	33 754 *
Current transformer 400A	NH1/2/3	3	33 755 *
Current transformer 600A	NH1/2/3	3	33 756 *
Integrable current transformer, calibrated, precision class 0,5, rated secondary current 5 A			
Current transformer 80A	NH00	3	33 757 *
Current transformer 150A	NH00	3	33 758 *
Current transformer 100A	NH1/2/3	3	33 759 *
Current transformer 150A	NH1/2/3	3	33 760 *
Current transformer 200A	NH1/2/3	3	33 761 *
Current transformer 250A	NH1/2/3	3	33 762 *
Current transformer 400A	NH1/2/3	3	33 763 *
Current transformer 600A	NH1/2/3	3	33 764 *

* Available in 3rd quarter of 2014
Price on request


ORDERING DATA


Type	Pack Size	Part No.
EQUES®185Power, busbar adapter up to 1600A, with clamp connection		
For ABB Tmax T6 630, top connection to system	1	32 712 *
For ABB Tmax T7 1000, top connection to system	1	32 716 *
For Eaton NZM4, 1600 / Siemens VL1250 3VL7, top connection to system	1	32 721 *
For further types of MCCBs upon request		
EQUES®185Power, busbar adapter up to 1600A, with screw connection		
For ABB Tmax T6 630, top connection to system	1	32 710 *
For ABB Tmax T7 1000, top connection to system	1	32 714 *
For Eaton NZM4, 1600 / Siemens VL1250 3VL7, top connection to system	1	32 718 *
For further types of MCCBs upon request		
Feeder modules		
3-pole set of feeder modules, direct cable connection, 2x 240mm²	1	01 437 *
3-pole set of feeder modules, flat conductor, 2x 80x10	1	01 441 *
3-pole set of feeder modules, cable lug, 4x M12 / 300mm²	1	01 442 *
Cover for feeder modules	3	01 443 *
CrossLink®185Power, systems cover (frontal)		
Shock protection module 50mm	5	01 433 *
Shock protection module 100mm	5	01 434 *
Additional shock protection cover to close one 100mm shock protection module	1	01 435 *
System shroud (rear)		
Base plate, 700mm long (set for all 3 phases)	1	01 436 *
Busbar support and accessories		
Busbar support 185mm for undrilled busbars 40, 50, 60, 80, 100, 120x10	4	01 430 *
Set of covers for busbar supports (1 left, 1 right)	1	01 431 *
Cover for central busbar support (busbar support can still be integrated in-between busbar components)	2	01 432 *


* Available in 3rd quarter of 2014
Price on request


 **MODULARITY**
Custom applications built from standard components

 **SIMPLICITY**
Drill-less mounting with compression clamps

 **COMPATIBILITY**
Mounts all standard circuit breaker and fuse types

 **SAFETY**
Touch-safe electrical protection from system components

 **EFFICIENCY**
Complete family of system components from a single source

 **ORDERLY**
Standardized components for a clean system design

Publication Information

Edited by: Holger Schulte, Alexander Rahn, Frank Lindenlaub

Concept and design: WHYBRAND GmbH

Typesetting: WHYBRAND GmbH

Renderings: Treeproducts GmbH

Lithography: Neidhart + Schön AG

Production: G. Peschke Druckerei GmbH

Paper: heaven 42 softmatt

Fonts: Thesis, TheSans

CrossLink® TECHNOLOGY

The innovative CrossLink® technology from Wöhner meets the requirements placed on power distribution equipment with readily available modular components delivering high levels of system dependability and personal safety. Systems can thus be engineered in the most straightforward way and modified to evolving application requirements.

YOUR BENEFITS

- ✚ Optimum contact protection of the busbar system and its components
- ✚ The scope always available for direct and assured bonding of components onto the busbar system
- ✚ Planning & design benefits from standardized grids in the same system layout



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