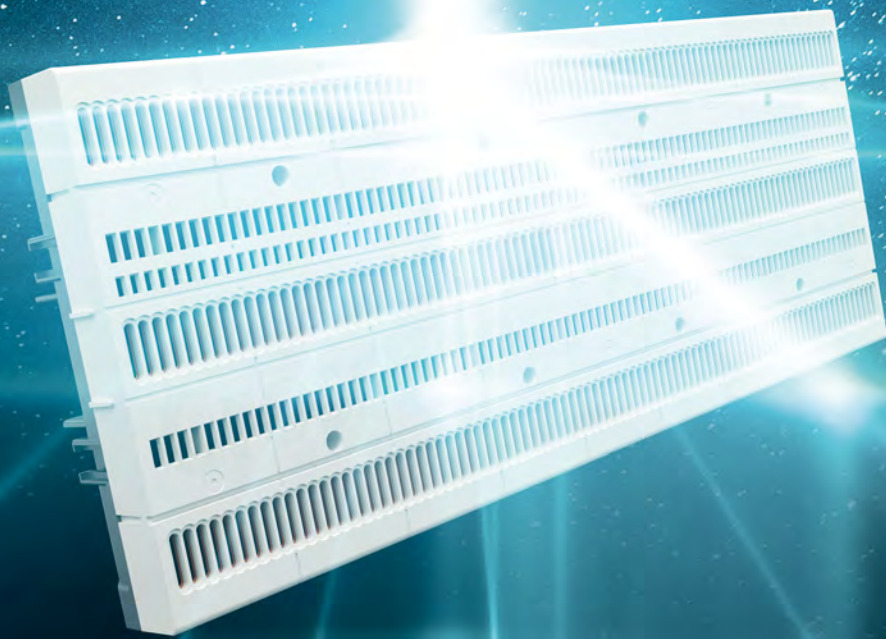


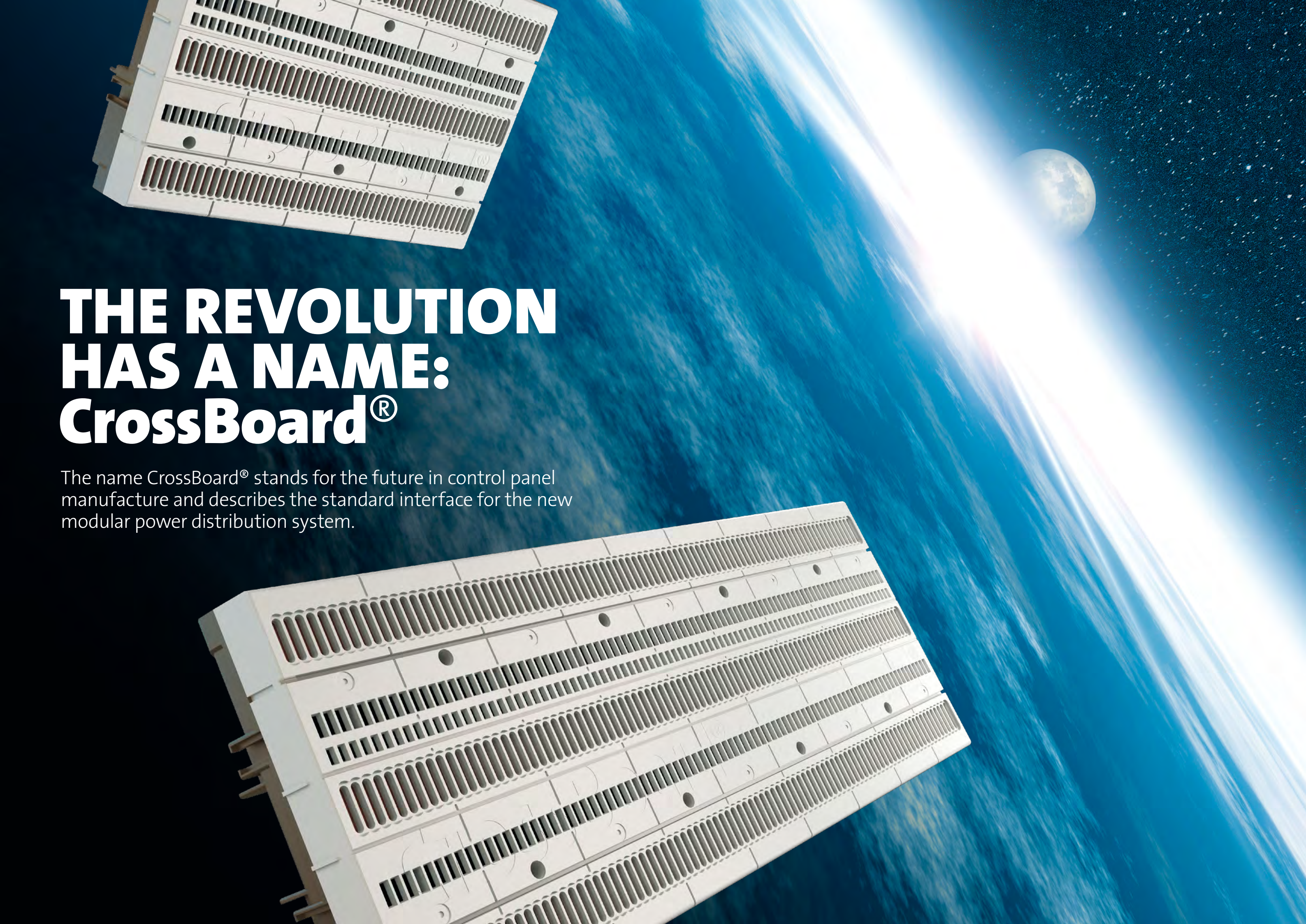
wöhner



# CrossBoard®

The new basic system

ALLES MIT SPANNUNG



# THE REVOLUTION HAS A NAME: CrossBoard®

The name CrossBoard® stands for the future in control panel manufacture and describes the standard interface for the new modular power distribution system.

# TWO BOARDS ONE MISSION

The new CrossBoard® is the modular system solution with which safe power distribution up to 125A can be quickly and easily realised, especially in machine and plant engineering.

The CrossBoard® is available in a width of 225mm and 405mm. Both can be combined with each other or with other Wöhner systems, such as the 60Classic or 30Compact busbar system. The Starter Kit is composed of the small or large CrossBoard®, the CRITO® power supply module, three universal EQUES® adapter models for various current ratings, the MOTUS® hybrid motor starter and the OMUS® hybrid switch.



## SAFE

The CrossBoard® with its all-round touch-safe protection offers a high degree of safety. This lets you realise power distribution systems in accordance with the IEC 61439 and UL 508 standard, including IP20 touch-safe protection.



## FAST

The CrossBoard® is an out-of-the-box system that saves the user a lot of time on mounting. Unpack, snap on to the DIN rail and immediately begin fitting the components.



## EASY

The components are simply snapped on to the CrossBoard®, meaning the connection is automatic. The integrated polarity protection prevents errors during installation.



## COMPATIBLE

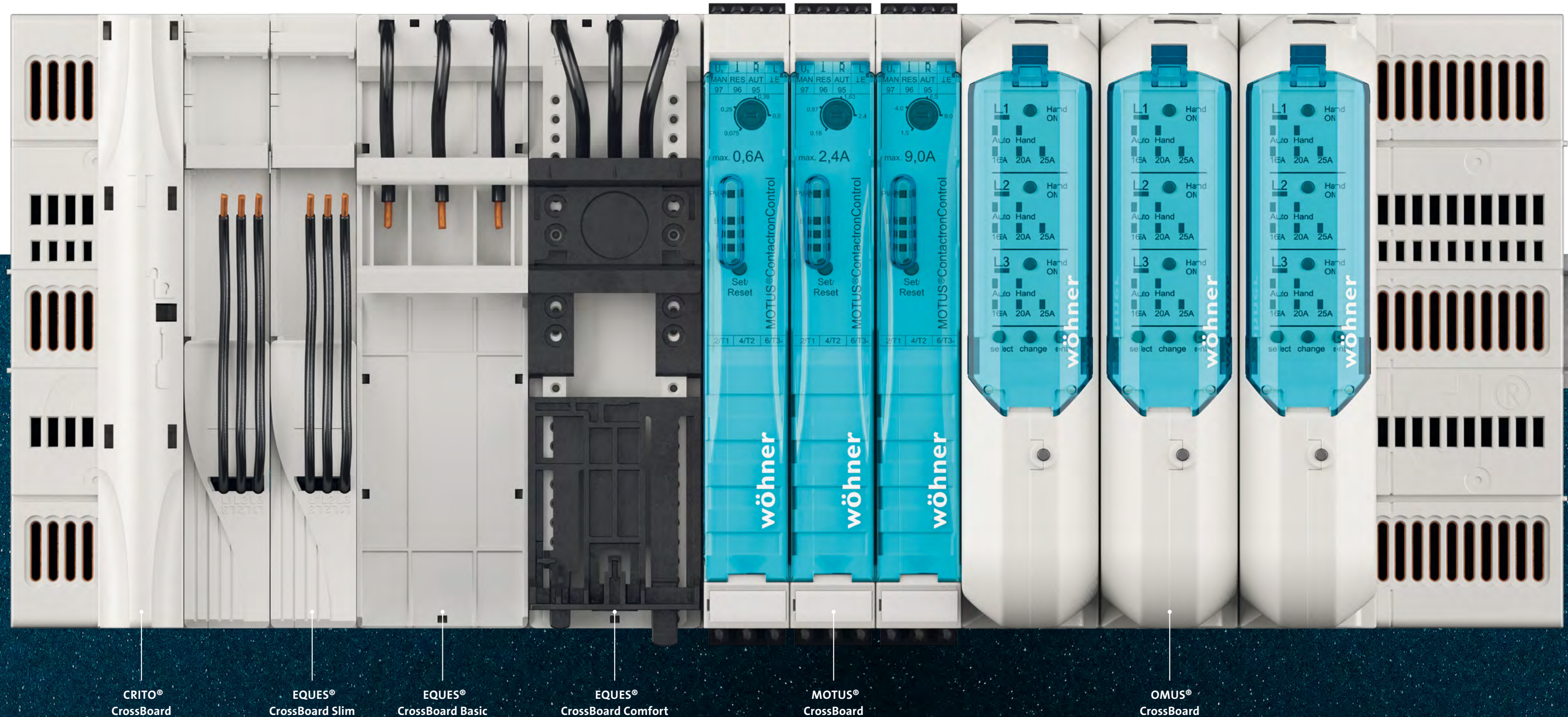
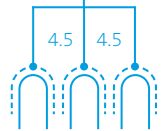
The components can be fitted to the CrossBoard®, as well as to conventional busbar systems such as 60Classic or 30Compact using CrossLink® adapters. As a universal system, CrossBoard® is also open for components from other manufacturers.

### CrossBoard®405

The larger CrossBoard® version is 405 x 160mm.

### 4.5

The CrossBoard® follows a 4.5mm grid. This means components with a pitch of 4.5mm or 9mm can be quickly and easily fitted.



CRITO®  
CrossBoard

EQUES®  
CrossBoard Slim

EQUES®  
CrossBoard Basic

EQUES®  
CrossBoard Comfort

MOTUS®  
CrossBoard

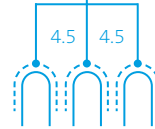
OMUS®  
CrossBoard

## CrossBoard®225

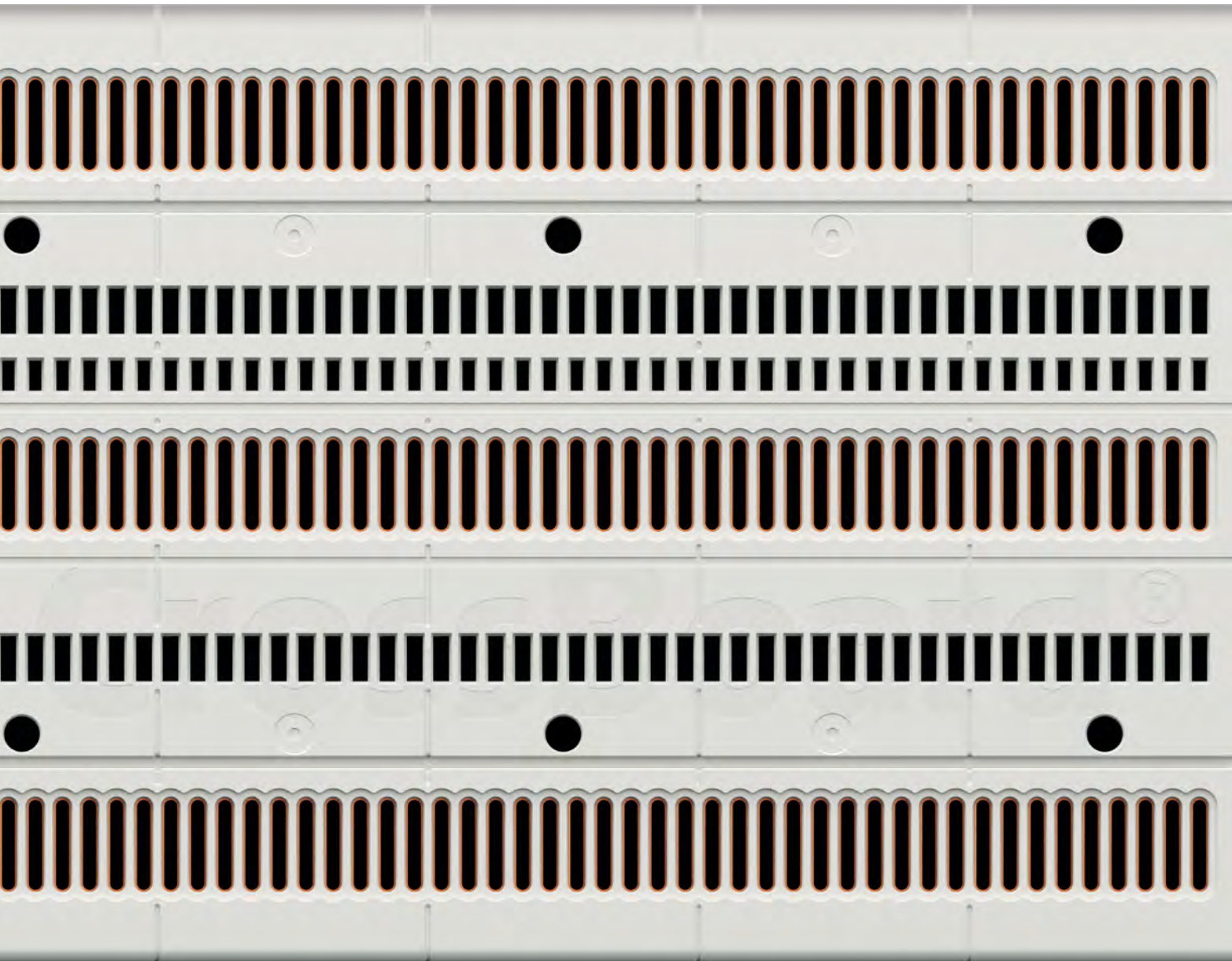
The smaller CrossBoard® version is 225 × 160mm.

## 4.5

The CrossBoard® follows a 4.5mm grid. This means components with a pitch of 4.5mm or 9mm can be quickly and easily fitted.



225



# BUSBAR TO GO

## The new out of the box system solution

With the CrossBoard®, Wöhner has established a whole new system that combines the advantages of a high-performance busbar system with traditional wiring on DIN mounting rails. The CrossBoard® is an out-of-the-box system that is supplied in one complete unit. It can be directly assembled and fitted with components after unpacking. This innovative solution saves time and costs. The integrated touch-safe protection allows you to work live in compliance with the applicable regulations and legislation.

### CrossLink® TECHNOLOGY

Wöhner fulfils the requirements of power distribution equipment with high availability as well as high system and personal safety with the innovative CrossLink® Technology, which is also used in the CrossBoard®. This lets you realise systems and tailor them to different requirements in the simplest way.

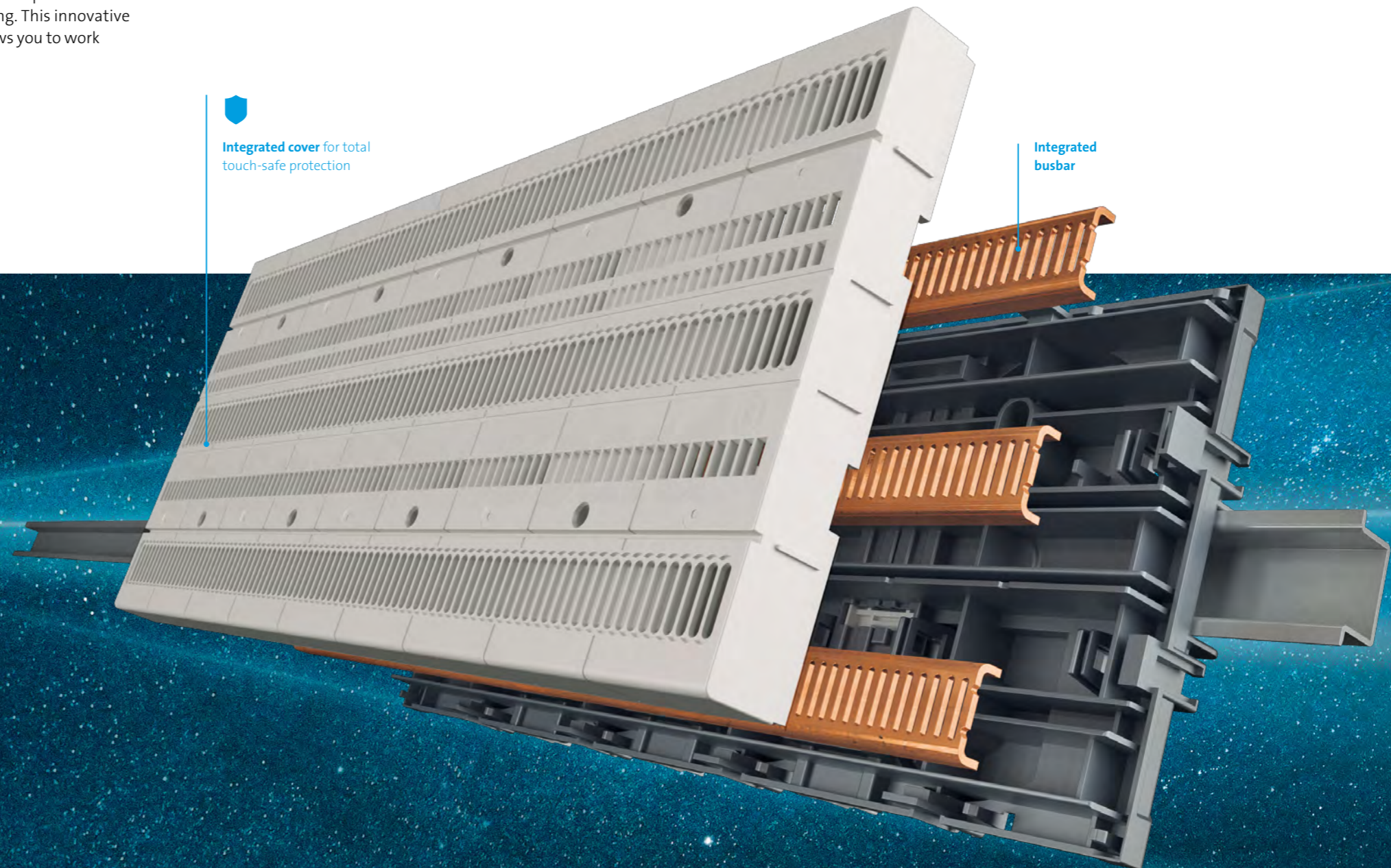
#### The advantages

- + Optimum touch-safe protection for the busbar system and the components
- + Direct and secure connection of components to the busbar system is always an option
- + Planning advantages through standardised grid system layout



Integrated cover for total touch-safe protection

Integrated busbar



### UL 508 LISTED



World-wide acceptance of a proven system: The requirements of UL 508A apply for Industrial Control Panels in the USA market. To make the acceptance of systems for the USA market easier, the system technology products from Wöhner are UL Listed. This not only makes approval easier, but also results in lower costs.

Approval is also possible as a UL Recognized Component, however usage of these requires "CoAs" (Conditions of acceptability) to be listed in the manufacturer's UL file. In contrast to this, UL Listed products can be used without restrictions.

The UL Listing in combination with test certificates in accordance with the applicable IEC standards guarantees the worldwide acceptance of products. Wöhner systems technology stands for diversity, flexibility and especially for safety.

# ASSEMBLED AT THE SPEED OF LIGHT

Time is money – this also applies to the installation of distribution equipment. That's why mounting is very easy with the CrossBoard® and is completed without the use of tools. This applies to the mounting of the CrossBoard® in the control panel, as well as to mounting of components on the CrossBoard®.



## ① Mounting the CrossBoard®

### DIN RAIL MOUNTING



The CrossBoard® is supplied as an out-of-the-box system and can be clicked on DIN mounting rails either high (35 × 15mm) or flat (35 × 7.5mm).

### MOUNTING PLATE



The CrossBoard® can be screwed directly to a mounting plate. Matching holes make mounting easier.

## ② Mounting the CrossBoard® components



The components can be easily snapped onto the CrossBoard® with no tools. This means both the mechanical attachment as well as the electrical connection are accomplished in one operation. The integrated polarity protection prevents errors during installation.

## ③ Dismounting the CrossBoard® components



The components can be easily removed and snapped back on to another section of the CrossBoard®. For safety reasons, the lock mechanism must be released with a screwdriver. This prevents accidental removal of any components.

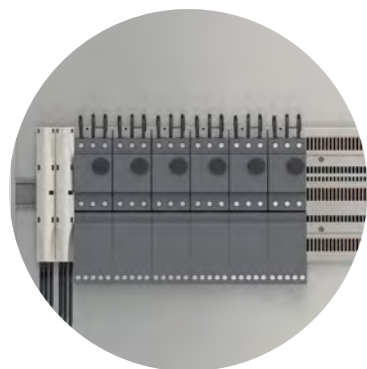
# POWER DISTRIBUTION SYSTEMS MADE EASY

The CrossBoard® is a connection platform with which structured, modular solutions can be constructed. The user utilises the CrossBoard® to bring order to the power distribution system and yet remains flexible at the same time. The combination of several CrossBoard modules or combination with conventional Wöhner busbar systems is also possible.

The use of CrossBoard® system components saves time on mounting and cabling. Compared to power distribution equipment with direct wiring and connection via comb-type busbars, installation is completed significantly faster.

The CrossBoard® can be mounted in the control panel and then fitted with components or installed as a completed system.

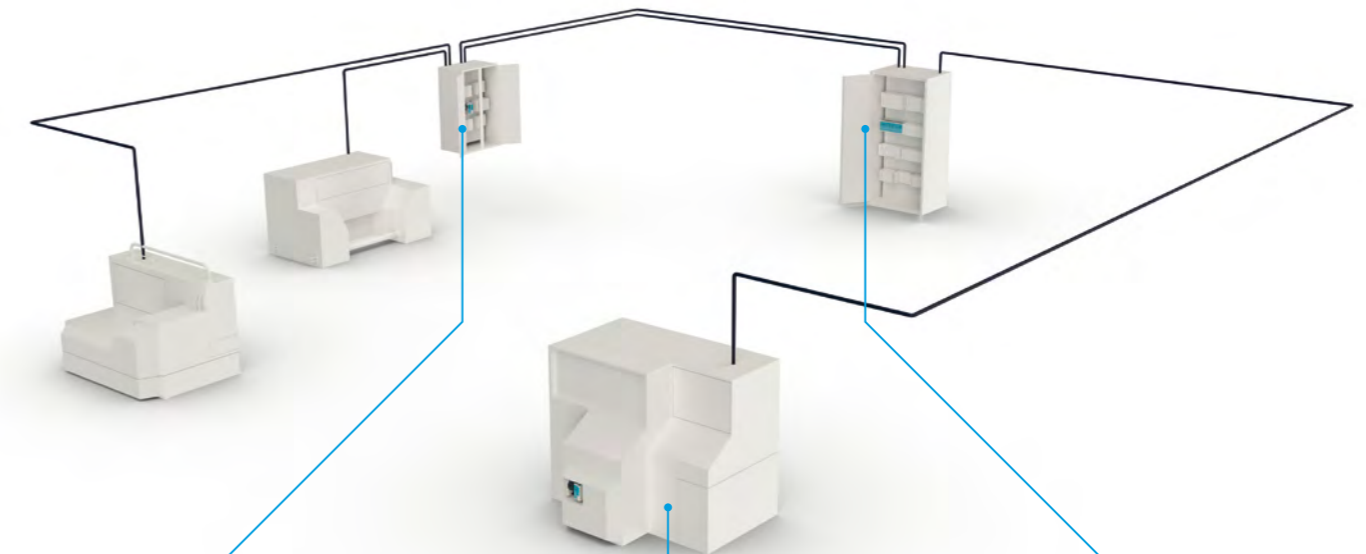
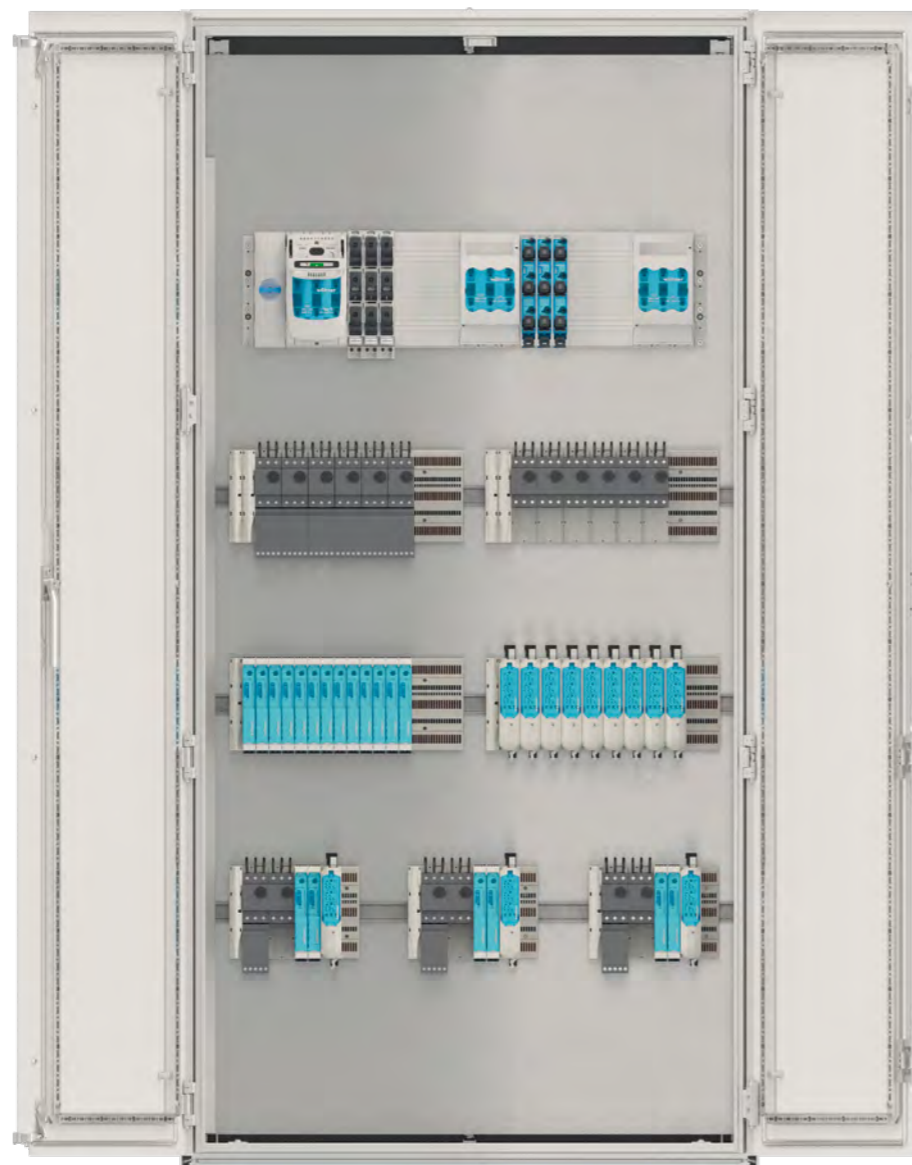
The CrossBoard® supports a variety of applications: Central or localised power distribution equipment, integrated directly in the machine or control panel, or for control and air conditioning technology.



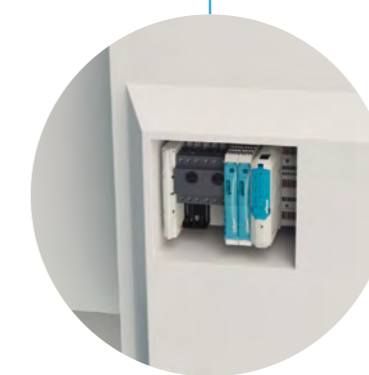
Installing CrossBoard®



Traditional wiring with higher labour costs



Decentralised power distribution



Directly integrated into the cabinet



Centralised power distribution

# READY, SET, GO STARTER KIT

The Starter Kit is composed of the CrossBoard®, a feeder unit, a range of adapters as well as the hybrid motor starter and hybrid switch.

All products on this page are using CrossLink® Technology and are UL listed.



## CrossBoard®225 CrossBoard®405

The CrossBoard® is the connection platform for the components.

- Rated current: 125A
- Equipment width: 225mm / 405mm
- Height: 160mm
- Short-circuit strength: I<sub>pk</sub>=25kA
- Rated voltage (IEC): 690V AC/600V DC
- Rated voltage (UL): 600V AC/DC
- UL listed



## CRITO®CrossBoard

Power is supplied to the CrossBoard® with a CRITO® connection module.

- Rated current: max 80A
- Equipment width: 22.5mm
- Connection terminal: 1.5–16 mm<sup>2</sup>
- Snap-Lock technology for tool-free connection of conductors
- Incl. cover
- UL listed



## MOTUS®CrossBoard

The MOTUS® hybrid motor starters control motors up to 4 kW directly from the CrossBoard®. The integrated functions – direct and reversing starter, overload protection and emergency switch-off – lead to a significant reduction in wiring requirements.

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



## OMUS®CrossBoard

The OMUS® hybrid switch is designed for the switching of resistive loads. Hybrid switching technology minimises power loss and achieves a long lifespan.

- Up to 25A continuous current
- Equipment width: 36mm
- 4 integrated functions: Feeder, fuses, monitoring and hybrid switching technology
- Switchable in a choice of 3-pole or 1-pole
- Up to 30 mil. switch cycles
- UL listed



## EQUES®CrossBoard Slim

The EQUES® universal adapter with an equipment width of 22.5mm can be used for the mounting of measurement and monitoring relays. It offers space in the housing for 10×38 or Class CC fuses.

- Rated current: 16A
- Equipment width: 22.5mm
- Connection cross-section 2.5mm<sup>2</sup>
- Fuse housing for 10×38 or Class CC fuses up to max. 16A
- Fixed mounting rails
- UL listed



## EQUES®CrossBoard Basic

Easy EQUES® busbar adapter for the mounting of motor protection devices.

- Rated current up to 32A
- Equipment width: 45mm
- Fixed mounting rails
- Connection cables: 2.5 mm<sup>2</sup>, 6 mm<sup>2</sup>
- UL listed



## EQUES®CrossBoard Comfort

The EQUES®CrossBoard Comfort Adapters are available for simplifying the mounting of motor starter combinations from various manufacturers.

- Rated current up to 45A
- Equipment width: 45mm
- Moveable mounting rails
- Connection cable: 2.5mm<sup>2</sup>, 4mm<sup>2</sup>, 6mm<sup>2</sup> or 10mm<sup>2</sup>
- Accessories for mounting contactors
- UL listed



# ENDLESS POSSIBILITIES

Power distribution with the CrossBoard® is modular and can be easily converted and adapted to new requirements as needed. This ensures user flexibility. A CRITO® connection module can feed the CrossBoard®. Motor protection switches and motor starter combinations can be mounted to the modular power distribution system via the EQUES® adapters

from Wöhner. Resistive loads can be easily controlled using the OMUS® hybrid switch. The MOTUS® hybrid starters control motors up to 4 kW directly from the CrossBoard®. The CrossBoard® interface is available as an open platform to other manufacturers, who would like to develop their own products for the CrossBoard®.



**Configuration 1** CrossBoard® in mixed installation with adapters (22.5 and 45mm) and MOTUS®



**Configuration 2** Simple construction for tap-off with motor protection switches



**Configuration 3** CrossBoard® combination for applications with heating circuits



**Configuration 4** CrossBoard® fitted with MOTUS® for applications in drive technology

## ORDERING DATA

| Type   | Rated current | Dimensions   | PU | PG | Part no. |
|--|---------------|--------------|----|----|----------|
| <b>CrossBoard®</b>   |               |              |    |    |          |
| Modular power distribution system, touch safe with CrossLink® Technology                 |               |              |    |    |          |
| CrossBoard®225   | 125A          | 225 × 160mm  | 1  | 06 | 11 225   |
| CrossBoard®405   | 125A          | 405 × 160mm  | 1  | 06 | 11 405   |
| <b>CRITO®CrossBoard</b>  |               |              |    |    |          |
| Connection module 3 pole with Snap-Lock Technology, with cover and CrossLink® Technology |               |              |    |    |          |
| 1.5–16mm²  | max. 80A      | 22.5 × 160mm | 1  | 07 | 01 592   |
| <b>EQUES®CrossBoard Slim</b>   |               |              |    |    |          |
| Adapter with fixed mounting rail, with fuse housing and CrossLink® Technology            |               |              |    |    |          |
| 2.5mm² (AWG 14)  | 16A           | 22.5 × 160mm | 1  | 05 | 36 009   |
| <b>EQUES®CrossBoard Basic</b>  |               |              |    |    |          |
| Adapter with fixed mounting rail and CrossLink® Technology                               |               |              |    |    |          |
| 2.5mm² (AWG 14)  | 16A           | 45 × 160mm   | 1  | 05 | 32 666   |
| 6mm² (AWG 10)  | 32A           | 45 × 160mm   | 1  | 05 | 32 682   |
| <b>EQUES®CrossBoard Comfort</b>  |               |              |    |    |          |
| Adapter with moveable mounting rail and CrossLink® Technology                            |               |              |    |    |          |
| 2.5mm² (AWG 14)  | 16A           | 45 × 160mm   | 1  | 05 | 32 668   |
| 4mm² (AWG 12)  | 25A           | 45 × 160mm   | 1  | 05 | 32 676   |
| 6mm² (AWG 10)  | 32A           | 45 × 160mm   | 1  | 05 | 32 684   |
| 10mm² (AWG 8)  | 45A           | 45 × 160mm   | 1  | 05 | 32 692   |
| <b>Accessories for EQUES®CrossBoard Comfort</b>  |               |              |    |    |          |
| Mounting rail 45mm   |               | 45mm         | 10 | 05 | 32 947   |
| Positioning piece for Siemens S0 and S00   |               | 45mm         | 10 | 05 | 32 952   |
| Positioning piece for EATON PKZ0   |               | 45mm         | 10 | 05 | 32 979   |
| Extension module for direct starter combinations   |               | 45mm         | 8  | 05 | 32 933   |
| Extension set for reverse starter combinations   |               | 45mm         | 4  | 05 | 32 934   |
| <b>MOTUS®CrossBoard</b>  |               |              |    |    |          |
| Hybrid motor starter with reversing function and CrossLink® Technology                   |               |              |    |    |          |
| MOTUS® hybrid motor starter, 0.6A  | 0.075–0.6A    | 22.5 × 160mm | 1  | 21 | 36 109   |
| MOTUS® hybrid motor starter, 2.4A  | 0.18–2.4A     | 22.5 × 160mm | 1  | 21 | 36 110   |
| MOTUS® hybrid motor starter, 9.0A  | 1.5–9A        | 22.5 × 160mm | 1  | 21 | 36 111   |
| <b>OMUS®CrossBoard</b>   |               |              |    |    |          |
| Hybrid switch for resistive loads and CrossLink® Technology                              |               |              |    |    |          |
| OMUS® hybrid switch, IEC   | 25A           | 36 × 160mm   | 1  | 21 | 36 154   |
| OMUS® hybrid switch, UL  | 20A           | 36 × 160mm   | 1  | 21 | 36 159   |

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