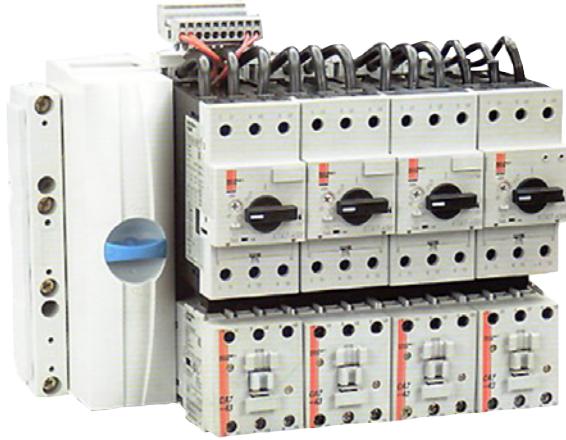


60mm Bus Bar Systems from

wöhner

ALLES MIT SPANNUNG



Reducing panel space, cost and increasing UL/CSA short circuit current ratings are essential for custom control panel builders to be competitive in the marketplace. While some users still insist on the classic motor control center, other users are asking for multi-motor starter panels with modular flexibility in a smaller space. A three phase 60mm bus bar system is perfectly suited to meet these specifications.

Partnering with the Best



Sprecher + Schuh, the motor control and protection consultants, have formed an alliance with Wöhner to offer three phase 60mm bus systems to our customers. Sprecher + Schuh is a recognized leader in knowledge of the application of self-protected combination motor controller (Type E/F) applications. Now teamed with Wöhner, we are positioned to recommend and provide CAD layouts of bus bar designs, quote bus bar components, or assemble bus systems into custom multi-motor starter control panels.



Reduce Panel Assembly Time with a Modular Bus Bar System

The Wöhner Panel System is a group of current carrying component modules which simplifies panel design, layout and assembly. Sprecher + Schuh is proud to partner with Wöhner USA to offer 3-Phase 60mm Bus Bar Systems in conjunction with Sprecher + Schuh starters, controllers and other components for a complete panel assembly that offers flexibility, modularity and reduced assembly costs.

The Wöhner 3-Phase 60mm bus bar system offers power distribution throughout your panel with a minimum of installation labor. Panel systems can span horizontally, or vertically, depending on the application needs and enclosure size. Sprecher + Schuh starters, motor controllers and other components (mounted to removable modules) snap directly to the current carrying bus bar system, eliminating the need for direct power wiring.

Modular Means Flexibility

Modular units can be assembled elsewhere, installed or removed and replaced in a snap. Plug-in modules reduce assembly time and provide the user with a system that can be updated and maintained by simply unplugging and replacing a unit with in-stock modules. The 60mm System eliminates traditional components like power distribution blocks, individual conductors, wiring duct, wire markings and cable ties. Bus bar systems are available in a variety of lengths and amperages up to 4000A max. Touch-safe covers and future provisions enable expansion without the need for redesign or retrofitting.

Exceptional Features

- UL approved and SCCR rated bus system
- IP20 protection against accidental contact
- Simplifies planning through modularity
- Work bench assembly of device modules
- Design flexibility maximized
- Ideal for systems frequently changed, rebuilt or serviced
- International acceptability



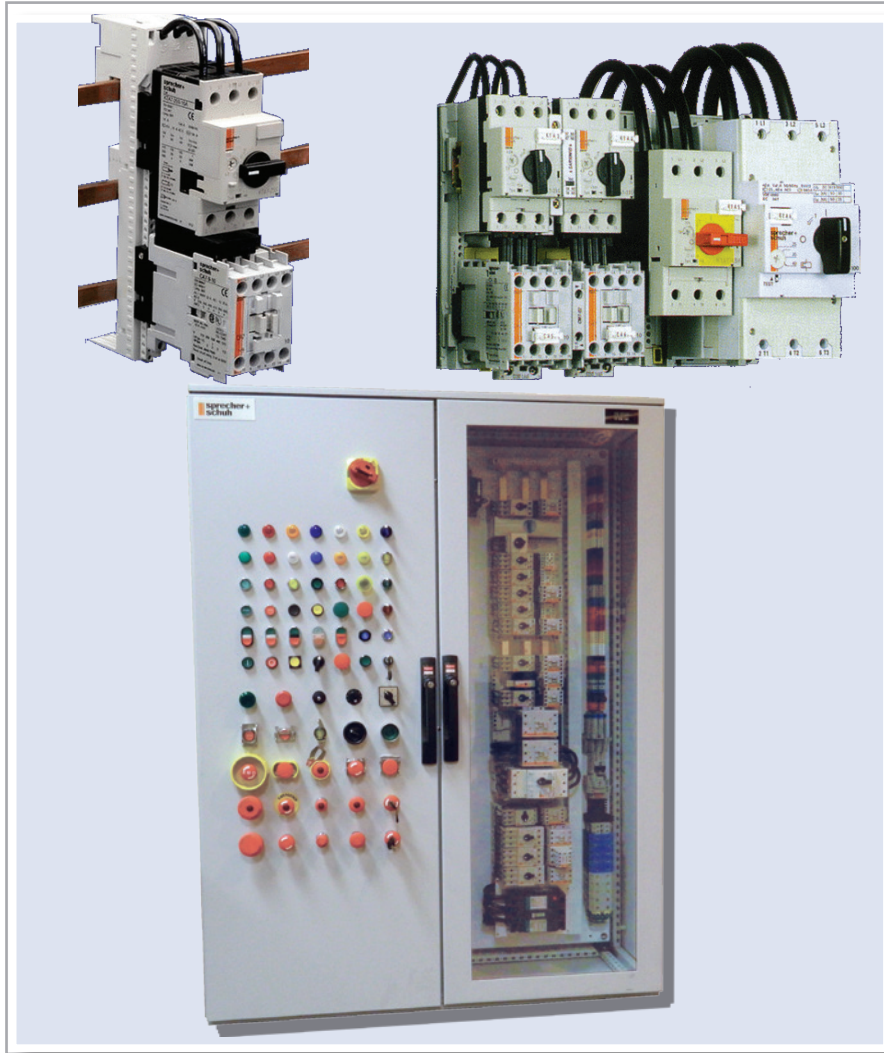


Europeans originated 3-phase bus bar systems, while North American industrial users have historically specified more expensive motor control centers. In recent years the market has become more international and bus bar systems have successfully influenced many user specifications as economic pressures increase. System integrators have increased the use of multi-motor starter control panels using 3-phase bus bar systems as opposed to the more expensive classic motor control centers. Now is the time to check out just how much time can be saved in design and assembly of multi-motor starter control panels by using UL Approved and SCCR rated 60 mm bus bar systems.

Designed for expandability

Bus bar systems are designed and built around specific application needs, from the available amperage of the system to the size of the enclosure. Sprecher + Schuh and Wöhner will work with you to design and build your panel system to exactly match your current and future panel needs.

Contact your Sprecher + Schuh representative for complete product information.



VERTICAL



HORIZONTAL

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Variety of Components

Wöhner Bus Bar Systems are comprised of a variety of components, assembled to fit the exact application specifications. Current carrying bus bars provide power to all the components of the system in one complete assembly that is flexible and safe.

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Copper Bus Bars

Tin plated, copper bus bars in standard 1.2 or 2.4 m lengths, or cut to size

12 x 5 mm	150A max.	
20 x 5 mm	362A max.	
30 x 5 mm	500A max.	
30 x 10 mm	756A max. per UL508	

* Bus bars up to 4000A are available

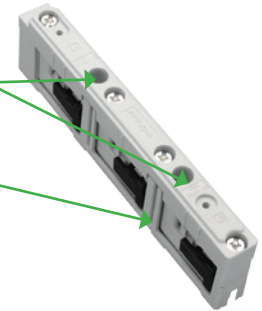
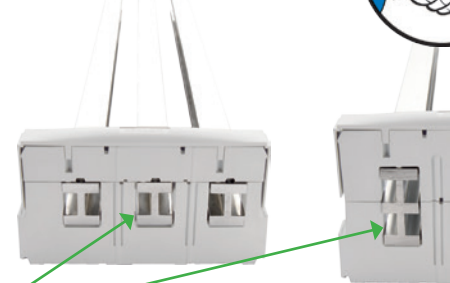
Universal Support

Fits 5mm or 10 mm bus bar & ranges up to 4000 Amps

Just two holes for mounting

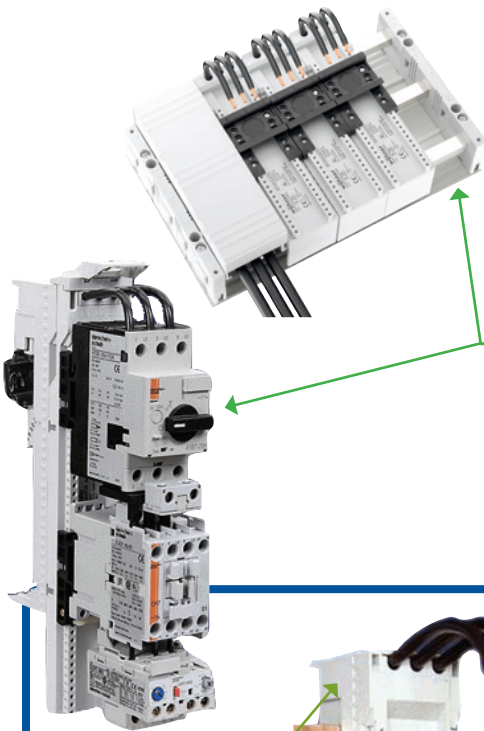
Sliding clamp mechanism

Snap together assembly



60mm Spacing

- Allows design in 3 dimensions
- Standard platform for IEC style components
- Accomodates most Sprecher+Schuh components



Bus Bar Modules

Modularity and flexibility is the heart of the 60mm bus bar system

- Eliminates power wiring, terminal labels and other costly components
- Provides electrical connection and support for the control device
- Adjusts to fit 5mm or 10mm thick bus bars
- Available in 45mm, 54mm and other widths to accommodate a variety of components
- Available in 200 or 260mm heights
- Current ratings for 25A to 80A
- Latching mechanism secures mounting module to bus bar
- Release mechanism for removal or adjustment of installed components
- Standard Wired or Terminal only models
- Available in Single or Double rail modules
- Eliminates most wiring errors



Control plugs attach to top and bottom

Wired or Terminal only models

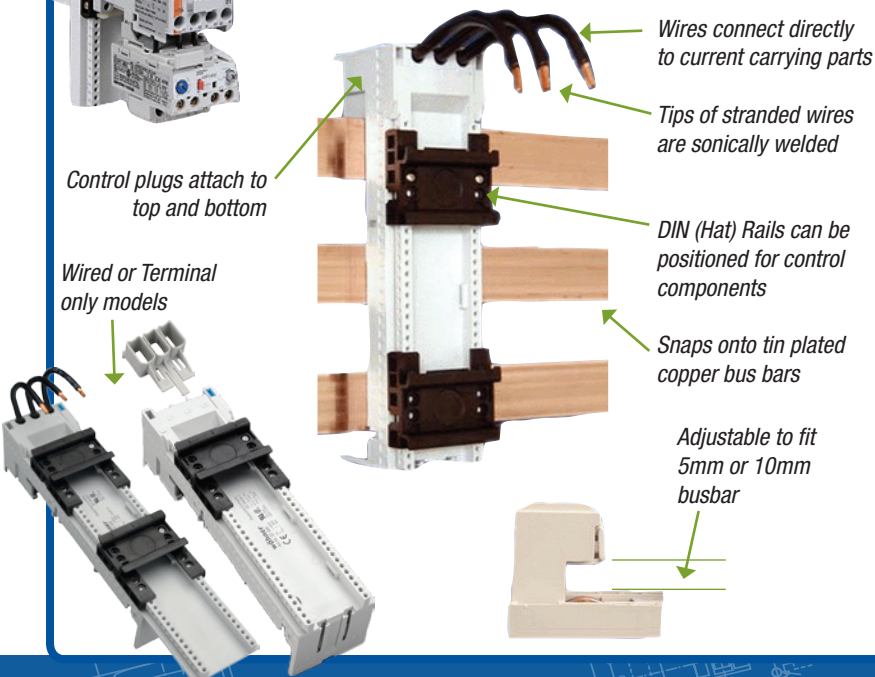
Wires connect directly to current carrying parts

Tips of stranded wires are sonically welded

DIN (Hat) Rails can be positioned for control components

Snaps onto tin plated copper bus bars

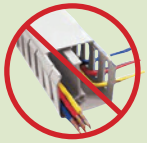
Adjustable to fit 5mm or 10mm busbar



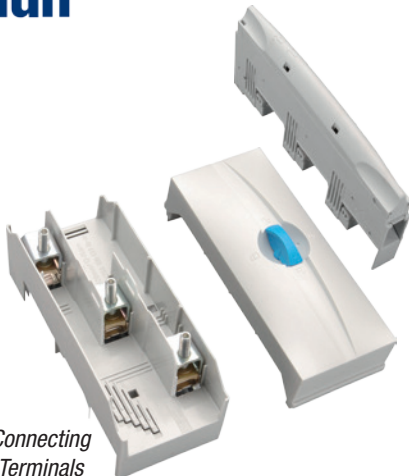


Reduce assembly time & costs

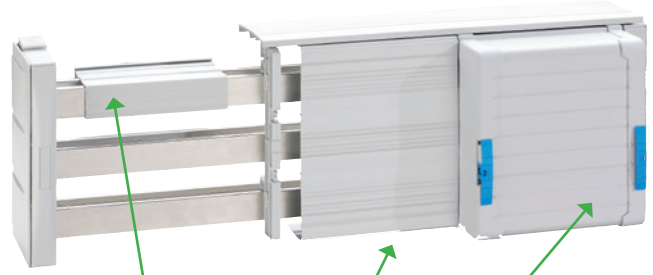
Wöhner Bus bar Systems are comprised of a variety of components, assembled to fit the exact application specifications. The 60mm bus bar system eliminates traditional components like distribution blocks, individual conductors, wiring duct, wire markings, and cable ties.



Connecting Terminals



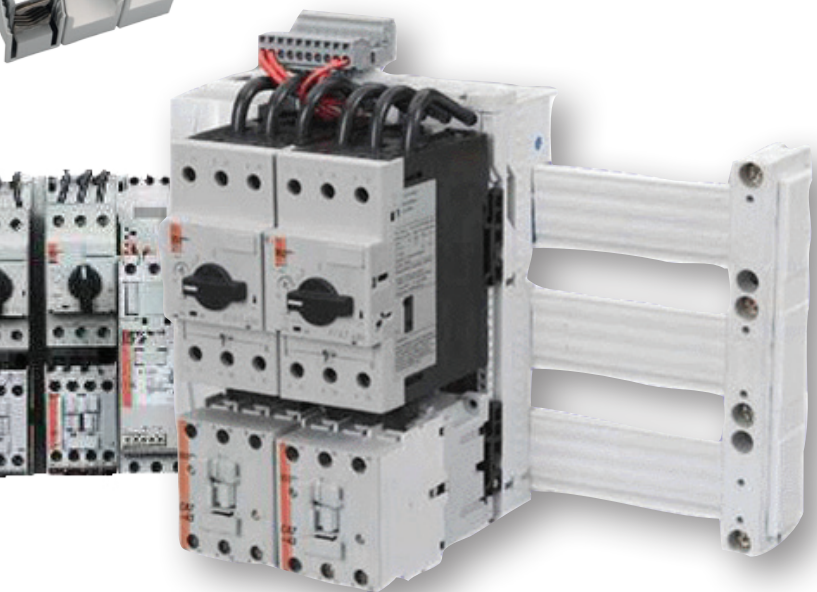
IP20 Touch Safe Covers



Snap on covers for individual bus bars

3-Phase Reserve Section covers

3-Phase System cover for terminal connections



CERTIFICATION

The Wöhner Bus Bar Systems is UL Listed in the United States and Canada and complies with NEC, UL508 and CE certifications the world wide.



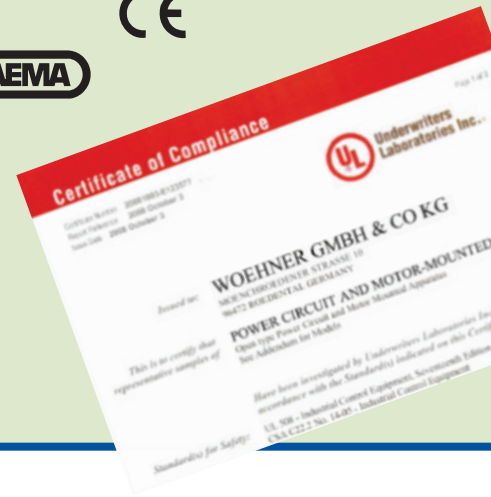
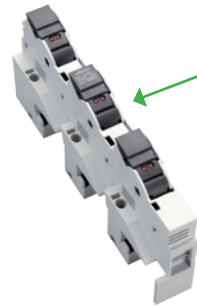
Accommodates Variety of Components

Customer specific components

Molded Case Circuit Breakers and EQUES® Power connectors

Bus Bar mountable Fuse Holders for Class CC and 10x38 (midget) fuses

Quandron® Crosslink Fuse Holders for up to 400A Class J fuses



SATISFACTION
GUARANTEED

★ PREMIUM
QUALITY ★

REDUCED
LABOR COSTS

A Wöhner Bus Bar Case Study

Sprecher + Schuh designed and built a Wöhner bus bar system with 7 wall mounted starters for demonstration purposes. A 30" X 20" x 8" Type 4 enclosure was selected to house the Wöhner bus bar system. Included in the panel is a 150 amp molded case breaker for feeder circuit protection and panel disconnect, as well as a 150 5VA control power transformer with primary and secondary protection. The motor loads included one each of a 30HP, 15HP, 10HP, 5HP, 3HP and 1HP motors in addition to one lighting load. A KTA7-45H was used for the 30 HP, a KTA7-25H for the 15HP load, and four KTA7-25S Type E self-protected Combo motor circuit controllers for the other motor loads. Also included were CA7 contactors with multifunction buttons on the front of the enclosure. The lighting load is supplied by a 15amp KTU7 molded case circuit breaker plus a CAL7 lighting contactor. The load requirements were sent to Wöhner, who responded with a dimensioned CAD layout and a list of required parts the very next day. All seven loads fit on one 418mm wide bus bar system. Mounting the Wöhner busbar supports required only four drilled holes. The bus bar was aid in place and tightened the four screws holding the top half of the support, then installed the other components right onto the busbar. It is important to note that the KTA7 or the KTU7 compact bus bar would have been only partially effective in this application. Since one load used the KTA7-45H, a distribution block would have been required to use compact bus bar. This was not needed because the Wöhner bus bar system effectively distributes power to all the components simultaneously. Design time was minimized and labor was seriously reduced with the use of the Wöhner system. The impressive feat was the ability to include seven loads along with the main disconnect and CPT into one diminutive space.

Premium Quality Provides Efficiency and Cuts Labor and Assembly Time

The assembly of a similar multi-starter using compact busbar would have required approximately eight hours of labor. Assembly with the Wöhner busy bars decreased labor time to 6 hours.

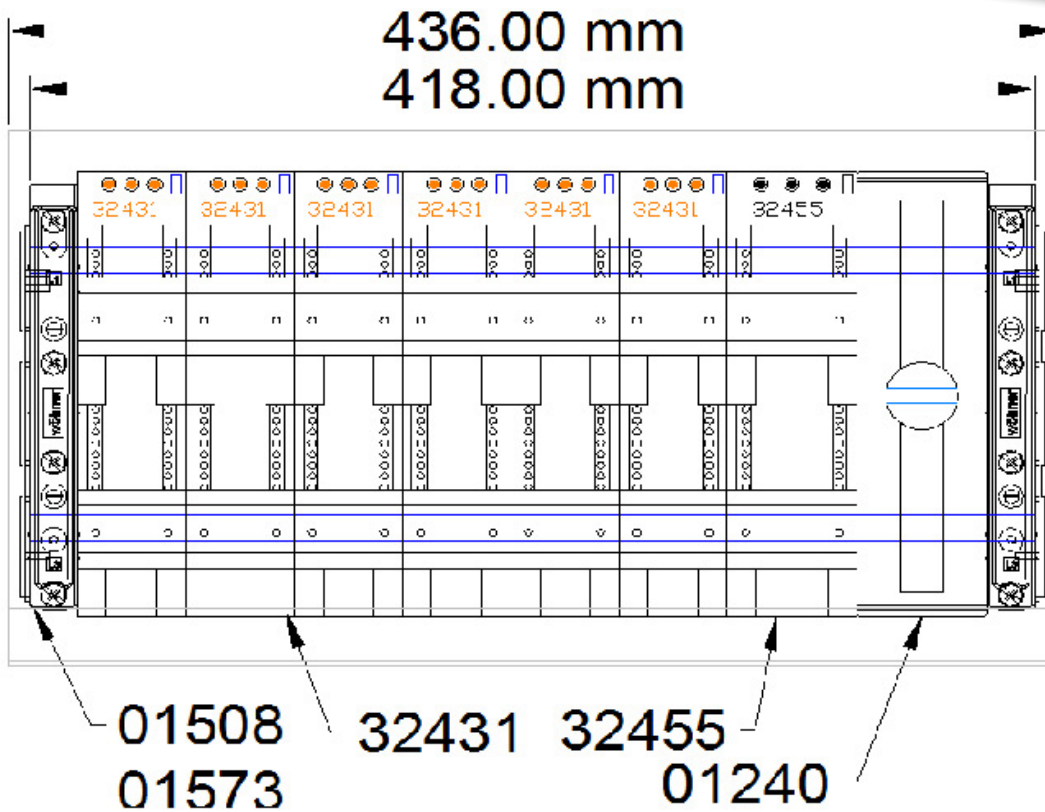
A multi-starter panel with the Wöhner busbar model would sell for \$2039, a slight \$200 premium over a standard compact busbar system. Premium quality comes at a slightly higher price, but ultimately saves money in the long run with lower labor costs and higher flexibility in design for multiple application use.



Wöhner Bus Bar Case Study



Wöhner Bus Bar CAD Drawing



Qty	Part No	Description	Comments
1	01515	230 X 700 Bottom trough.	Insulating base plate
2	01508	Universal busbar support, sys 60, conforms to UL508A	Busbar supports
2	01573	end cover, for busbar support 01 495 and 01 500	End cover for 01508
1	01618	Busbar, 12x5x2400mm, 150A, tinned	Tin plated copper busbar
1	01240	Terminal plate, 3-pole, 6 - 50mm ² , 54 x 200mm, w/cover	Terminal plate to feed system
1	32455	EEC Adapter 63A, 54mm W x 200mm L, 2 mounting rails	To mount and feed 45A MCC and contactor
6	32431	EEC adapter, 25A, 45mm x 200mm, 2 DIN rails	To mount and feed 25A MCC and contactor

This drawing is a suggested arrangement of the Wöhner Busbar System, based on unverified application requirements. The acceptability of this system is the responsibility of the panel builder.