

# PowerWize High-Current Wire-to-Board, Wire-to-Busbar Interconnects >

PowerWize High-Current Wire-to-Board/Wire-to-Busbar Connectors leverage our Coeur socket technology and are offered in two sizes, 6.00 and 8.00mm, delivering up to 200.0A of current, and the headers can be mounted on either printed circuit boards or busbars

## FEATURES AND ADVANTAGES

### Optimal current-carrying capacity

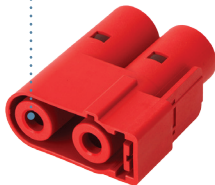
Offers multiple contact beams to ensure low contact resistance, low voltage drop and minimal heat generation at the contact interface



Coeur Socket

### Finger touch-safe receptacles

Designed per UL 60950 to isolate the crimp contacts and to prevent accidental contact with an energized circuit



### Finger touch-safe headers

Designed per UL 60950 to isolate the pins and to prevent accidental contact with an energized circuit



### Positive locking with active latches on receptacles and barbed geometry on headers

Provides operators tactile and audible feedback during system integration to help ensure secure mating; helps prevent cable assemblies from backing off headers due to shock, vibration, or mishandling



PowerWize Interconnects  
6.00mm Wire-to-Board/  
Wire-to-Busbar  
Connectors



PowerWize Interconnects  
8.00mm Wire-to-Board/  
Wire-to-Busbar  
Connectors

# PowerWize High-Current Wire-to-Board, Wire-to-Busbar Interconnects >

## FEATURES AND ADVANTAGES

### Low mating and unmating forces

Enable operators to mate and unmate cable assemblies even in hard-to-reach or tight spaces



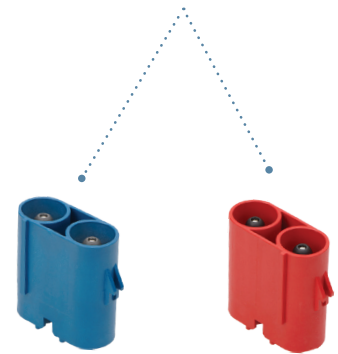
### Reliable, high-quality eight-sided crimp profile

Ensures minimal contact resistance at the interface between the wire and the crimp barrel, contributing to the system's minimal heat generation and higher current-carrying capacity compared to other designs



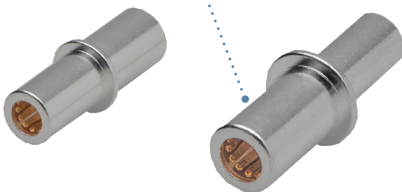
### Mechanically keyed and color coded with uniquely positioned ribs on header housings and matching slots on receptacles (based on connector color)

Ensures only like-colored connectors mate; helps prevent mismatching when multiple wire-to-board or wire-to-busbar interconnects are used in the same application



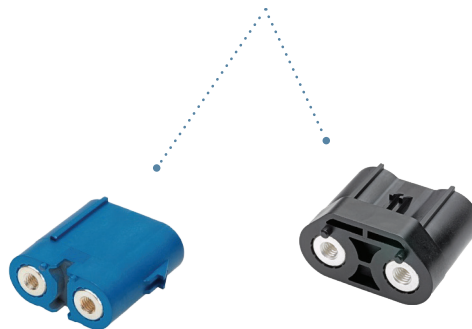
### Crimp contacts are available in a wide range of wire gauges

Provides design and manufacturing flexibility



### Screw-mount headers attach securely to either busbars or printed circuit boards

Provides design and manufacturing flexibility



### Field installable with battery-powered applicators

Enables on-site cable assembly fabrication for applications where cable assembly lengths are uncertain until installation is underway



# PowerWize High-Current Wire-to-Board, Wire-to-Busbar Interconnects >

## FEATURES AND ADVANTAGES

The TPA retainer slips over the stripped wire prior to crimping and after crimping it locks into the receptacle housing

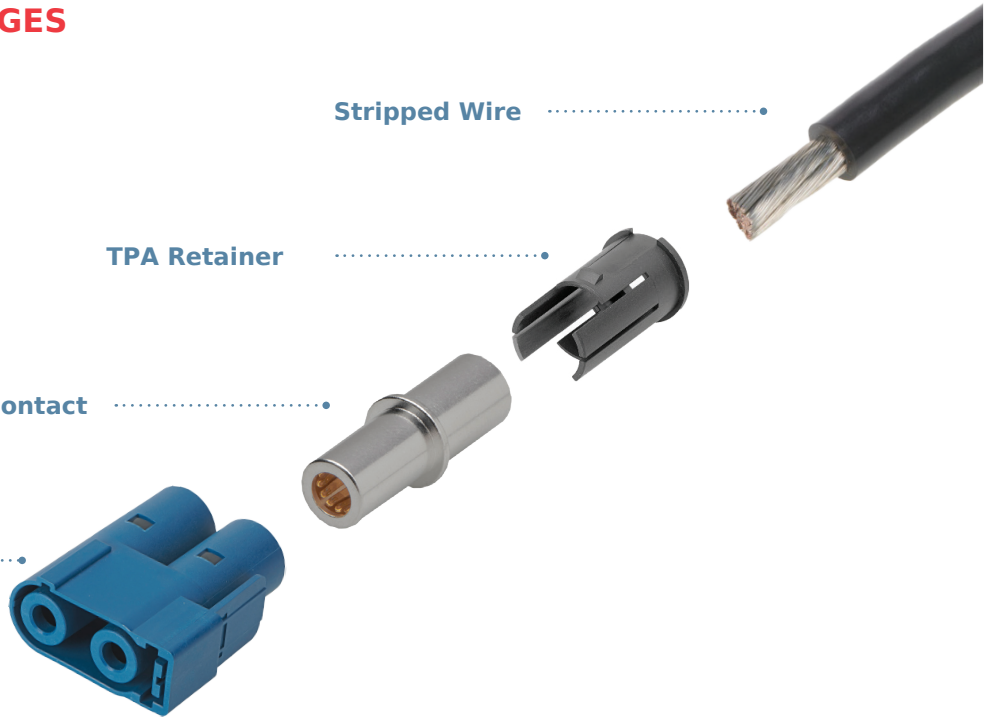
Offers a user-friendly cable assembly; helps ensure contact is fully engaged

Receptacle Housing

Crimp Contact

TPA Retainer

Stripped Wire



## MARKETS AND APPLICATIONS

### Telecommunications/Networking

- 5G/6G Base Stations
- Servers
- Data storage units
- Power distribution units (PDUs)
- Uninterruptable power supplies (UPSs)
- Digital cross connect switches
- Network routers

### Data Centers

- Servers
- Data storage units
- Power distribution units (PDUs)
- UPS/battery storage units
- Enterprise switches
- Circuit breakers
- Routers

### Industrial

- Factory equipment
- Battery farms
- Robotics

### Test and Measurement

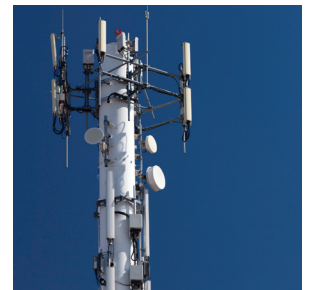
- Instrumentation devices



Factory Equipment



Data Center Servers



5G/6G Base Station

# PowerWize High-Current Wire-to-Board, Wire-to-Busbar Interconnects >

## SPECIFICATIONS

### Reference Information

Packaging: Tray or bag depending on part number; see packaging specifications for details  
UL File No.: E29179  
CSA File No.: LR19980-70184994  
Use With: Printed circuit boards and busbars  
Designed In: Millimeters  
RoHS: Yes

### Physical

Receptacle Housing: PBT  
Header Housing: PBT  
TPA Retainer: PBT  
Contact: High-performance Copper (Cu) Alloy  
Plating:  
    Socket contact area—Gold (Au)  
    Pin—Silver (Ag)  
PCB Thickness (min.): 1.58mm  
Busbar Thickness (min.): 1.50mm  
Operating Temperatures: -40 to +125°C

### Electrical (6.00mm Size)

Voltage (max.): 300V  
Current (max.): 120.0A  
Contact Resistance (max.): 0.25 milliohms

### Mechanical (6.00mm Size)

Whole Connector Mating Force (max.): 75N  
Whole Connector Unmating Force (min.): 10N  
Durability (min.): 200 mating cycles

### Electrical (8.00mm Size)

Voltage (max.): 600V  
Current (max.): 175.0A  
Contact Resistance (max.): 0.20 milliohms

### Mechanical (8.00mm Size)

Whole Connector Mating Force (max.): 110N  
Whole Connector Unmating Force (min.): 20N  
Durability (min.): 200 mating cycles

[www.molex.com/link/powerwize.html](http://www.molex.com/link/powerwize.html)