

Thickened Busbar Connector

Article Overview

Thickened busbar connectors are high-current, pluggable interfaces designed to connect thicker busbars or high-power PCBs, ensuring reliable power distribution and thermal management.

Overview

Thickened busbar connectors are engineered to handle high currents and provide secure, low-resistance connections between busbars, PCBs, and power distribution systems. They are commonly used in electric vehicles (EVs), hybrid vehicles (HEVs), data centers, server racks, and power distribution units. These connectors are designed to accommodate thicker busbars, typically ranging from 0.8mm to 5mm, depending on the application, while maintaining high ampacity and low insertion force .

Key Features

- **High Current Capacity:** Supports currents from 40A up to 420A or more, depending on the connector type and busbar thickness .
- **Pluggable and Separable:** Many designs, such as ENNOVI-BusMate and TE CROWN CLIP, allow board-to-blade, board-to-board, or blade-to-blade connections, facilitating assembly, inspection, and maintenance .
- **Misalignment Tolerance:** Floating contact technology or alignment features allow for stack-up tolerance and blind mating, reducing the risk of damage during installation .
- **Thermal Management:** Copper busbars with high cross-section efficiently dissipate heat, preventing hot spots and improving reliability

Article Content

Jul 04, 2026

TE Connectivity: Connectors & Sensors for a Connected, Sustainable

Hier sollte eine Beschreibung angezeigt werden, diese Seite lässt dies jedoch nicht zu.

Oct 27, 2025

Power Busbar PCB Connector: ENNOVI-BusMate

Explore ENNOVI's power busbar PCB connectors, designed to ensure secure electrical connections and

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PowerPlane Busbar Connectors

These power connectors and cable assemblies offer high reliability for enhanced performance and are

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Types of Power Bus Bar Connectors | TE Connectivity

Efficient power distribution Busbars and busbar connectors are an efficient method of distributing power in

Oct 10, 2025

PowerBusbar PCB Powerelement

With this combination, high currents can be transferred locally, while connections (e.g. board-to-board or

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Busbars, Terminals & Lugs

High voltage rigid and flexible (braid or laminated) busbars and custom terminals/lugs for any application. Copper and Aluminum.

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PowerPlane Busbar Power Connectors

Molex's PowerPlane bus bar power connectors provide compact, high-current PCB-to-bus-bar connectivity with

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Power Busbar Connector System for 0.8mm Thick Mating Busbar Blade

Power Busbar Connector System for 0.8mm Thick Mating Busbar Blade Low and high voltage applications Compact size Excellent

Nov 15, 2025

Power Applications Using High-force Press-Fit

The full integration of busbars within power applications by using pluggable, high-force, press-fit technology can significantly improve

Oct 01, 2025

Bus Bar Connectors | Burndy

Discover Burndy's Bus Bar Connectors, expertly designed for robust and efficient electrical connections in demanding environments

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High Voltage Rigid Bus Connectors

Discover our High Voltage Substation Connector Range Substation Connectors Our mechanical substation connectors are available

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Copper Busbars | nVent ERIFLEX

Copper Busbars Heavy-duty power connections for the toughest tasks An alternative to multiple, large cables, ERIFLEX copper

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Busbar Power Connectors/Distribution | High Current Electrical Busbar ...

Amphenol offers high-performing, low-resistance Busbar connectors with designs to conveniently distribute power

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Flexible Copper Busbar

Flexible Copper Busbar Lower Insulation Resistance (IR) drop Efficient thermal and electrical properties Space saving relative to

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Busbar Clamps and Connectors | nVent ERIFLEX

Busbar Clamp that connects two copper busbars together, or nVent ERIFLEX Flexibar, to a copper busbar without the need for drilling.

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YG14B2TC2C6C Compression Bus Bar Connector

High conductivity wrought copper connector for attaching ground conductor to ground bus with just one crimp when using BURNDY

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Blind-Mating Connector System (HC-STAK)

Its unique terminals are comprised of layered, double-ended fork contacts that provide 25 contact points

Mar 08, 2026

High-Current High-Voltage Solutions

Molex provides a versatile range of high-current high-voltage busbar solutions suitable for

Mar 23, 2026

Stäubli ZeroBolt busbar connectors for e-mobility

Stäubli ZeroBolt provides high-power busbar connections like fork- and blade connectors that use no bolts or fasteners to improve

Apr 24, 2026

PowerPlane Busbar Connectors

PowerPlane Busbar Power Connectors and Cables Assemblies deliver high-current performance along

Jul 08, 2026

High Voltage Busbars

To connect various high voltage (HV) components to the HV system, we also deliver a wide variety of busbars. In cooperation with

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Case Study: Grease for Data Center Busbars| Nye Lubricants

Case Study: Resolving Rack Equipment Power Failures Background A leader in integrated cloud technology noticed that the backup

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Flexible Busbar | Copper Busbar | Busbar Protection

Flexible Busbar Connectors Multiple layers of flat braid are used and assembled in a parallel or stacked

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Busbar Connectors

Busbar Connectors Amphenol offers high-performing, low-resistance Busbar connectors with designs to conveniently distribute power

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Busbar Design Guide

Typical Busbar Sizes If this program recommends sizes that do not fit into the ranges below, change either the number of conductors

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List of Busbar Connectors Models & Products | TE Connectivity

Search our portfolio of Busbar Connectors products and select your specifications. We offer a wide array of reliable and cost-effective

Oct 21, 2025

Busbars | Power, Laminated and Custom Busbar

Consisting of multiple conductive layers bonded with thin insulation, laminated busbars from Molex are

Contact Us

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