

molex

HIGH-CURRENT, UNIVERSAL CLAMP TERMINAL BLOCK

Molex-developed solution provides vital connection between high-current, high-voltage devices and the power grid.

BUSINESS CHALLENGE

A space existed in the Molex product lineup for a device that facilitates the connection between the power grid and today's high-current, high-voltage machines and other electrical requirements positioned throughout a factory.

With today's high-tech, high-power equipment, such as AC drives, motor controllers, switchgears, vehicle charging stations, and photovoltaic (solar) systems, now requiring large amounts of current and voltage, customers need a wire-to-wire product capable of efficiently and effectively distributing power from its source to these various elements.

Competitor solutions available for this capability were limited and forced technicians to choose between DIN-rail-mounted terminal blocks or panel-mount terminal blocks secured directly to the panel via screws, potentially leading to challenges in space-constrained applications. Molex did not offer anything in its terminal block portfolio capable of handling such high-current and voltage.

SOLUTION

A versatile product that meets demanding industry standards.

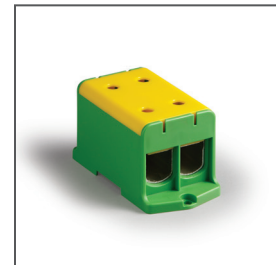
The Molex terminal block group responded by offering technicians a simplified solution for their power-distribution needs and affording them far greater flexibility for installation. The Molex High-Current, Universal Clamp Terminal Block is adaptable and designed to either be mounted to a DIN-rail or direct-mounted to a panel via screws. The versatile product is also compatible when terminating aluminum to aluminum conductors, copper to copper conductors or aluminum to copper conductors, making the terminal blocks applicable for use in both North America and Europe. Hexagonal screws are employed to ensure ultimate secureness, and an oxidation-inhibiting compound maximizes electrical conductivity which is of particular importance when terminating to aluminum conductors.

Molex High-Current, Universal Clamp Terminal Blocks were designed to meet demanding global industry ratings, including the UL 2059 safety standard for terminal blocks and the connector Class A standard per IEC EN 61238-1:2003. The terminal blocks have been

third-party tested and verified to survive a short circuit in high-current and high-voltage feed-in lines. They have also been deemed suitable for use in switchboard applications where fast-acting fuses are not present.

High-voltage models are available in 600 or 1000V per UL 1059 and 800 or 1000V per EN 60947. High-current models that range from 150.0 to 380.0A per UL 1059 or 160.0 to 425.0A per EN 60947 are also offered. This marks a significant upgrade in terms of voltage and current capacity when compared to other Molex terminal block offerings, which have maximums of 300V and 115.0A.

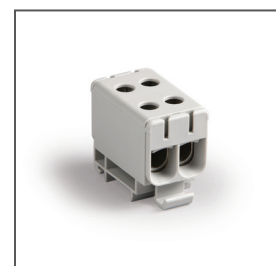
Models available include single pole, side-by-side stackable; three pole, for use in three-phase electrical applications; and single pole with tapping for two wires per circuit. Models in multiple colors and accessories such as marking strips and terminal shrouds are also offered to allow for easy identification.



MX-69.3



MX-KE163.4



MX-KE66



BENEFITS AND ROI

A robust wire-to-wire power-distribution device.

- Can be either mounted to a panel using a DIN-rail or direct-mounted with screws
- Features an oxidation-inhibiting compound to maximize electrical conductivity
- Certified to both IEC and UL standards for domestic or international applications
- Suitable for use with either copper or aluminum wires
- Capable of safely terminating an aluminum to a copper conductor
- Meets the rigorous connector Class A standard per IEC EN 61238-1:2003

To learn more www.molex.com/link/hcucterminalblocks.html

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