

MTPC-XX-CB-489-208V-2P-50A-D-N3R

D-Curve MCCB Circuit Breaker for Phase Converters - 50 Amp - Two Pole - 208V AC Max - Fixed Thermal Fixed Magnetic Trip - NEMA 3R Enclosure

Product ID: 270837

Please see last page for supporting documentation for this product(certificates, CAD files & drawings, IES files, wiring diagrams, etc).



Larson Electronics LLC manufactures a wide variety of products, including custom built to spec designs. The pictures displayed for this unit are a general representation of form factor for the product line and may not accurately represent this exact configuration in every detail due to custom builds and changes between similar products in our standard catalog. The specifics for this configuration are listed in the specification table and supporting documentation (CAD files, Dimensional Drawing, Name Plate Diagram, Wiring Diagram, etc.). This means that specific details (receptacles, plugs, wires, connections, mounting brackets, external finishes, etc.) may not be accurately represented in images vs specifications. Please review specifications and do not order based solely on images.

MTPC-XX-CB-489-208V-2P-50A-D-N3R 50 Amp 2 Pole Molded Case Circuit Breaker Listings/Ratings

Protection Type: Overload & Short Circuit

Rated Current: 50 Amps

Poles: 2 Pole

Frequency: 50/60 Hz

Max Voltage: 208 V AC

Interrupting Capacity: 25 kA

Tripping Curve: D-Curve

Trip Type: Fixed Thermal Fixed Magnetic

Terminals: Mechanical Lugs & Busbar Connectors

Circuit Breaker Dimensions: 2.01"-W x 5.12"-H x 3.44"D

Enclosure Dimensions: 12.00"-W x 18.00"-H x 6.00"D

Enclosure Materials: Code Gauge Low Carbon Steel

Enclosure Finish: ANSI 61 Light Gray Powder Coating

Enclosure Rating: NEMA 3R

Weight: -

Mounting: External Mounting Brackets

NRTL Listed to UL 489

Weatherproof NEMA 3R Enclosure

Special Orders - Special Requirements

Contact us for special requirements

Toll Free: 1-800-369-6671

Intl: 1-903-270-1187

Fax: 1-903-498-3364

E-mail: sales@larsonelectronics.com

The MTPC-XX-CB-489-208V-2P-50A-D-N3R from Larson Electronics is a Two Pole Molded Case Circuit Breaker with a Weatherproof NEMA 3R Enclosure that is rated for 50 amps and is NRTL listed to UL 489. This D-curve circuit breaker is rated for a max voltage of 208 V AC. The MTPC-

XX-CB-489-208V-2P-50A-D-N3R is ideal for adding to existing phase converters to prevent the tripping of breakers during installation or start up when supply currents may rise sharply.

The MTPC-XX-CB-489-208V-2P-50A-D-N3R has a fixed thermal fixed magnetic trip type and is equipped with mechanical lugs and busbar connections. Instead of switching at the panel, this D-curve circuit breaker is simply installed at the control panel of the phase converter. The molded case circuit breaker itself measures 2.01" wide by 5.12" high by 3.44" deep. The weatherproof NEMA 3R enclosure it is contained within measures 12.00" wide by 18.00" high by 6.00" deep.

Trip Curves: Circuit breakers are classified according to their trip curves. A trip curve is a representation of how a circuit breaker is expected to behave. In other words, a trip curve specifies when a circuit breaker should activate during overcurrents and short circuits. In order to avoid nuisance tripping, circuit breakers need different trip curves to account for variances in the balance between adequate overcurrent protection and optimal machine performance. The three most common types of trip curves are B, C, and D curves.

- **Curve B** - 3-5x Instantaneous Tripping - Intended for Resistive Circuits such as Lighting & Control Circuits
-
- **Curve C** - 5-10x Instantaneous Tripping - Intended for Circuits with Medium Inductive Loads such as Control Panels & Coils
-
- **Curve D** - 10-20x Instantaneous Tripping - Intended for Circuits with Highly Inductive and Capacitive Loads such as Motors & Transformers

UL 489 vs UL 1077: Circuit breakers will typically be rated either UL 489 or UL 1077. There is a distinct difference between these two ratings and the scenarios in which they should be used. Circuit breakers that are rated UL 489 can be used for branch circuit protection and for providing protection for service, feeder, and branch circuit equipment. UL 489 devices are usually used on main panels, panelboards, control panels, motor control panels, and switchboards. Circuit breakers and devices that are rated UL 1077 can only be used as supplemental protection when there is branch circuit protection ahead of it. These manually resettable devices are meant to provide a limited amount of overcurrent protection for specific applications such as individual receptacles, appliances, lights, control circuit, and relays.

Enclosure: The weatherproof enclosure of the MTPC-XX-CB-489-208V-2P-50A-D-N3R is made from code gauge low carbon steel and features a NEMA Type 3R rating which means that it is intended for outdoor use. It provides a degree of protection against rain, sleet, and snow as well as damage from external ice formation. This enclosure also features external mounting brackets, a continuous hinge, a padlockable pull down hasp and an ANSI 61 light gray powder coated finish.

Mounting: The MTPC-XX-CB-489-208V-2P-50A-D-N3R is equipped with external mounting brackets.

At Larson Electronics, we do more than meet your lighting needs. We also provide replacement, retrofit, and upgrade parts as well as industrial grade power accessories. Our craftsmen can custom build any lighting system and/or accessories to fit the unique demands of your operation. A commitment to honesty, quality, and dependability has made Larson Electronics a leader in the lighting and electronics business since 1973. Contact us today at 800-369-6671 or message sales@larsonelectronics.com for more information about our custom options tailored to meet your specific industry needs.



Frequently Asked Questions (FAQ)









MTPC-XX-CB-489-208V-2P-50A-D-N3R

Product ID: 270837

Export Control Classification Number (ECCN): EAR99

Links (Click on the below items to view):

- [HigResPic1](#)
- [HigResPic2](#)
- [HigResPic3](#)
- [HigResPic4](#)
- [HigResPic5](#)
- [HigResPic6](#)
- [HigResPic7](#)
- [HigResPic8](#)
- [ISO 9001 Certification](#)
- [Business Certificate](#)
- [Shipping Time Map](#)