Larson Electronics LLC
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MPD-MDS-CB-3P4W-1.3-480Y.277-3000A-65K-N3R-DF-EL

3000A Main Distribution Switchboard, 480Y/277V, 3-Phase 4-Wire, 65kAIC, Electronic Trip, 100% Rated Electrically Operated Main Breaker, NEMA 3R

Product ID: 344614

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

Image: MPD-MDS-CB-3P4W-1.3-480Y.277-3000A-65K-N3R-DF-EL

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.

MPD-MDS-CB-3P4W-1.2-480Y.277-3000A-65K-N3R-DF-EL Switchboard

Made in the USA

Unit Type: UL 891 Deadfront Switchboard

Configuration: 3-Phase, 4-Wire
Voltage: 480Y/277V

Main Bus: 3000A

Main Breaker: 3-Pole, Individually Mounted, Electrically Operated (Motor Operator, Remote Open/Close Capable), Electronic Trip Unit (LSIG), 100% Rated for Continuous Duty
Main Breaker Rating (Trip/Frame): 3000/3000 (frame size TBC), Micrologic 6.0P Trip Unit or Equal

Short Circuit Rating: 65kAIC

Enclosure Type: NEMA 3R
Bus Material: Copper, Silver-Plated Contacts
Neutral Bus: 100% of Main Rating
Ground Bus: Min. 1/4" × 2" Copper
Cable Entry: Side or Rear Only — No Bottom Entry

Features of Every Assembly
Dead Front Construction
Digital Multifunction Power Meter — True RMS ±1%, THD to 31st Order, Ethernet Communication via Modbus TCP and DNP3 TCP, Controls and Measurements Available Through Both Protocols
Molded-Case Circuit Breakers Throughout — Series Rating Not Permitted

Electronic Trip Units, All Breakers, True RMS Sensing

120V Heaters, 250W Min. per Section, Thermostat Controlled (60–90°F)

Ratings & Approvals
Designed in accordance with UL 891, UL 489, NEMA PB 2
All grounding per NFPA 70

Feeder/Branch Breaker Schedule (2 Positions)
Position 1: 2000A Frame, 3-Pole, 2000A Trip, Electronic Trip Unit
Position 2: 2000A Frame, 3-Pole, 2000A Trip, Electronic Trip Unit
Position 3: 2000A Frame, 3-Pole, 2000A Trip, Electronic Trip Unit

Dimensions & Shipping
Overall Dimensions: 110"W x 60"D x 91.5"H (estimated)
Approximate Weight: 3,500 lbs (estimated)
Shipping Dimensions: TBD
Shipping Weight: TBD

Shipping
Shipped on pallet or skid
Crated shipment available upon request
Final shipping configuration subject to approved design

Special Features
Dead Front Switchboard, 100%-Rated Electrically Operated Main Breaker, Electronic Trip Main and Feeders, Dual-Protocol Ethernet Metering

Special Orders – Special Requirements
Contact us for special requirements

Toll Free: 1-800-369-6671
Intl: 1-903-270-1187
Fax: 1-903-765-7664
E-mail: sales@larsonelectronics.com

Customer Compliance
Final arrangements, sizes, ratings, settings, configuration, and installation details will be finalized during detailed engineering review and customer approval prior to release for manufacture.

Larson Electronics manufactures a wide variety of custom power distribution systems. The pictures displayed for this unit are a general representation of form factor and may not accurately represent this exact configuration in every detail due to being custom builds. The specifics for this configuration are listed in the specification table and applicable drawings.

Made in the USA

The Larson Electronics MPD-MDS-CB-3P4W-1.3-480Y.277-3000A-65K-N3R-DF-EL is a UL 891 deadfront switchboard engineered for reliable power distribution in industrial and utility applications. This 3000A, 480Y/277V, three-phase, four-wire switchboard provides one main circuit breaker position and three outgoing feeder positions.

PLEASE NOTE: ANY FREE SHIPPING OFFERS DO NOT APPLY TO POWER DISTRIBUTION PANELS, TRANSFORMERS, OR SUBSTATIONS

The main section includes a molded-case main circuit breaker rated 3000A trip on a 4000A frame for 100% continuous-duty operation, electrically operated via a motor operator for remote open/close capability, and equipped with an electronic trip unit (Micrologic 6.0P or approved equal) providing true RMS sensing with adjustable long-delay, short-delay, instantaneous, and ground fault protection settings, along with a digital display of watts, VARs, VA, kWh, kvarh, kVAh, and kW/kVA demand and peak demand values. A digital multifunction power meter is provided at the incoming section for continuous monitoring of voltage, current, power, and power quality parameters, with Ethernet communication via Modbus TCP and DNP3 TCP providing both controls and measurements over either protocol.

Main Section
A 3-pole, individually mounted molded-case main circuit breaker (3000A trip, 4000A frame, 100% rated), electrically operated with a motor operator for remote actuation, and equipped with an electronic trip unit, serves as the main disconnecting means, paired with a digital multifunction power meter offering true

RMS ±1% accuracy, total harmonic distortion measurement to the 31st order, and Ethernet-based Modbus TCP and DNP3 TCP communication.

Feeder Section (Qty 3)
Three outgoing feeder positions are provided, each 3-pole with electronic trip units, rated 2000A frame at 2000A trip settings, with Micrologic 6.0P trip units or approved equal.

Construction
All circuit breakers are molded-case type with electronic trip units; series-rated breaker combinations are not permitted. The bus is copper with silver-plated contact surfaces; the neutral bus is rated 100% of the main bus continuous current, and a continuous copper ground bus (minimum 1/4" × 2") runs the length of the assembly. Cable entry is accommodated through the side or rear of the enclosure only; bottom entry is not provided. Each section includes a 120V, 250W minimum thermostatically controlled heater to prevent condensation, maintaining section temperature between 60–90°F.

Certification
Designed in accordance with UL 891 (Switchboards), UL 489 (Molded-Case Circuit Breakers), and NEMA PB 2. All grounding complies with NFPA 70.

Customer Compliance
Final arrangements, sizes, ratings, settings, configuration, and installation details of this equipment will be established in accordance with detailed engineering review, applicable project documentation, and customer approval prior to manufacture.

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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.

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Frequently Asked Questions (FAQ)

There are no Faqs

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Export Control Classification Number (ECCN): EAR99

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