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MPD-MODS-FM-NFDS-3P-3W-34.5KV-2000A-DF-BM-N3R-GO-VB-120VAC.TO

Motor Operated Non-Fused MV Disconnect Switch, 2000 Amp, 34.5kV 3PH AC, 3-Pole 3-Wire plus Ground, Floor Mount, NEMA 3R, Gang Operated, Vertical Break, 3-Section Lineup (Line / Switch / Load), 120VAC A/B Throwover Control Power, Remote SCADA Operation

Product ID: 346429

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



Image: MPD-MODS-FM-NFDS-3P-3W-34.5KV-2000A-DF-BM-N3R-GO-VB-120VAC.TO

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-MODS-FM-NFDS-3P-3W-34.5KV-2000A-DF-BM-N3R-GO-VB-120VAC.TO - Motor Operated Non-Fused Disconnect Switch

Unit Type: Motor Operated Non-Fused Air Disconnect Switch, Vertical Break, 3-Section Lineup

Made in the USA

Lineup

Section 1: Line Cable Section, (3) 8 in Conduit Entries, Bottom Entry
Section 2: Switch Section, 2000 A Motor Operated Vertical Break Disconnect
Section 3: Load Cable Section, (3) 8 in Conduit Entries, Bottom Exit

Line-In: N/A (Customer Provided)

Line-In Cord Cap: N/A (Customer Provided)
Line-In Connections: MV Cable Terminations, (3) Sets per Phase
Line-In Orientation: Bottom Feed
Nominal Voltage: 34.5 kV AC
Rated Voltage: 35 kV
Phase: 3-Phase
Configuration: 3-Pole, 3-Wire plus Ground
Frequency: 60 Hz

Features of Every Assembly

Corona-Free Design
Arc Horns, Included
High-Strength Insulators
Padlockable in Open and Closed Positions
Clamp-On Open/Close Indicators (Green: Open; Red: Closed)

Insulators Per Pole: 3
Mains Rating: 2000 A
Short-Time Withstand Rating: Rated for the Available Fault Current at the Installation
Protection: None (Disconnect Only)

Motor Operator & Controls
Disconnect Means: Motor Operated, Gang Operated, with Manual Operating Handle for Local Override
Motor Operator: 120 VAC Electric Motor Operator
Control Power: 120 VAC, Dual A/B UPS Circuits with Automatic Throwover
Remote Operation: Local/Remote Selector, Dry Contacts for Open and Close Commands
Position Status: Auxiliary Position Indication Contacts
Control Power Status: Control Power OK Contact
Operating Mechanism: Adjustable Open/Close Stops, 1-1/2 in IPS Vertical Pipe, Minimum 1 in IPS Interphase Pipe

Ratings & Approvals
NEMA 3R Rated for Outdoor Use
Complies with ANSI C37.30
Complies with ANSI C37.32
Complies with ANSI C37.34
Complies with NEMA SG-6
All Grounding Complies with State and Local Codes and NEC Section 250

Cable Entry & Grounding
Cable Entry: (3) 8 in Conduits per Cable Section
Load-Out: N/A (Customer Provided)
Load-Out Connections: MV Cable Terminations, (3) Sets per Phase
Load-Out Orientation: Bottom Exit
Ground Bus: Provided in Each Cable Section, Accepts (3) 350 kcmil EGC
Neutral Connection: N/A

Switch Construction
Live Parts Material: Hard Drawn or Extruded, Castings X-Ray Certified Free of Porosity and Cracks
Bearings: Ball Type, Maintenance-Free, Permanently Lubricated, Water and Dust Ingress Protected
Terminal Pads: Ductile, High-Conductivity Material, Machined Top and Bottom, NEMA 4-Hole Pattern
Contacts: Reverse Loop Design, Silver-to-Silver Contact Surface, Stainless Steel Coil Spring-Backed, Wiping Action on Hinge and Break-Jaw
Contact Pressure: Rotary Motion Stop for Consistent Pressure Regardless of Operating Speed

Enclosure
Form Factor: Rectangular, 3-Section Lineup with Lockable Doors
Door: Left Hinged Door with Pad Lockable Handle, Each Section
Enclosure Material: 11GA Sheet Steel
Enclosure Finish: ANSI 49 Grey
Enclosure Type: NEMA 3R Ventilated
Mounting: Floor Mount, Base Frame with Anchor Provisions

Dimensions & Shipping
Overall Dimensions: 160 in W × 96 in D × 126 in H (estimated)
Approximate Weight: 9,500 lbs (estimated)
Shipping Dimensions: TBD
Shipping Weight: TBD

Shipping
Shipped standard freight/crated per manufacturer practice
Final shipping configuration subject to manufacturer confirmation

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

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-MODS-FM-NFDS-3P-3W-34.5KV-2000A-DF-BM-N3R-GO-VB-120VAC.TO Motor Operated Non-Fused Disconnect Switch is a 34.5kV, 2000-amp, three-pole, gang-operated vertical break air disconnect switch built as a three-section lineup in NEMA 3R steel enclosures. A line cable section, a switch section, and a load cable section give it the room for multiple large conduit entries and medium-voltage cable terminations. It is designed for floor mounting and outdoor use.

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

The **MPD-MODS-FM-NFDS-3P-3W-34.5KV-2000A-DF-BM-N3R-GO-VB-120VAC.TO** gives operators a safe, reliable way to isolate a 34.5kV circuit rated up to 2000A. It is a disconnect only and carries no fuses, breaker, or overcurrent protection. It can be operated locally or remotely, and it reports its position to a SCADA system.

Lineup Arrangement
The lineup has three sections. The line cable section receives incoming medium-voltage cable through three 8-inch conduit entries. The switch section houses the 2000A motor operated vertical break disconnect. The load cable section carries the outgoing cable through three 8-inch conduit entries. Each cable section includes a ground bus for the equipment grounding conductors, and cable entry is from the bottom. The neutral kit found on lower-voltage disconnects is not used.

Operation
A 120VAC electric motor operator drives the gang-operated switch mechanism, which opens and closes all three poles together. A manual operating handle provides local override, and the mechanism is padlockable in both the open and closed positions. Adjustable open/close stops, a vertical operating pipe, and an interphase pipe keep the poles synchronized, and clamp-on indicators show the switch position (green: open, red: closed).

Ground Fault Protection / Arc Energy Reduction: This disconnect switch is rated 2000A or higher and includes provision for ANSI 50G/51G or 50N/51N ground fault protection. The ground fault relay has adjustable pickup and time delay and works with compatible ground fault CTs. A hardwired trip signal is provided, along with local indication and remote alarm contacts for ground fault alarms.

Remote Control & Control Power
A local/remote selector and dry contacts for open and close commands allow the switch to be operated from a SCADA system. Auxiliary position contacts report switch position, and a control power OK contact reports control power status. Control power comes from two 120VAC UPS circuits (A and B) with an automatic throwover, so the operator stays available if one circuit is lost.

Switch Construction
The switch uses hard drawn or extruded live parts, with castings x-ray certified free of porosity

and cracks. The contacts use a reverse loop design that boosts contact pressure under short-circuit current, with silver-to-silver contact surfaces, stainless steel coil spring backing, and a wiping action on the hinge and break-jaw. A rotary motion stop keeps contact pressure consistent regardless of operating speed. Ball type, maintenance-free bearings are factory adjusted and protected against water and dust. Arc horns are included, and the design is corona-free.

Enclosure Design
Each section is housed in an 11GA sheet steel NEMA 3R enclosure with an ANSI 49 grey finish. The ventilated design supports natural cooling, and the NEMA 3R rating protects against rain, sleet, and external ice formation for outdoor use. Left-hinged doors with pad lockable handles give secure access to each section.

Mount
The lineup is floor mounted on a base frame with provisions for anchoring to a customer-supplied pad or platform.

Ratings & Approvals
The switch complies with ANSI C37.30, ANSI C37.32, ANSI C37.34, and NEMA SG-6. All grounding complies with state and local codes and NEC Section 250.

Customization
The **MPD-MODS-FM-NFDS-3P-3W-34.5KV-2000A-DF-BM-N3R-GO-VB-120VAC.TO** can be customized to meet specific operating and power requirements. Examples of customization include:

* Space heaters for cold environments
* Additional auxiliary position contacts
* Key interlock provisions
* Additional cable sections
* Alternate control power voltages

Applications
This switch is suitable for medium-voltage utility and industrial 34.5kV distribution, including substations, renewable energy facilities, and large-load facilities that need a remotely operated isolation point with multiple parallel cable runs.

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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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