

MPD-MODS-HM-NFDS-3P-3W-138KV-4000A-DF-BM-N3R-GO-M1

Motorized Non-Fused Disconnect Switch, 4000 Amp, 138KV 3PH AC, 3-Pole 3-Wire, Double-End Break, Group Operated, Horizontal Mount, Composite Insulators, 650KV BIL, NEMA 3R

Product ID: 332483



Image: MPD-MODS-HM-NFDS-3P-3W-138KV-4000A-DF-BM-N3R-GO-M1

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-HM-NFDS-3P-3W-138KV-4000A-DF-BM-N3R-GO-M1 Disconnect Switch - Non-Fused Disconnect

Ratings

Unit Type: Outdoor High Voltage Non-Fused Disconnect Switch, Double-End Break, Motorized

ANSI C37.30, C37.32

Line-In: N/A (customer provided)

ANSI C37.34

Line-In Cord Cap: N/A

Line-In Connections: TBD

Line-In Orientation: Horizontal Bus

Maximum System Voltage: 138 kV

Current Rating: 4000A Continuous

Voltage Rating: 138 kV

Phase: Three Phase

Configuration: 3-Pole, 3-Wire

Frequency: 60 Hz

Protection Method: Provided Upstream by Circuit Breaker

Protection Type: Relay & Breaker Protected

Protection Fuses: N/A

Operation Mechanism: Motorized, Gang Operated

Motor Operation Voltage: 125VDC

Arcing Horns: Included, Stainless steel

Creepage to Ground: 168.5 inches

Phase-to-Phase Spacing: 8 Feet

Interrupting Rating: Not Load Break Rated (Isolation Only)

Short Circuit Withstand: 63 kA Symmetrical

Short Circuit Duration: 3 Seconds
BIL (1.2 x 50µs): 650 kV
Withstand Voltage (1 min, dry): 335 kV rms
Withstand Voltage (10 sec, wet): 275 kV rms
Insulator Type: Composite (Silicon Rubber)
Switch Auxiliary Contacts: 5a & 5b (Field Convertible)
Line-Out: N/A (customer provided)
Line-Out Cord Cap: N/A (customer provided)
Line-Out Connection: Aluminum Pad Terminals
Line-Out Orientation: Horizontal Bus
Construction: Double-End Break, Center Rotating Blade Design
Bearings: Heavy duty stainless steel bearing enclosed in weather proof aluminum alloy housing
Termination Pads: 4 Hole NEMA configuration
ACSR termination Lugs: TBD
Lug Afixing Hardware : 2"-13NC, Durium Bolts, Washers & Nuts
External Metal Parts: Hot Dipped Galvanized per ASTM standards
Support Frame: Included
Support Frame Columns: Two Column Type
Support Frame Ground Lugs: Suitable for #4/0 AWG Cu
Operating Handles: 31.5 inches above grade
Operating Rods Material: Hot Dipped Galvanized
Rod Grounding: Grounding Straps for #4/0 AWG CU to be supplied
Altitude: 328ft Above Sea Level
Operating Temperature Range: -20°C to 50°C
Environment: Trace amounts of H2S, SO2 , and coke dust
Enclosure Finish: ANSI 49 Grey
Motor Operator Enclosure: NEMA 3R
Mount: Horizontal, parallel
Dimensions: TBD
Weight: TBD
Shipping Dimensions: TBD
Shipping Weight: TBD
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 one-line diagram.

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

All grounding shall comply with state and local codes and meet the minimum requirements of the National Electronic Code section 250

Made in the USA

The MPD-MODS-HM-NFDS-3P-3W-138KV-4000A-DF-BM-N3R-GO-M1 from Larson Electronics is a high-voltage, transmission-class, non-fused disconnect switch engineered for reliable isolation and safe operation in utility and substation environments. This outdoor, motor-operated, double-end break disconnect switch is rated for 4000A continuous current at 138kV and is constructed for installation on steel support structures in open-air substations. Designed in accordance with ANSI/IEEE C37 standards, the switch provides visible air-gap isolation for high-voltage transmission systems.

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

The MPD-MODS-HM-NFDS-3P-3W-138KV-4000A-DF-BM-N3R-GO-M1 motorized disconnect switch is compatible with three-phase 138kV AC transmission systems operating at 60 Hz. This 3-pole, 3-wire, gang-operated switch features a 650kV BIL (1.2 x 50 μ s) lightning impulse withstand rating and a 63kA symmetrical short-circuit withstand capability. The unit is not load-break rated and is intended for isolation only, with protection provided upstream by a circuit breaker and relay protection system.

Operation: The disconnect switch is operated by a 125VDC motor operator housed in a NEMA 3R enclosure. The motor operator includes local open/close pushbuttons, a local/remote selector switch, a mechanical operations counter, space heater, position indication target, and auxiliary contacts (5a and 5b). Manual override capability is provided without removal of the motor assembly.

Time Delay vs. Fast Acting Fuses Two of the most common types of fuses found in power distribution equipment are time delay and fast acting fuses.

Time Delay: Time delay fuses are tripped once overcurrent heat builds up enough to melt the fuse element over a period of time. That period of time varies between different time delay fuses depending on the application. Time delay fuses decrease the chances of false tripping. During startup, many components require a large current for a very short amount of time. In other words, a time delay fuse disconnects the circuit only when the overcurrent persists in the line.

Fast Acting: Fast acting fuses are tripped immediately upon sensing an overcurrent or short circuit in the line. They are ideal for electronics, components, or systems that cannot withstand sudden changes in current. A fast acting fuse will not withstand a temporary overload such as one that occurs during the startup process.

Construction: The switch features a double-end break, center-rotating blade design with extruded aluminum alloy live parts and silver-plated, high-pressure wiping contacts for dependable conductivity. Composite silicone rubber station post insulators provide superior pollution performance, reduced weight, and enhanced seismic capability compared to traditional porcelain designs. All structural steel components are hot-dip galvanized for long-term corrosion resistance in outdoor environments.

Mount: The disconnect switch is designed for horizontal mounting on substation steel structures with parallel phase configuration and 8-foot phase spacing typical for 138kV installations.

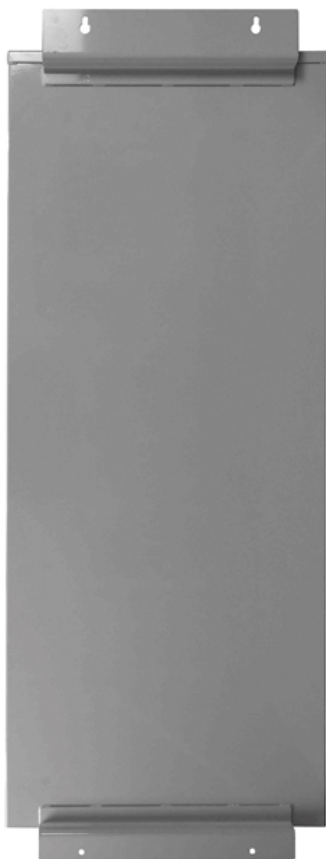
Applications: This transmission-class disconnect switch is ideal for utility substations, transmission switching stations, power generation facilities, and industrial high-voltage installations requiring visible isolation and reliable mechanical performance under demanding environmental conditions.

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.

Larson Electronics LLC
9419 E US HWY 175, Kemp, TX 75143
Phone: 800.369.6671



www.LarsonElectronics.com
Email: sales@LarsonElectronics.com
Fax: 903.765.7664



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Frequently Asked Questions (FAQ)

There are no Faqs