Larson Electronics LLC
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Product ID: 341516

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

Image:

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-PM-NFDS-3P-3W-34.5KV-2000A-DF-BUS-N3R.C-VB-NOP-M1 Motor Operated Disconnect Switch
Unit Type: Motor Operated Disconnect Switch (MODS), Vertical Break, Without Ground Switch

Made in the USA

Configuration

Phase/Wiring: 3-Phase, 3-Wire

Switch Style: Vertical Break
Maximum System Voltage: 38kV, Nominal: 34.5kV
BIL: 200kV (Peak)
Rated Power Frequency Withstand Voltage: 80kV rms (standard 38kV class)
Creepage Distance: 44mm/kV (Line-to-Ground)
Pole-to-Pole & Phase-to-Phase Clearances: Per IEEE C37.30 series
Frequency: 60Hz
Current Rating: 2000A
Short-Time Withstand Current: 31.5kA for 3 Seconds
Making (Fault-Closing) Capacity: 78.75kA Crest (standard 2.5× short-time withstand, per ANSI/IEEE C37.32)

Switch & Operator Assembly
Operating Mechanism: Motor Operated, Vertical Break, Synchronized 3-Phase Electric Motor with Gearbox
Operating Time (Close/Open): Typical ≤ 60s (adjustable interlocks)
Mechanical Life: ≥ 10,000 Operations
Contact Material: Silver-Plated Copper Alloy

Features of Every Assembly
Motor Operated, Synchronized 3-Phase Electric Motor with Gearbox
Emergency Manual Handwheel Override
Local/Remote Control, SELV Protected Compartments
Mechanical and Electrical End-of-Travel Interlocks
Silver-Plated Copper Alloy Contacts

Joints & Bearings: Maintenance-Free Bushings / Sealed Bearings
Manual Operation Provision: Emergency Manual Handwheel Override
Torque Ratings: Sized per Motor/Load Requirements with Thermal Backup
Insulator Type: Porcelain, Station Post Type

Controls
Control Voltage: 110VDC / 220VDC (Selectable)
Position Indication: Limit Switches, Open/Closed
Auxiliary Contacts: Min. 4 NO + 4 NC
Local/Remote Control: Yes, SELV Protected Compartments
Motor Protection: Thermal/Overcurrent

Mounting & Connections
Mounting: Outdoor, Pad-Mounted, Customer-Supplied Substation Structure
Line Connections: Bus / Overhead Conductor, Clamp-Type Terminals

Construction
Switch Assembly: Open-Air Outdoor Construction — No Enclosure Rating Applies to Switch Blades, Insulators, or Bus
Control Cabinet: 11GA Sheet Steel, ANSI 49 Grey Finish, NEMA 3R Weatherproof, Gasketed, Powder-Coated

Ratings & Approvals
NRTL Listed Service Equipment

NRTL Listed to UL 98 Dead Front Switchboards

Designed in accordance with ANSI/IEEE C37.30, C37.32, C37.34
All grounding shall comply with NEC Section 250 and applicable state/local codes

Dimensions & Shipping
Overall Dimensions: 216 in W × 144 in D × 120 in H (estimate)
Approximate Weight: 4,200 lbs (estimate)
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
Motor Operated, Vertical Break Design, Manual Handwheel Override, Local/Remote Control, Open-Air Outdoor Construction

Special Orders – Special Requirements
Contact us for special requirements

Toll Free: 1-800-369-6671
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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-MODS-PM-NFDS-3P-3W-34.5KV-2000A-DF-BUS-N3R.C-VB-NOP-M1 Motor Operated Disconnect Switch is designed for reliable, safe, and visible isolation of high-voltage distribution and substation circuits in outdoor applications. This air-insulated, vertical break disconnect switch is intended for pad-mounted installation on a customer-supplied substation structure, with a motor-operated

mechanism housed in a weatherproof NEMA 3R rated control cabinet.

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

The **MPD-MODS-PM-NFDS-3P-3W-34.5KV-2000A-DF-BUS-N3R.C-VB-NOP-M1** provides a dependable means of isolating equipment on 34.5kV class distribution and substation systems, with a maximum system voltage of 38kV and 34.5kV nominal. This three-phase, three-pole, vertical break disconnect switch is rated 2000A continuous, with a 200kV BIL rating, 31.5kA short-time withstand current for 3 seconds, and a 78.75kA crest making (fault-closing) capacity, ensuring reliable insulation and fault-withstand performance under lightning, switching surge, and momentary fault conditions.

Operation:
The switch is driven by a synchronized 3-phase electric motor with gearbox, with a typical operating time of 60 seconds or less and mechanical and electrical end-of-travel interlocks. An emergency manual handwheel override is provided for local operation without power. Control power is 110VDC or 220VDC, selectable, with position indication via limit switches, a minimum of 4 normally-open and 4 normally-closed auxiliary contacts, and local/remote control from SELV-protected compartments. Motor protection is provided via thermal/overcurrent devices. The mechanism is rated for a minimum of 10,000 mechanical operations.

Switch Assembly:
The switch employs a vertical break design, with contacts of silver-plated copper alloy mounted on maintenance-free bushings and sealed bearings, torque ratings sized per motor and load requirements with thermal backup. Insulators are porcelain, station post type, sized for the 38kV class with a creepage distance of 44mm/kV (line-to-ground).

Enclosure Design:
The switch assembly itself is open-air outdoor construction, with no enclosure rating applying to the blades, insulators, or bus. The motor operator control cabinet is protected by an 11GA sheet steel enclosure with ANSI 49 grey finish, NEMA 3R rated, weatherproof aluminum, gasketed, and powder-coated.

Certification:
This disconnect switch is NRTL listed to UL 98 dead front switchboards and NRTL listed for service equipment.

Mounting & Connections:
The switch is pad-mounted on a customer-supplied substation structure. Line connections are made via bus or overhead conductor using clamp-type terminals.

Special Features:
This unit incorporates a vertical break motor-operated mechanism with manual handwheel override, local/remote control, and open-air outdoor substation construction with a weatherproof control cabinet.

Ratings & Approvals:
This disconnect switch is designed in accordance with applicable ANSI/IEEE C37.30, C37.32,

and C37.34 standards. All grounding provisions shall comply with NEC Section 250 and applicable state and local electrical codes.

Customer Compliance: The 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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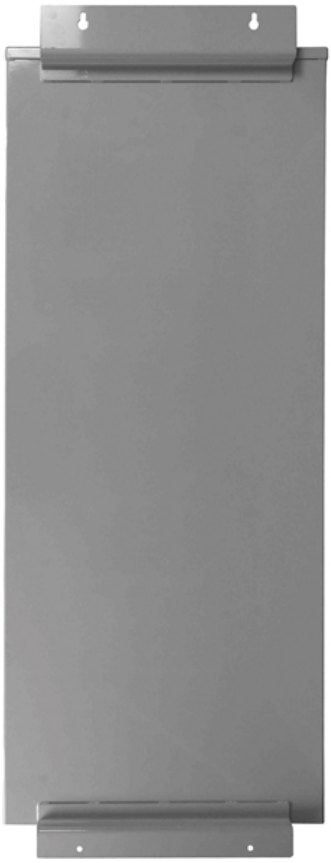

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Export Control Classification Number (ECCN): EAR99

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