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MPD-GOAB-NFDS-3P-3W-138KV-3000A-EF-BM-HM-NC-VB-M1

Gang Operated Air Break Switch, 3000 Amp, 138KV 3PH AC, 3-Pole 3-Wire, Vertical Break, Horizontally Mounted, Motor Operated

Product ID: 339518



Image: MPD-GOAB-NFDS-3P-3W-138KV-3000A-EF-BM-HM-NC-VB-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-GOAB-NFDS-3P-3W-138KV-3000A-EF-BM-HM-NC-VB-M1 Gang Operated Air Break Switch

Unit Type: Motor Operated Gang Operated Air Break Switch, Vertical Break
Line-In: N/A (customer provided)
Line-In Cord Cap: N/A (customer provided)
Line-In Connections: NEMA 4-Hole Aluminum Terminal Pads
Line-In Orientation: Top Feed
Nominal Voltage: 138KV AC, 3 Phase
Rated Voltage: 145KV AC, 3 Phase
Frequency: 60Hz
BIL: 650 kV
Current: Alternate 3 Phase Current
No. of Poles: (3)
Wires: (3)
Protection Method: Non-Fused
Protection Type: N/A
Protection Fuses: None
Protection Ampacity: N/A
Continuous Current Rating: 3000A
Short-Time Withstand Current: 63kA for 3 Seconds
Momentary Withstand Current: 100kA
Peak Withstand Current: 164kA
Disconnect Means: Motor Operated Vertical Break Mechanism
Manual Operation: Manual Crank/Emergency Override Provision
Motor Control Voltage: 125VDC
Heater Voltage: 120/240VAC

Ratings

IEEE C37.32
ANSI C29 Insulator Standards
Outdoor Substation Rated

Made in the USA

Local Controls: OPEN/CLOSE Pushbuttons with Red/Green Indication Lamps
Auxiliary Contacts: Six (6) SPDT Contacts (3 "a" + 3 "b")
Position Indicator: Mechanical OPEN/CLOSED Indicator
Line-Out: N/A (customer provided)
Line-Out Cord Cap: N/A (customer provided)
Line-Out Connection: NEMA 4-Hole Aluminum Terminal Pads
Line-Out Orientation: Bottom Feed
Contact Material: High Pressure Silver-to-Silver
Terminal Material: Aluminum or Tin-Plated Copper
Insulators: Outdoor Station Post Porcelain, ANSI #70 Sky Gray (or Equivalent)
Arcing Horns: Standard
Power System: Solidly Grounded
Rated Operating Temperature: -30°C to +50°C
Minimum Creepage Distance: 35 mm/kV (Line-to-Ground)
Form Factor: Outdoor Open-Air Substation Switch Assembly
Door: Weatherproof, Dustproof Motor Operator Cabinet with Padlockable Door
Enclosure Material: N/A – Open Structure Design
Enclosure Finish: Hot Dip Galvanized Steel Structure
Enclosure Type: N/A - Outdoor Air Insulated
Motor Operator Enclosure: Weatherproof, Dustproof Steel Cabinet (NEMA 3R Equivalent)
Maximum Wind Speed:115 MPH (ASCE 7-10 Risk Category II)
Maximum Ice Loading:1.00 Inch with 40 MPH Wind (ASCE 7-10 Risk Category II)
Mounting: Horizontally Mounted
Dimensions: See attached drawing
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 Larson Electronics MPD-GOAB-NFDS-3P-3W-138KV-3000A-EF-BM-HM-NC-VB-M1 Gang Operated Air Break Switch is designed for reliable, safe, and convenient high-voltage power isolation in utility substations, transmission networks, renewable energy facilities, and industrial power distribution systems. This motor operated vertical break disconnect switch utilizes an ANSI 89-T1 vertical break design and is furnished with station post insulators for dependable operation in demanding outdoor environments.

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

The MPD-GOAB-NFDS-3P-3W-138KV-3000A-EF-BM-HM-NC-VB-M1 GOAB switch provides a safe and reliable means of isolating energized equipment for maintenance and operational switching. Compatible with 138KV AC systems (145KV maximum operating voltage), this switch features a motor operated gang mechanism for local or remote operation with a manual override provision in the event of motor or control power failure. The disconnect carries a continuous current rating of 3000 amps, a 63kA short-time withstand rating for 3 seconds, and utilizes copper or aluminum live parts with high-pressure silver-to-silver contacts for dependable electrical performance. The vertical break configuration provides a highly visible air gap when opened, allowing operators to easily verify equipment isolation.

Operation: The GOAB switch utilizes a motor operated mechanism that enables remote and local opening and closing from a control station. The operator includes OPEN/CLOSE

pushbuttons with position indication lamps and a minimum of six auxiliary contacts for remote status monitoring. A manual crank mechanism allows operation during motor or DC control power failure. The vertical break configuration creates a clearly visible disconnect point, enhancing operator safety during maintenance procedures.

Construction Design: The switch is furnished with outdoor station post insulators and copper or aluminum current-carrying components engineered for long service life in harsh outdoor environments. The operating mechanism is supplied complete with interphase piping, adjustable operating linkage, and a weatherproof, dustproof motor operator enclosure with anti-condensation venting. The switch is mounted on a hot-dip galvanized steel support structure that provides superior corrosion resistance and mechanical strength. A minimum creepage distance of 35 mm/kV (line-to-ground) is provided for reliable operation in contaminated outdoor environments.

Certification: The GOAB switch is manufactured in accordance with applicable IEEE C37.32, ANSI, NEMA, and other applicable industry standards for high-voltage disconnect switches and outdoor substation equipment.

Mount: Operators can install the GOAB switch on horizontal substation support structures utilizing station post insulators and galvanized steel mounting assemblies.

Customization: The MPD-GOAB-NFDS-3P-3W-138KV-3000A-EF-BM-HM-NC-VB-M1 can be customized to meet specific operating and power requirements. Examples of customizations include:

• Alternate continuous current ratings

• Alternate BIL ratings

• Polymer or porcelain station post insulators

• Manual or motor operated mechanisms

• Ground switch additions

• Auxiliary contact packages

• Custom control voltages

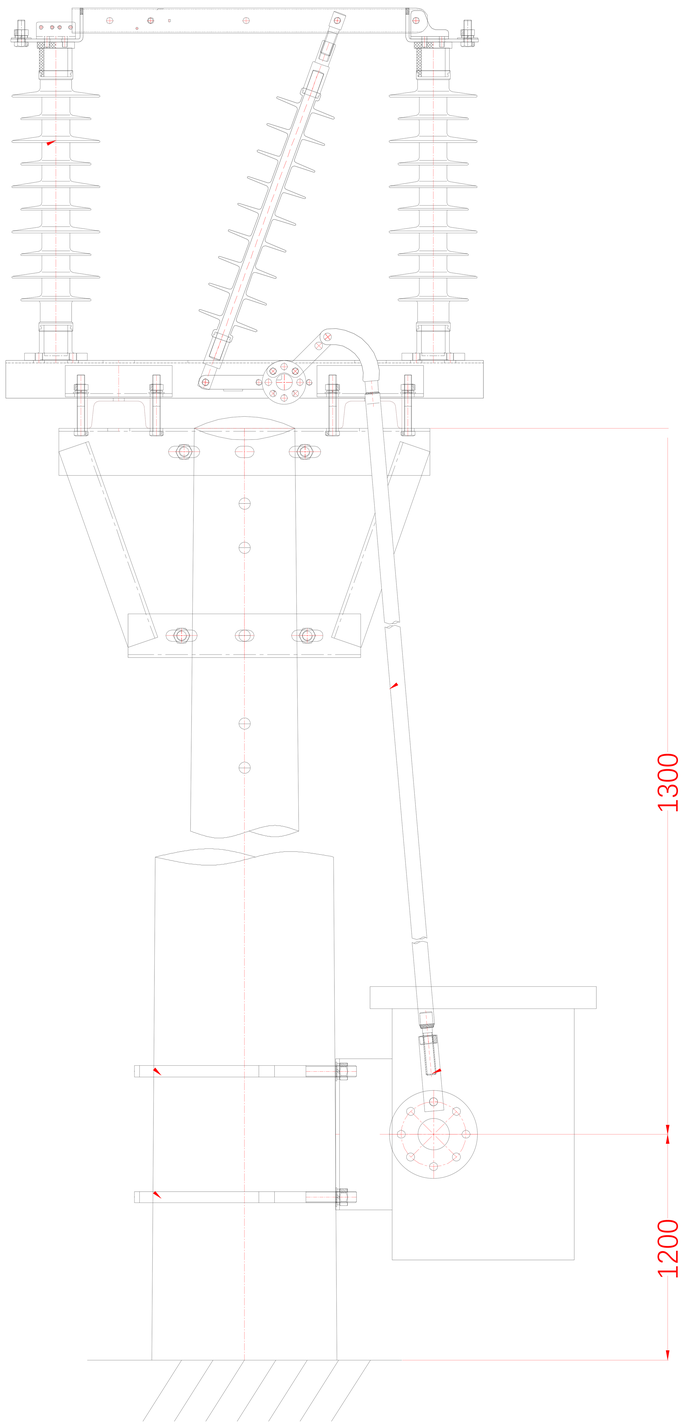
• SCADA and remote monitoring integration

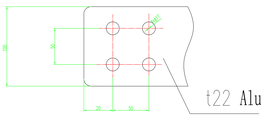
Applications: This switch is suitable for outdoor utility and industrial applications including, but not limited to, electrical substations, transmission and distribution systems, solar farms, wind generation facilities, power plants, utility switching stations, battery energy storage systems (BESS), industrial facilities, and renewable energy installations.

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

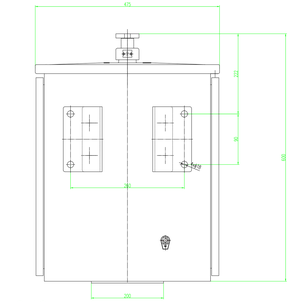
of your operation. A commitment to honesty, quality, and dependability has made Larson Electronics a leader in the lighting and electronics business since 1973. Contact us today at 800-369-6671 or message sales@larsonelectronics.com for more information about our custom options tailored to meet your specific industry needs.

Vertical break

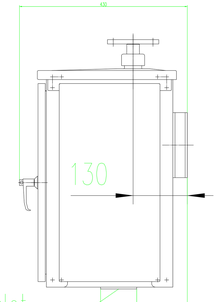




aluminum terminal 30000A



CJ6



Cable Inlet

Electric Operation mechanism

Technical Parameter
Operating Type:Vertical break double rotate
Rated Voltage: 138KV
Rated Current: 3000A Rated Frequency: 50/60Hz
Power frequency withstand voltage to ground: 330kV 1min
Lightning impulse withstand voltage: 650kV
Rated short time withstand current: 40kA/3S
Rated peak withstand current: 100kA
DC voltage: 220V DC AC voltage: 230V AC

LARSON MAGNETICS

Outdoor DS ,
Earth switch in one side
Model:

Horizontally mounted
Vertical breaker

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Frequently Asked Questions (FAQ)

There are no Faqs