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MPD-MES-SF6-3P3W-12-15KV-630A-BE-FM-MAR-CU-N3R-M1

Metal Enclosed Switchgear, SF6 Gas Insulated Circuit Breaker Fault Interruption, 630 Amp, 15 KV AC, 3-Phase 3-Wire, 1 IN 2 OUT, Pad Mount, Bottom Entry, Copper Bus, NEMA 3R, Mild Steel

Product ID: 331636



Image: MPD-MES-SF6-3P3W-12-15KV-630A-BE-FM-MAR-CU-N3R-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-MES-SF6-3P3W-12-15KV-630A-BE-FM-MAR-CU-N3R-M1 Metal Enclosed Switchgear

Unit Type: Metal Enclosed Switchgear, SF6 Gas-Insulated Circuit Breaker Fault Interruption
Line-In Connections: Terminal Lugs
Line-In Orientation: Bottom Feed
Nominal Voltage: 12 kV
Voltage Rating: 15 KV AC, 3 Phase, 3 Wire

BIL Rating: 95 KV

Frequency: 60 Hz

Current: Alternate 3 Phase Current

Protection Method: Digital Protection Relays

Protection Type: Overcurrent, Earth Fault, Differential, Breaker Failure, Voltage & Frequency

Protection Fuses: N/A

Incomer Digital Protection Relay Functions: Overcurrent, Earth Fault, Voltage, Negative Sequence, Under / Over Frequency, Breaker Failure, Sequence of Event and Data Logging
Transformer Feeder Digital Protection Relay Functions: Phase Overcurrent, Earth Fault, Transformer Differential (87T), Thermal Protection, Negative Sequence
External Trip inputs: Buchholz Relay, Pressure Relief Device, Winding Temperature Indicator, Oil Temperature Indicator

Bus Rating: 630 A

Continuous Current Rating: Incomer: 630 A, Transformer Feeders: 250 A

Interrupting Fault Current Rating: 20 kA

Ratings

Complies with IEEE 450 and IEEE 1188
Complies with IEC 62271 Series, IEEE C37 Series
NEMA 3R Rated for Indoor/Outdoor Use
Made in the USA

Short Circuit Current Rating: 20 kA

Bus Type: Copper Bus, Insulated

Bay #1 (Source Way)

(1) 15 kV Class, 630A, Three Pole SF6 Gas Circuit Breaker, Motorized, 124 VDC Trip and Close Coils

Bay #2 (Load Way)

(1) 15 kV Class, 250A, Three Pole SF Gas Circuit Breaker, Motorized, Relay Controlled

Bay #3 (Load Way)

(1) 15 kV Class, 250A, Three Pole SF Gas Circuit Breaker, Motorized, Relay Controlled

Mechanical Endurance: Minimum 10,000 Operations

Operating Mechanism: Spring-Operated, Motor-Charged

Trip / Close Coils: 124 VDC, Redundant

Auxiliary Contacts: Minimum (4) NO and (4) NC

SF6 Gas System: Individual sealed compartments, mechanical pressure gauge, pressure transducer with alarm contact, SF6 sampling and filling port, automatic gas-pressure blocking and interlocking functions

Potential Indication: Included, 3-Way Potential Indication, w/ Test Feature with LV Phasing 15 kV

Bushing Termination: Medium-voltage bushings suitable for bottom-entry cable terminations

Ground Pad: 3-Way 2-Hole, 15 kV

Control Cabinet: Weatherproof, ventilated control cabinet housing protection relays, metering, DC system and remote control interfaces

Remote Control Functions (Per GIS Panel): Open Pushbutton, Close Pushbutton, Trip Pushbutton, Breaker Position Indicator Lights (Open / Closed / Tripped), Alarm Indicator Lights, Hardwired Interconnection to GIS, Surge Protection, Wiring Schematic and Cable Tagging

Space Heaters: Included, w/ Thermostat

Anti-Condensation Heaters: Included

Internal Lighting: Internal LED Maintenance Lights

Minimum Ingress Protection: IP54 (Outdoor Enclosure)

Metering Current & Potential Transformer (CT/PT): Included Mount and Termination CT/PT

Control Power System: 124 VDC System Including AC-DC Inverter/Charger, DC Distribution Board, Battery Bank and Battery Monitoring Sensors, Complies with IEEE 450 and IEEE 1188

DC System Installation: Installed in an adequately sized, weatherproof, ventilated panel suitable for outdoor installation under the protective shed

Battery Autonomy: Minimum 12 Hours with Full Control and Tripping Capability During AC Supply Loss

Line-Out Connection: Terminal Lugs

Line-Out Orientation: Bottom Feed

Lifting Brackets: Included, Fitted on the Top of the Enclosure

Form Factor: Rectangular, Compact GIS Enclosure w/ Lockable Doors

Panel Configuration: 1 x Incomers, 2 x Outgoings

Mounting: Pad Mount / Floor (Plinth) Mount

Enclosure Material: Mild Steel

Enclosure Finish: Outdoor Industrial Finish

Enclosure Type: NEMA 3R, Ventilated

Special Orders - Special Requirements

Contact us for special requirements

Dimensions: 26-5/8"H x 47-13/16"W x 34-13/16"D
Weight: 825 lbs
Shipping Dimensions: -
Shipping Weight: -
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.

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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-MES-SF6-3P3W-12-15KV-630A-BE-FM-MAR-CU-N3R-M1 Metal Enclosed Switchgear is designed for reliable, safe, and convenient medium-voltage power distribution at utility and industrial facilities. This switchgear assembly consists of one incoming and two outgoing SF_6 gas-insulated circuit breakers for feeder and transformer protection. Designed for pad or floor (plinth) mounting, this bottom-entry switchgear is housed in a NEMA 3R rated, ventilated steel enclosure suitable for outdoor installations.

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

The MPD-MES-SF6-3P3W-12-15KV-630A-BE-FM-MAR-CU-N3R-M1 metal enclosed GIS switchgear operates on a 12 kV nominal system with a 15 kV class rating and provides 20 kA interrupting capacity. The lineup utilizes motor-operated, spring-charged SF_6 gas circuit breakers with redundant 124 VDC trip and close coils for dependable fault interruption. The incoming breaker is rated at 630 amps, while the two outgoing transformer feeders are rated at 250 amps each. A 95 kV BIL rating ensures insulation integrity for utility-grade applications.

Operation: The switchgear is equipped with digital protection relays for the incomer and transformer feeders, providing overcurrent, earth fault, voltage, frequency, negative sequence, breaker failure, transformer differential (87T), and thermal protection. Breaker control and status indication are provided locally and through a remote control station featuring open, close, and trip pushbuttons, breaker position indication, alarm lights, and surge protection. The system includes a complete 124 VDC control power system with charger, battery bank, DC distribution, and monitoring sensors, providing a minimum of 12 hours of autonomy during AC supply loss.

Enclosure Design: The GIS assembly is constructed with individually sealed SF□ gas compartments and includes mechanical pressure gauges, pressure transducers with alarm contacts, sampling and filling ports, and automatic gas-pressure blocking and interlocking functions. The enclosure incorporates space heaters, anti-condensation heaters, and internal LED maintenance lighting, and meets IP54 minimum ingress protection for outdoor service. The enclosure is fabricated from mild steel with an industrial outdoor finish and ventilated for thermal performance.

Standard & Compliance: This metal enclosed switchgear complies with IEC 62271 Series and IEEE C37 Series standards for medium-voltage switchgear and circuit breakers. The DC battery system complies with IEEE 450 and IEEE 1188.

Mount: This switchgear is designed for pad mount or floor (plinth) mount installations with

bottom cable entry and integrated lifting provisions.

Customization: The MPD-MES-SF6-3P3W-12-15KV-630A-BE-FM-MAR-CU-N3R-M1 can be customized to meet specific operating and power requirements. Example of customizations include:

• Alternate protection relay configurations

• Communication interfaces for SCADA integration

• Modified enclosure materials or finishes

• Extended battery autonomy

• Custom control and metering arrangements

Applications: This metal enclosed GIS switchgear is suitable for utility substations, booster pump stations, water and wastewater facilities, industrial plants, and critical infrastructure requiring reliable medium-voltage distribution and protection.

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