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MPD-MES-VCB-3P3W-11-34.5KV-1200A-TE-FM-REL-CU-N3R-M1

Metal Enclosed Switchgear with Vacuum Circuit Breaker and Ground Switch, 1200 Amp, 34.5 KV AC, 40 KAIC, 200 KV BIL, 3-Pole 3-Wire, 1 IN 1 OUT, Floor Mount, Top Entry, Copper Bus, NEMA 3R

Product ID: 332656

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



Image: MPD-MES-VCB-3P3W-11-34.5KV-1200A-TE-FM-REL-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-VCB-3P3W-11-34.5KV-1200A-TE-FM-REL-CU-N1-M1 Mental Enclosed Switchgear **Ratings**

Unit Type: Metal Enclosed Switchgear, Vacuum Circuit Breaker with Integral Ground Switch NEMA 3R Rated for Indoor/Outdoor Use
Line-In Connections: Outdoor porcelain bushings with air terminal pads for overhead conductor termination
Line-In Orientation: Top Feed via outdoor bushings
Voltage Rating: 34.5 KV AC, 3-Phase
BIL Rating: 200 KV
Frequency: 60 Hz
Current: Alternate 3 Phase Current
Protection Method: Vacuum Circuit Breaker with relay-based protection
Protection Type: SEL-751 protective relay
Protection Fuses: N/A
Protective Relay: SEL-751
Current Transformers:
- Pole 2-4-6: (1) Set 600/5A, SR 0.15B-1.8, TRF 2.0
- Pole 1-3-5: (1) Set 4000/5A, MR C800, TRF 2.0
- Additional: (1) Set 1200/5A, MR C400, TRF 2.0

Potential Transformers: As required for relay control power
Test Switches: ABB test switches as required

Control Power:
- Close & Trip Power: 125 VDC
- Dual Electrically Independent Trip Coils
- Charging Motor: 120 VAC normal with automatic transfer to 125 VDC backup
- Space Heaters: 120 VAC
- Convenience Outlet: 120 VAC GFCI

Bus Rating: 1200 A
Continuous Current Rating: 1200 A
Interrupting Fault Current Rating: 40 kA (symmetrical)
Short Circuit Current Rating: 40 kA
Bus Type: Silver-plated copper phase bus
Ground Bus: Copper ground bus, 1/4" × 2"
Insulators: Epoxy insulators

Bay Configuration (Main Breaker Section)
(1) 34.5 kV, 1200 A, 40 kA, 200 kV BIL Vacuum Circuit Breaker with Ground Switch, fixed mounted
Incoming Line Connections:
- Top-mounted outdoor bushings
- Air terminal connectors for overhead conductor termination

Outgoing Connections:
- Bottom cable exit
- Termination pads only

Low Voltage Compartment:
- Breaker control switch with LED indicating lights
- Selector switch
- Terminal blocks, terminal shorting blocks, and fuse blocks as required
- Anti-condensation heaters wired to terminal block
- SIS control wiring with insulated ring-type lugs
- GPO-3 devices as required

Construction Type: Bolt-together metal enclosed switchgear lineup
Mounting: Floor Mount
Primary Connections: Top-mounted outdoor bushings with air terminal arrangement
Bottom Design: Open bottom
Enclosure Material: Steel sheet metal enclosure
Enclosure Finish: ANSI 70 Gray, heat-cured powder coat
Enclosure Type: NEMA 3R, Outdoor, Ventilated
Dimensions: 78.74" W × 70.87" D × 96.46" H
Weight: 11,000 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.

Special Orders - Special Requirements
Contact us for special requirements
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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-VCB-3P3W-11-34.5KV-1200A-TE-FM-REL-CU-N3R-M1 Metal Enclosed Switchgear is designed for reliable, safe, and convenient medium-voltage power distribution in industrial and utility applications. This metal enclosed switchgear is configured with a fixed-mounted vacuum circuit breaker with an integral ground switch and is intended for floor-mounted installations. Designed with top cable entry and exit, the switchgear is housed in a NEMA 3R rated, ventilated steel enclosure suitable for outdoor service.

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

The MPD-MES-VCB-3P3W-11-34.5KV-1200A-TE-FM-REL-CU-N3R-M1 metal enclosed switchgear is rated for 34.5 kV AC, 1200 amps continuous, with a 200 kV BIL and 40 kA symmetrical interrupting capability. The unit utilizes a fixed-mounted vacuum circuit breaker and incorporates relay-based protection using an SEL-751 protective relay. Current transformers are provided per specification, including 600/5A, 4000/5A, and 1200/5A protection-class CTs with appropriate accuracy ratings and thermal rating factors. Incoming and outgoing power cables terminate at top-entry termination pads (lugs and terminations by others).

Operation: The switchgear is constructed as a bolt-together metal enclosed lineup with a dedicated low-voltage compartment. Operator controls include a breaker control switch with LED indicating lights and a selector switch. Close and trip power is 125 VDC with dual electrically independent trip coils for redundancy. The breaker charging motor operates on 120 VAC under normal conditions and automatically transfers to 125 VDC backup power upon loss of normal supply. Anti-condensation heaters (120 VAC) and a 120 VAC GFCI convenience outlet are provided within the compartment. Relay settings and commissioning are by others.

Enclosure Design: The enclosure is fabricated from steel sheet metal and finished in ANSI 70 gray, heat-cured powder coating. The ventilated NEMA 3R enclosure is designed for outdoor environments and includes an open bottom configuration to accommodate top cable entry. Silver-plated copper phase bus and a 1/4" × 2" copper ground bus are provided, supported by epoxy insulators.

Mount: This metal enclosed switchgear is designed for floor-mounted installations on suitable flat surfaces.

Customization: The MPD-MES-VCB-3P3W-11-34.5KV-1200A-TE-FM-REL-CU-N3R-M1 metal enclosed switchgear can be custom engineered to meet specific project requirements. Available customizations may include alternate relay packages, metering configurations, enclosure modifications, or additional feeder sections.

Applications: This switchgear is suitable for indoor and outdoor medium-voltage power distribution applications including substations, utility infrastructure, industrial plants, power generation facilities, and critical electrical distribution systems.

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

Export Control Classification Number (ECCN): EAR99

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