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

MPD-MES-VCB-3P3W-2.8.2T-38KV-2000A-40K-DO-FM-BEBE-S.R.M.-CU-N3R-LF-WOSP-M1

Metal Enclosed Switchgear, Vacuum Circuit Breaker, 3-Ph, 3-Wire, 2 In/ 8 Out/ 2 Tie Breakers, 38kV, 2000A, Floor-Mounted, Surge Arresters + Relay + Meter, NEMA 3R

Product ID: 339408

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



Image: MPD-MES-VCB-3P3W-2.8.2T-38KV-2000A-40K-DO-FM-BEBE-S.R.M.-CU-N3R-LF-WOSP-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-2.8.2T-38KV-2000A-40K-DO-FM-BEBE-S.R.M.-CU-N3R-LF-WOSP-M1 Metal Enclosed Switchgear

Unit Type: Metal Enclosed Switchgear, Vacuum Circuit Breaker Switchgear
Configuration: 3-Phase, 3-Wire
Assembly Type: 2 Incoming Main Breakers / 8 Feeder Breakers (4 per Bus Section) / 2 Bus Tie Breakers (Double Tie)
Voltage Class: 38kV AC, 60Hz
Main/Tie Bus Rating: 2000A (Highest Rating — Mains and Both Ties)
Feeder Rating: 1200A (Lower Rating — All 8 Feeder Positions)
Bus Material: Copper
Mounting Style: Draw-Out Type, Floor Mounted
Cable Entry: Bottom Entry / Bottom Exit
Enclosure Type: NEMA 3R, Front Type: Live Front

Main-Tie-Tie-Main Configuration
Two (2) Incoming Main Vacuum Circuit Breakers, 2000A Each
Two (2) Bus Tie Vacuum Circuit Breakers, 2000A Each
Eight (8) Outgoing Feeder Vacuum Circuit Breakers, 1200A Each — Four (4) Per Bus Section (per E-House)

Made in the USA

Features of Every Assembly
Main-Tie-Tie-Main (MTTM) Configuration
Draw-Out Vacuum Circuit Breakers Throughout
Suitable for Utility & Industrial Power Distribution Applications
Protection Relay & Metering Package
Utility Distribution Class Construction

Ratings & Approvals
Designed in accordance with applicable ANSI, IEEE, NEC, and NEMA standards
Suitable for Outdoor Utility Applications
All grounding shall comply with applicable state and local codes and NEC requirements

Dual Bus Arrangement, Independently Operable Bus Sections
Mechanical and/or Electrical Interlocking Between Main Breakers and Both Bus Tie Breakers
Break-Before-Make Transfer Logic, Prevents Simultaneous Incoming Source Paralleling
Load Transfer Capability Between Bus Sections

Vacuum Circuit Breaker Package
Quantity: Twelve (12) Total Draw-Out Vacuum Circuit Breakers — Two (2) Main, Two (2) Tie, Eight (8) Feeder
Voltage Class: 38kV, Interrupting Rating: 40kA Symmetrical
Main and Tie Breakers: 2000A Continuous, Feeder Breakers: 1200A Continuous
Three-Pole Operation, Standard Auxiliary Contacts, Open/Closed Position Indication, Mechanical Operations Counter

Protection, Metering & Surge Protection
Protection Relay Package for Main, Tie, and Feeder Breakers
Main Protection (Typical): 50/51, 50/51N, 27/59, 81O/U, 86
Bus Tie Protection (Typical, Each Tie): 50/51, 50/51N, 27/59, 81O/U, 86
Feeder Protection (Typical): 50/51, 50/51N, 27/59, 86
CT/PT Arrangement Per Approved Protection Scheme, Metering Provisions, SCADA Communication Provisions
Auxiliary Status Contacts, Remote Alarm Contacts

Surge Protection Package
Distribution Class Surge Arresters, Two (2) Total — One (1) Per Incoming Main Source

Control Cabinet
Front Accessible Instrument & Control Compartments, Breaker Control Switches

Bus System
2000A Sectionalized Copper Main Bus, Copper Ground Bus
Dual Bus Tie Connections Between Independent Bus Sections
Insulated Bus Supports, Medium Voltage Insulation System

Construction
Heavy Gauge Steel Construction, Metal Enclosed, Live Front
NEMA 3R Outdoor Enclosure, Floor Mounted Assembly
Front Accessible Compartments, Lockable Doors, Lifting Provisions

Dimensions & Shipping
Overall Dimensions: 396 in W × 84 in D × 114 in H (estimated, revised for double-tie section)
Approximate Weight: 21,000 lbs (estimated, increased from original single-tie figure to account for the added tie breaker cubicle)
Shipping Dimensions: TBD
Shipping Weight: TBD

Shipping
Multi-Section Factory-Assembled Lineup
Crated shipment available upon request
Final shipping configuration subject to approved GA drawings

Special Features
Main-Tie-Tie-Main (Double Tie) Configuration
Twelve (12) Draw-Out Vacuum Circuit Breakers
Main and Dual Bus Tie Interlocking
Microprocessor-Based Protection, SCADA Communication Provisions
Dual Incoming Surge Arresters, Copper Bus Construction

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

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-MES-VCB-3P3W-2.8.2T-38KV-2000A-40K-DO-FM-BEBE-S.R.M.-CU-N3R-LF-WOSP-M1 Metal Enclosed Switchgear is designed to provide reliable medium-voltage power distribution, source transfer, and feeder protection for utility and industrial electrical systems. This metal enclosed switchgear assembly consists of two incoming main vacuum circuit breakers, two bus tie vacuum circuit breakers, eight outgoing feeder vacuum circuit breakers, protection relay and metering provisions, distribution-class surge arresters, and a sectionalized copper bus system housed within a floor-mounted NEMA 3R outdoor enclosure. Designed for operation on 38kV AC, three-phase, three-wire systems operating at 60Hz, the assembly features a 2000A main and tie bus rating, 1200A feeder rating, 40kA symmetrical interrupting rating, draw-out circuit breaker construction, and a live front design suitable for outdoor utility distribution applications.

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

The **MPD-MES-VCB-3P3W-2.8.2T-38KV-2000A-40K-DO-FM-BEBE-S.R.M.-CU-N3R-LF-WOSP-M1** is engineered for medium-voltage distribution systems requiring a Main-Tie-Tie-Main arrangement with independent bus sections, feeder protection, and operational flexibility. The assembly combines draw-out vacuum circuit breakers, microprocessor-based protection, metering provisions, SCADA communication provisions, surge protection, and a sectionalized copper bus system to support reliable power distribution and simplified maintenance.

Main-Tie-Tie-Main Configuration:
The switchgear incorporates two incoming main vacuum circuit breakers and two draw-out bus tie vacuum circuit breakers, together with eight outgoing feeder vacuum circuit breakers, arranged in a Main-Tie-Tie-Main configuration. Four feeder circuits are supplied from each bus section through a sectionalized dual bus arrangement, with each bus section serving one E-House. Mechanical and/or electrical interlocking between the incoming mains and both bus tie breakers supports break-before-make transfer logic, preventing unintended paralleling of incoming power sources while allowing controlled load transfer between bus sections when required.

Vacuum Circuit Breaker Package:
The assembly includes a total of thirteen draw-out vacuum circuit breakers consisting of two main breakers, two bus tie breakers, and eight feeder breakers. Main and tie breakers are rated 2000A continuous current, while feeder breakers are rated 1200A continuous current. All breakers are rated for 38kV service with a 40kA symmetrical interrupting capacity and provide three-pole operation, standard auxiliary contacts, open and closed position indication, and mechanical operations counters. The draw-out design facilitates inspection, maintenance, and replacement while minimizing equipment downtime.

Protection, Metering & Surge Protection:
The switchgear includes a protection relay package for all main, tie, and feeder breakers. Typical protection functions include 50/51, 50/51N, 27/59, 81O/U, and 86 for the main and

each tie breaker, while feeder protection typically includes 50/51, 50/51N, 27/59, and 86. Current transformer and potential transformer arrangements are provided in accordance with the approved protection scheme. Metering provisions, SCADA communication provisions, auxiliary status contacts, and remote alarm contacts are also included. Distribution-class surge arresters are furnished on each incoming main source to provide incoming line surge protection. Final relay models, CT/PT ratios, communications protocols, and metering equipment shall be determined during detailed engineering review and customer approval.

Control Cabinet:
Front-accessible instrument and control compartments provide convenient access to breaker control switches and associated control equipment. The layout supports installation of customer-approved protection relays, metering devices, and communication hardware while maintaining accessibility for testing, maintenance, and future upgrades.

Bus System:
The switchgear utilizes a 2000A sectionalized copper main bus together with a copper ground bus, insulated bus supports, and dual dedicated bus tie connections between the two independent bus sections. The medium-voltage insulation system is designed to provide reliable electrical performance while supporting maintenance and operational flexibility.

Assembly Construction:
The switchgear is furnished as a complete floor-mounted metal enclosed assembly incorporating two incoming main breakers, two draw-out bus tie breakers, eight feeder breakers, sectionalized copper bus construction, surge arresters, protection and metering provisions, front-accessible control compartments, and a NEMA 3R outdoor enclosure. The integrated design provides centralized switching, protection, and distribution for critical medium-voltage systems.

Construction:
The enclosure is fabricated from heavy-gauge steel and finished with the manufacturer's standard outdoor finish. Construction features include a metal enclosed design, live front construction, floor-mounted assembly, front-accessible compartments, lockable doors, lifting provisions, and a NEMA 3R weather-resistant enclosure suitable for outdoor utility and industrial installations.

Special Features:
This switchgear incorporates a Main-Tie-Tie-Main (double-tie) configuration with thirteen draw-out vacuum circuit breakers, main and dual bus tie interlocking, microprocessor-based protection, revenue/utility metering provisions, SCADA communication provisions, dual incoming surge arresters, copper bus construction, and a NEMA 3R outdoor enclosure. The design provides high system reliability, operational flexibility, and simplified maintenance for demanding medium-voltage distribution applications.

Ratings & Approvals:
The switchgear is designed in accordance with applicable ANSI, IEEE, NEC, and NEMA standards and is suitable for outdoor utility and industrial medium-voltage power distribution applications. All grounding provisions shall comply with applicable state and local electrical codes together with NEC requirements.

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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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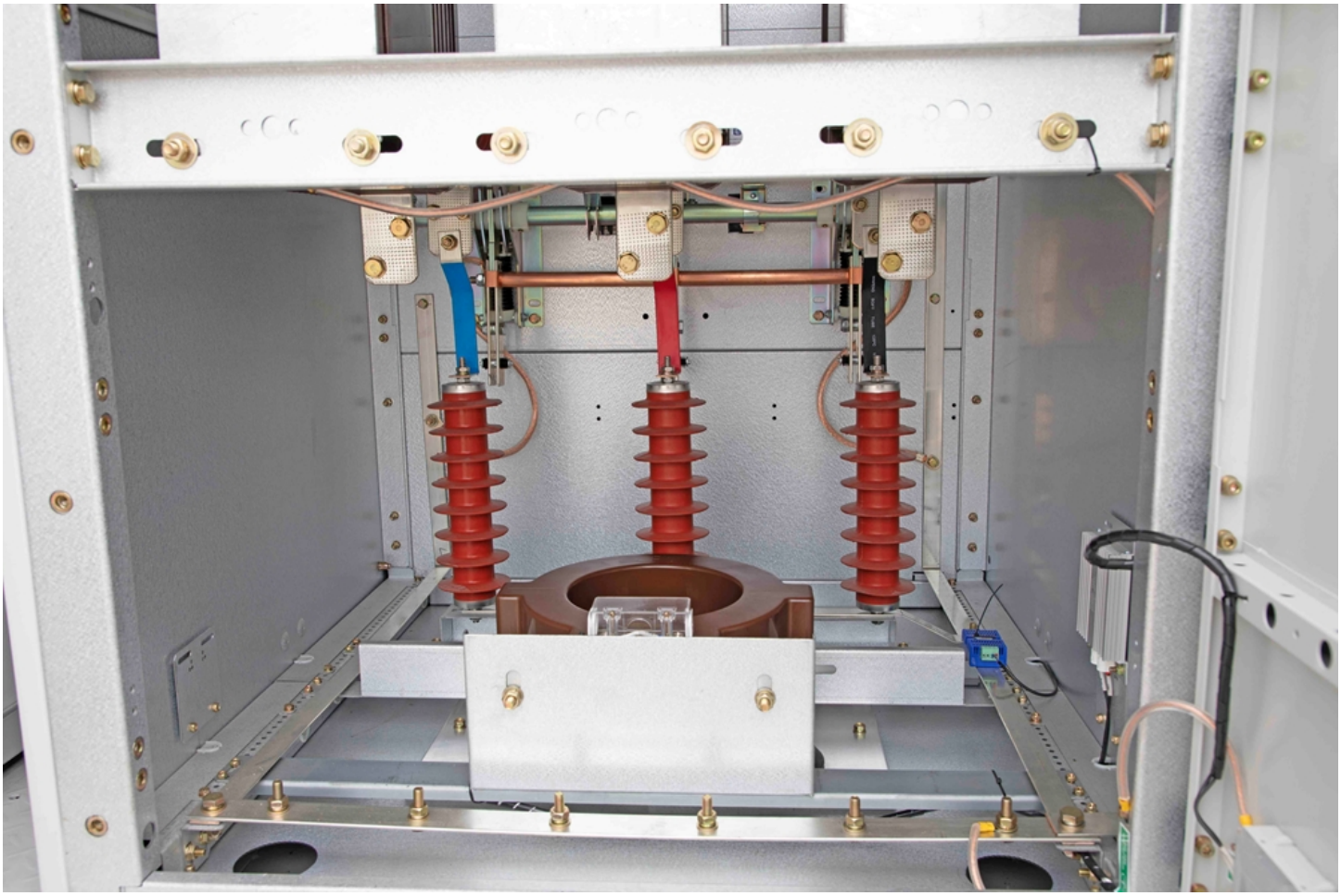


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Export Control Classification Number (ECCN): EAR99

Links (Click on the below items to view):

- **Single Line Diagram (One-Line Diagram)**(https://www.larsonelectronics.com/images/product/Oneline/339408.PDF)
- **HigResPic1**(https://www.larsonelectronics.com/images/product/HigResPic1/339408.JPG)
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