

MT-DTCB-SF6-R7-3P-AC-DXK-1200A-40KA-6-FM-Z-Z-N3R-M1

Dead Tank SF6 Circuit Breaker, 1200 Amp, 138000V AC, 3-Pole, Floor Mounted

Product ID: 310510

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



Image: MT-DTCB-SF6-R7-3P-AC-DXK-1200A-40KA-6-FM-Z-Z-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.

MT-DTCB-SF6-R7-3P-AC-DXK-1200A-40KA-6-FM-Z-Z-N3R-M1 Dead Tank Circuit Breaker

Unit Type: SF6 Circuit Breaker, Dead Tank

Nominal Voltage: 138000V AC

Maximum Voltage: 145000V RMS

Rated Voltage Range Factor K: 1.0

Rated Continuous Current: 1200A

Insulation Level:

Withstand Voltage (1 min, Dry): 365 kV, RMS

Withstand Voltage (10 sec, Wet): 315 kV, RMS

BIL (1.2 x 50µs): 650 kV Crest

Chopped Wave (2 µs): 968 kV

Chopped Wave (3 µs): 862 kV

Creepage Distance (To Ground): 168.5 inches

Creepage Distance (Across Break): > 168.5 inches

No. Of Poles: 3-Poles

Frequency (Hz): 60 Hz

Short Circuit Current at Rated Max. kV: 40 KA

Maximum Symmetrical Interrupting Current: 40 KA

3-Second Short Time Current: 40 KA

Ratings

NRTL Listed Service Equipment

NRTL Listed to UL 98 Dead Front Switch Boards

Complies With IEEE C37.06-2000

Complies With ANSI/IEEE C37.04-2018

Complies With ANSI/IEEE C37.04-1999

Complies With ANSI/IEEE C57.13-1993

Complies With ASTM D 2472-00

Complies With IEEE-693

Made in the USA

Closing and Latching Capability: -

Rated Interrupting Time (max.): 3 cycles

Rated Permissible Tripping Delay: 1 Sec.

Minimum Reclosing Time: 0.3 Sec.

Adjustable Reclosing Range: 0.1 - 1.0 Sec.

Operating Mechanism: Motor Charged Spring for 3 pole operation

Pole Center Line Distance: 68.9 inches (min.)

Motor Voltage: 125VDC

Control Voltage: 125VDC

Breaker Auxiliary Contacts: 16NO & 16NC

Trip Coil Voltage Range: 70-140VDC

Number of Trip Coils: (2), independent from each other

Trip Logic: Trip and block close

Trip Coil: Operated electrically (local & remote) + mechanically

Trip Coil Monitors: SEL-2652

Closing Coil: Operated electrically (local & remote)

Closing Coil Voltage Range: 70-140VDC

Control Power Disconnects: Molded Case Circuit Breakers

Space Heater: Included, 120Vac nominal, Thermostat controlled (240Vac Voltage Rating)

Incoming Bushing Current Transformer: Included, (2) Per Bushing, 1200:5 Ratio, C400 Relaying Accuracy Class, 2.0 Thermal Rating & (1) Per Bushing, 600:5 Ratio, 0.15S-B0.9 Metering Accuracy Class, 2.0 Thermal Rating

Outgoing Bushing Current Transformer: Included, (2) Per Bushing, 1200:5 Ratio, C400 Relaying Accuracy Class, 2.0 Thermal Rating & (1) Per Bushing, 600:5 Ratio, 0.15S-B0.9 Metering Accuracy Class, 2.0 Thermal Rating

Bushing Type: Porcelain, ANSI 70 Grey

Bushing Quantity: (6) Bushings

Bushing Termination: Tinned bronze, 4-hole NEMA pad terminals

Bushing Rating: 170 kV Class, 750 kV BIL

ACSR termination Lugs: 477 MCM, BURNDY CAT #NAR36A-4N (for each pad)

Lug Affixing Hardware: 2"-13NC, Bolts, Washers & Nuts

External Metal Parts: Hot Dipped Galvanized per ASTM standards

Support Frame Ground Lugs: Suitable for #4/0 AWG Cu

Fusing: Included, knife blade fuses for close and trip circuits

Switching: Included, double-pole single throw switches for the trip and close circuit isolation

Pressure Gauge: Included

Pressure Switches: For trip/close & alarm circuits (low & low/low)

Ambient Temperature Range: -40° C to +50° C

Seismic: Complies with IEEE-693

Wind Load Rating: 90 mph

Mounting: Floor mounted on a welded hot-dip galvanized steel base structure with removable legs

Lifting Eyes: Included

Ground Pads: Included, (2) bolted bronze type grounding terminals for 7#5 Copper weld conductor are provided on diagonally opposite corners of the structural frame of the high voltage

Enclosure Material: Coated Steel

Nameplate Material: Stainless Steel

Enclosure Finish: ANSI 70 Grey

Insulating Medium: SF6

SF6 Gas System: Includes pressure alarms, valves, dryers, filters and all accessories for filling, removal, operation and maintenance of the circuit breaker, Temperature compensated gas pressure gauges and gas density monitors, 1/4" tube fitting - a 37 degree AN male 7/16-20 flare type, 1" Dilo fitting (Swagelok. Manufactured) for SF6 filling, 316 stainless steel gas lines and valves (Cajon Manufactured), Two pressure switches

SF6 Tubing: H2S corrosion proof (316 Stainless Steel)

SF6 Tubing Joints: Mechanical Compression type (no silver soldering)

Gas filling: 1 bottle of SF6 gas per breaker

Gas filling equipment to be supplied: Regulators, Hoses, fittings & special tools

Hardware Material: 316 Stainless Steel

Control Cabinet Protection Degree: Weatherproof Fiberglass NEMA 3R Enclosure

Service Condition: Outdoor

Dimensions: 140"-W x 114"-D x 157"-H

Weight: 3,527 lbs

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 MT-DTCB-SF6-R7-3P-AC-DXK-1200A-40KA-6-FM-Z-Z-N3R-M1 from Larson Electronics is a 145 kV class dead tank SF6 circuit breaker, new recyclable embedded poles up to 145 kV, 40 kA, and 1200 A C2 Class back-to-back capacitive switching and out of phase switching test compliance.

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

The MT-DTCB-SF6-R7-3P-AC-DXK-1200A-40KA-6-FM-Z-Z-N3R-M1 service entrance circuit breaker provides a safe and reliable way for operators in industrial settings to tap into and utilize power sources independently of the work area. Compatible with three-phase 145000V AC. This 3-pole circuit breaker carries a 1200A RMS at 138000V AC.

Operation: All the control and signaling devices are located on the front of the circuit-breaker. Suitable locks prevent incorrect operations. The antipumping device is always provided on the actuator. The nameplate, located on the front panel, enables all the circuit-breaker characteristics to be identified.

Mount: The MT-DTCB-SF6-R7-3P-AC-DXK-1200A-40KA-6-FM-Z-Z-N3R-M1 circuit breaker is floor mounted. The breaker is operated by a motor-charged stored energy spring mechanism, charging of the circuit breaker is normally performed by an electric motor and in an emergency by a manual charging handle.

Certification: This MT-DTCB-SF6-R7-3P-AC-DXK-1200A-40KA-6-FM-Z-Z-N3R-M1 complies with the ISO 9001 Standards, certified by an external independent organization, complies with the ISO 14001 Standards, certified by an external independent organization and OHSAS 18001 Standards

Applications: This MT-DTCB-SF6-R7-3P-AC-DXK-1200A-40KA-6-FM-Z-Z-N3R-M1 are used in power distribution to control and protect lines, transformer and distribution substations, motors, transformers, capacitor banks, etc.

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.



Frequently Asked Questions (FAQ)

There are no Faqs



Warranty: 12 Months.

Export Control Classification Number (ECCN): EAR99



Links (Click on the below items to view):

- **HigResPic1**(<https://www.larsonelectronics.com/images/product/HigResPic1/310510.JPG>)
- **Video1**(<https://www.youtube.com/watch?v=D1zbANtgS48>)
- **Video2**(<https://www.youtube.com/watch?v=FcbIEGXvqyA>)
- **ISO 9001 Certification**(<http://larsonelectronics.com/images/pdfdocs/ISO9001.PDF>)
- **Business Certificate**(<https://www.larsonelectronics.com/images/pdfdocs/w9.PDF>)
- **Shipping Time Map**(<https://www.larsonelectronics.com/images/product/ShippingTimeMap/ShippingTimeMap.pdf>)