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MT-DTCB-SF6-R7-3P-AC-DXK-4000A-63KA-6-FM-Z-Z-N4-M2

Dead Tank SF6 Circuit Breaker, 4000 Amp, 138000V AC, 3-Pole, Floor Mounted

Product ID: 318823



Image: MT-DTCB-SF6-R7-3P-AC-DXK-4000A-63KA-6-FM-Z-Z-N4-M2

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-4000A-63KA-6-FM-Z-Z-N4-M2 Dead Tank Circuit Breaker

Unit Type: SF6 Circuit Breaker, Dead Tank
Nominal Voltage: 138,000V AC
Maximum Rated Voltage: 145,000V RMS
Rated Voltage Range Factor, K: 1.0
Rated Continuous Current: 4000A

Insulation Level:
Rated Short-Duration Power Frequency Withstand Voltage, Dry, 1 min.: 275 kV, RMS
Power Frequency Withstand Voltage, 1 min., Across Open Contacts: 315 kV, RMS
BIL (1.2 x 50µs): 650 kV Crest
BIL (1.2 x 50µs), Across Open Contacts: 750 kV
Creepage Distance (To Ground): 168.5 inches
Creepage Distance (Across Break): > 168.5 inches

No. Of Poles: 3-Poles
Frequency: 60 Hz
Overload Capability: 110% of rated current for 2 hours
Maximum Symmetrical Interrupting Capability, with X/R: 63 KA (X/R : 20)
Maximum Symmetrical Interrupting Capability: 63 KA :
3-Second Short Time Current Carrying Capability: 63 KA
Closing and Latching Capability: 170 kA
Rated Out Of Phase Current: -
Rated Interrupting Time (max.): 3 Cycles
Rated Permissible Tripping Delay: 1 Sec.

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
30 Years Maintenance Cycle
Made in the USA

Operating Control Voltage (trip and close): 125VDC (range 90-140V closing,70-140V opening)

Operating Mechanism: Motor Charged Spring for 3 pole operation

Motor Voltage: 125 VDC with alternating current (AC) supply as normal and direct current (DC) as backup

Motor Current: Maximum starting current = 40 A for .3 seconds and 15 A maximum continuous until charged

Auxiliary Power Voltages: 208/120 VAC normal

Breaks Per Phase: (1)

Number of Trip Coils: (2)

“a” Auxiliary Contacts: (12)

“b” Auxiliary Contacts: (12)

Additional “a” Auxiliary Contacts: (12)

Additional “b” Auxiliary Contacts: (12)

Closing Coil: Operated electrically (local & remote)

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

Protection Relay: SEL-421

Space Heater: Included, Thermostat controlled

Rated isolated capacitor bank current switching capability: 600A

Asymmetrical Int. Capability Ratio: 1.2

Closing Time (Total): 100 ms

Rated Reclosing Time: 12 Cycles

Rated Duty Cycle: O-15sec-CO-3min-CO

Bushing Current Transformer: Included, (2) Per Bushing, 4000:5 MR, C800 Accuracy Class, 2.0 Continuous Thermal Current Rating Factor, Secondary Resistance ≤ 0.0025 Ω/turn

Bushing Type: Porcelain, ANSI 70 Grey

Bushing Quantity: (6) Roof Bushings

Line Cable, Bus or Conductor Size/No. Per Phase: 1590 KCML AAC “COREOPSIS” (1.453” DIA) / 3 Per Phase

Load Cable, Bus or Conductor Size/No. Per Phase : 1590 KCML AAC “COREOPSIS” (1.453” DIA) / 3 Per Phase

Bushing Rating: 145 kV Class, 650 kV BIL

First Pole to Clear Factor: 1.5

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: -25° C to +37.3° C

Relative Humidity Range: 40.5% - 80%

Snow Load: 30 psf

Seismic Criteria: 0.2 sec. MCE Spectral Response Acceleration, Ss = 0.110 g, 1.0 sec. MCE Spectral Response Acceleration, S1 = 0.057 g, Site Class: D, Occupancy Category: III, Importance Factor = 1.25

Wind Load Rating: 120 mph

Noise Level: 85 dBA max. (At 100ft from Breaker)

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 61 Sky 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)

SF6 Weight: 161 lbs

SF6 Rated Operating Pressure: 87 PSIG @ 20ºC

SF6 Min. Operating Pressure: 72 PSIG @ 20ºC

SF6 Alarm Pressure: 75 PSIG @ 20ºC

SF6 Cutout Pressure: 72 PSIG @ 20ºC

Gas filling: 1 bottle of SF6 gas per breaker

SF6 Leakage Rate Per Year: < 0.5%

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

Hardware Material: 316 Stainless Steel

Control Cabinet Protection Degree: Weatherproof Fiberglass NEMA 4 Enclosure

Service Condition: Outdoor

Total Dimensions: 150.28"-W, 124.61"-D, 167.4"-H

Total Weight: 3527.4 lbs

Foundation Dimensions: 62.05" x 60.24" (Center-to-Center)

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

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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-4000A-63KA-6-FM-Z-Z-N4-M2 from Larson Electronics is a 145 kV class dead tank SF6 circuit breaker, new recyclable embedded poles up to 145 kV, 63 kA, and 4000 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-4000A-63KA-6-FM-Z-Z-N4-M2 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 4000A 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-4000A-63KA-6-FM-Z-Z-N4-M2 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-4000A-63KA-6-FM-Z-Z-N4-M2 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-4000A-63KA-6-FM-Z-Z-N4-M2 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.

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Frequently Asked Questions (FAQ)

There are no Faqs