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MT-PDT-CRC-K4-3P-DNZ-1.5MVA-YE.E-A6-FA-AZ-2Z-ZZ-Z-N3R-M1

1.5 MVA Cast Resin Core Transformer, 6900V Delta Primary, 480Y/277 x 480Y/277 Wye-N Secondary, AA/FA, Class F, W/ Fans

Product ID: 314501



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-PDT-CRC-K4-3P-DNZ-1.5MVA-YE.E-A6-FA-AZ-2Z-ZZ-Z-N3R-M1 Cast Coil Resin Transformer

Transformer Type: Cast Resin Transformer (CRT)
Transformer Configuration: Dry Type, Ventilated
Phase: Three Phase
Capacity: 1.5 MVA (1500 KVA)
Vector Group: Dyn11
Primary Voltage: 6900V AC
Primary Voltage Class: 8.7 kV Class
Primary Phasor: Delta
Primary BIL: 75 KV
Secondary Voltage: 480Y/277 x 480Y/277
Secondary Voltage Class: 1.2 kV Class
Secondary Phasor: Wye-N
Secondary BIL: 30 KV
Frequency: 60 Hz
Temperature Rise: 115°C
Cooling: AA/FA
Forced Air (Fans): Included
Insulation Class: Class F
Tap Changer: 5-Position Tap Changer (By Cable, No switch)
Tap Qty: (2) FCAN Above, (2) FCBN Below
Tap %: 2.5%
Tap Changer Switch Location: HV Side
Impedance (at 120°C): 4%
Primary Connection Type: Terminal Lugs
Primary Surge Arrestors: Included

Ratings

NRTL Listed for United States and Canada
Complies with ANSI / IEEE C57.12.00
Complies with ANSI / IEEE C57.12.01
Complies with ANSI / IEEE C57 12.35
Complies with ANSI / IEEE C57.12.59
Complies with ANSI / IEEE C57.12.70
Meets/Exceeds DOE 2016 Efficiency Ratings
Meets/Exceeds CSA Efficiency Ratings
Meets or Exceeds NEMA ST-20 Standards
NEMA 3R Indoor/Outdoor Steel Enclosure
Seismic Qualified for Earthquake Loads
RoHS Certified
CE Certified

Efficiency %: 99.30%
Based on transformer operating at 50% of nameplate base kVA.

Load Losses at 145°C Reference Temp.
No Load Loss (in watts): +/- 2,400W
Full Load Loss(in watts): +/- 13,500W
Total Load Loss (in watts): +/- 15,900W

Note: ***Losses offered are typical only, not guaranteed***

Primary Surge Arrestor Voltage Rating: 9 kV
Primary Surge Arrestor MCOV Rating: 7.65 kV
Primary Over Current Protection (OCP): N/A
Primary Over Current Protection Method: N/A
Primary Grounding Provisions: N/A
Secondary Connection Type: Terminal Lugs
Secondary Over Current Protection (OCP): Included, Circuit Breaker
Secondary Grounding Provisions: Lugs
Metering Current Transformer (CT): N/A
Metering Panel: N/A
Auxiliary Control Panel : N/A
Load Break Switch: 2-Position Load Break Switch
Load Break Switch Qty: (1)
Load Break Switch Location: HV Side
Digital Protection Relay: Included, Controls the feeder of the transformer, Issues an alarm in case of rising of temperature above a first level or in case of fault on the temperature measuring loop and trips the breaker in case of rising of temperature above a second level

NGR System: Included, Proposed to perform te following functions:

-High resistance grounding system (multi-tap neutral resistor) in the low voltage (LV), three-phase connection (secondary to the distribution transformers)
- Indication of the first ground fault (NGR monitoring)
- Permission to continue operating the installation until the fault is located and corrected; the system will alarm but not trip in the case of a line-to-Ground fault
- A quick method of fault location, before the second fault occurs: pulsed ground locating system
- The Neutral Grounding Resistor –rated for continuous duty- will limit the ground fault to a maximum of 5 to 10 A. Ground Fault Relays will detect the fault and alarm at 10 to 20% of the maximum ground fault current

Efficiency Standard(s): DOE 2016, IEEE, ANSI
K-Factor Rating (Harmonic Mitigation): K-4
Temperature Sensors in Coil: Included, PT100, Located in LV Winding
Temperature Gauge: Included
Seismic Bracing: Included, Match seismic condition imposed by California regulation
Weather Shield: N/A
Space Heaters: N/A

Antivibration Pads: Included

Winding Material: Aluminum
Ambient Temperature Rating: 40°C
Sound Level: 60 dBA, Complies with NEMA TR-1
Elevation (Altitude) Rating: 3300ft (1000 meters) Above Sea Level
Enclosure Material: Coated Steel

Enclosure Rating: NEMA 3R Weatherproof

Cable Entry: Bottom Entry

Paint Type: Epoxy Paint
Finish: ANSI 61 Grey

Mount: Pad Mount / Floor Mount

Dimensions: 85"L x 71"W x 87"H

Weight: 7720 lbs

*Please note that numbers are approximate and subject to change

Special Orders - Special Requirements
Contact us for special requirements

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The MT-PDT-CRC-K4-3P-DNZ-1.5MVA-YE.E-A6-FA-AZ-2Z-ZZ-Z-N3R-M1 Cast Resin Transformer from Larson Electronics converts three-phase 6900V Delta electrical current to three-phase 480Y/277 x 480Y/277 Wye-N. This power distribution unit provides operators the ability to safely tap into and distribute 1500 KVA AC power from a variety of sources, such as direct grid power. The entire system is secured to a skid mount platform.
PLEASE NOTE: ANY FREE SHIPPING OFFERS DO NOT APPLY TO POWER DISTRIBUTION PANELS, TRANSFORMERS, OR SUBSTATIONS*
Transformer Features: With a transformer rating of 1.5 MVA (1500 KVA), the industrial dry type transformer features a primary voltage of three-phase 6900V AC Delta and a secondary voltage of three-phase 480Y/277 x 480Y/277 AC Wye-N. This transformer is equipped with a 5-position tap changer with five, +/- 2.5% taps (two FCAN above and two FCBN below) to allow small changes for voltage. The system features aluminum windings for high strength and electrical

conductivity. This cast coil transformer features coils casted in epoxy resin under a vacuum using molds. The structure makes this type of transformer ideal for installations in extreme weather environments, offshore platforms, mining and rugged sites.
The MT-PDT-CRC-K4-3P-DNZ-1.5MVA-YE.E-A6-FA-AZ-2Z-ZZ-Z-N3R-M1 has fans for forced air cooling.
Transformer Efficiency: The transformer meets standard efficiency requirements. High efficiency makes this unit suitable for use in electrical rooms, air conditioned spaces in buildings, underground vaults and similar locations, in addition to outdoor areas.
Temperature Sensor: The MT-PDT-CRC-K4-3P-DNZ-1.5MVA-YE.E-A6-FA-AZ-2Z-ZZ-Z-N3R-M1 is equipped with temperature sensors inside the system for controls and monitoring. A monitoring service is not included with the transformer.
Temperature Gauge: This transformer comes with a temperature gauge.
Load Break Switch: This cast resin transformer includes a 2-position load break switch.
Surge Arresters: This transformer includes surge arresters. Designed for over-voltage and transient voltage protection, the components prevent damage caused by lightning, internal switching or voltage surges. We can offer models without surge arresters that have mounting provisions for customer-provided surge arresters.
Control Transformer: This
Seismic Bracing: This system does not include seismic bracing. We can add seismic bracing for added protection in areas prone to earthquakes at an additional cost.
Weather Shield: This transformer does not include a weather shield. We can add a weather shield for protection in outdoor areas, humid environments and rodents at an additional cost.
Space Heaters: This system does not include a space heater. We can add a space heater for preventing condensation during extended shutdown at an additional cost.
Enclosure Design: This transformer is protected by a steel housing. The enclosure carries a NEMA 3R rating for protection from exposure to moisture, rain, dust and debris.
Mount: The power distribution unit is mounted atop a skid plate base that allows this transformer to easily be moved from one location to another using a forklift. The skid platform is designed for serious use and is ruggedly constructed to withstand demanding conditions and heavy duty industrial applications. The industrial grade skid platform can be modified to meet the needs of job-site requirements.
Benefits: The MT-PDT-CRC-K4-3P-DNZ-1.5MVA-YE.E-A6-FA-AZ-2Z-ZZ-Z-N3R-M1 transformer offers many benefits to consumers. This transformer provides owners with significant energy savings, as well as offering environmental benefits. Higher efficiency not only extends the life of the transformer, but also turns into cost savings for owners in the form of lower energy bills and decreased cost of ownership.
Applications: General purposes, industrial sites, electrical rooms, underground vaults, manufacturing facilities, steel plants, offshore, commercial, military, processing plants, electric power distribution, utilities, public locations and more.
Larson Electronics is a manufacturer and as such can build stationary and portable transformer systems to your specifications. Although we carry several models of power distribution transformer systems, we can deliver custom ordered units almost as quickly as our prebuilt units. If this model does not meet your needs, please contact us at 1-800-369-6671 or sales@larsonelectronics.com to discuss your specific requirements.








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Frequently Asked Questions (FAQ)