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Product ID: 321533

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



Image:

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-PSTC-R7-3P-DXF-8MVA-GMP-HT-LS-A6-BM-CZ-2Z2-M2 Conservator Transformer

Phase: Three Phase
Capacity: 8 MVA (8,000 KVA)
Primary Voltage: 115000V Delta
Primary Voltage Class: 121 kV
Primary BIL: 450 kV
Secondary Voltage: 13800Y/7967 Grounded Wye
Secondary Voltage Class: 15 kV
Secondary BIL: 95 kV
Vector Group: Dyn1
Frequency: 60 Hz
Temperature Rise: 65°C
Forced Air (Fans): N/A
Tap Changer: 5-position Tap Changer, (2) +/- 2.5% Taps Above and (2) +/- 2.5% Taps Below
Primary: Bushings Position: Ansi Side 2, Partial length ATC, 4 Hole Spade Bushings
Secondary: Bushings Position: Ansi Side 4, Full length ATC, 6 Hole Spade Bushings
Insulation Fluid: Mineral Oil, Non-PCB Fluid
Fluid Capacity: 2,388 Gallons
Cooling Class: ONAN, Self-Cooled
Liquid Level Gauge: Analog w/ Contact
Oil Temperature Gauge: Analog w/ Contact, Qualitrol
Winding Temperature Gauge: Analog w/ (2) Contacts, Qualitrol
Pressure/Vacuum Gauge: Analog
Fault Pressure Device: None

Ratings

Listed for United States and Canada
ONAN Cooling Class

Factory Tests

Transformer Turns Ratio Test
Winding Resistance Test
Insulation Resistance Test
Double (Power Factor Dissipation Test)
SFRA (Sweep Frequency Response Analysis)

Pressure Relief Valve: Included
Fill Valve: Included
Drain Valve w/ Sampler Port: Included
Rapid Rise Relay: Included
Surge Arrestors: Included on Primary Side
Protection Fuses: N/A
Load Break Switch: (1) 2-position Load Break Switch
Front: -
Feed: -
Winding Material: Copper
No Load Loss: +/- 12,331W
Full Load Loss: +/- 38,902W
Impedance (@ 8 MVA): 7.88%
Ambient Temperature Rating: -
Sound Level: -
Cabinet Type: No Doors
Paint Type: Grey
Mounting: -
Conduit Opening: -
Dimensions:
Total Weight: 55,997.41 Lbs
Shipping Dimensions: 119"-L, 99"-W, 121"-H (+ The Height Of Rapid Rise Relay)
Shipping Weight: 33.069.34 Lbs (without Bushings, Oil, Radiators)

Special Orders - Special Requirements
Contact us for special requirements
Toll Free: 1-800-369-6671
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The MT-PSTC-R7-3P-DXF-8MVA-GMP-HT-LS-A6-BM-CZ-2Z2-M2 Conservator Substation Transformer from Larson Electronics offers powerful, reliable and efficient power distribution in outdoor locations. The low operating costs, low heat emissions and low cost of ownership make this transformer ideal for a wide range of applications and businesses. This transformer ensures extra space for storing oil and is equipped with breathers to facilitate air flow. The conservator transformer should be installed on supporting structures.

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

Transformer Features: The industrial transformer features a primary voltage of three-phase 115000V Delta and a secondary voltage of three-phase 13800Y/7967V Grounded Wye. This system is rated for 8 MVA (8,000 KVA). We offer systems with loop or radial feed, as well as dead front or live front primary connections. This transformer features a 5-position tap changer with two +2.5% taps above and two -2.5% taps below to allow small changes in voltage. There is a rapid rise relay on the system.

The system features copper windings for high strength and thermal/electrical conductivity. This transformer consists of a rectangular coil and a five-legged wound core design with three coils and four core loops (this is for three-phase transformers only; single-phase units have one coil and two core loops).

The MT-PSTC-R7-3P-DXF-8MVA-GMP-HT-LS-A6-BM-CZ-2Z2-M2 does not have fans for forced air cooling. This non-sealed system features breathers for cooling when operating temperatures increase.

Temperature Rise: This unit features 65°C temperature rise for reduced heat waste, increased reliability and longer life. At 65°C temperature rise, the transformer offers 8 MVA

(8,000 KVA). The transformer meets standard efficiency requirements. The combination of low temperature rise and 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.

Insulation Fluid: The MT-PSTC-R7-3P-DXF-8MVA-GMP-HT-LS-A6-BM-CZ-2Z2-M2 features mineral oil cooling fluid (ONAN). We offer transformers with biodegradable or FR-3 fluids, if needed.

Biodegradable Fluid: Biodegradable cooling fluid (vegetable oil) has a higher heat capacity compared to mineral oil, making the liquid safer to use and more reliable during operations. Vegetable oil has a higher flash point and fire point than mineral oil, hydrocarbon oil, silicone oil and synthetic ester. This cooling fluid is also non-toxic and can tolerate higher breakdown voltages than mineral oil. When operating at high temperatures, biodegradable cooling liquid sustains up to 120% loan conditions, which helps preserve the transformer's lifespan and performance.

Gauges: The following gauges are included with the system: liquid level, temperature and pressure/vacuum gauges. Standard liquid level, temperature and pressure/vacuum gauges are analog, manual reading types.

Fault Pressure Devices: There are no fault pressure devices on the unit. Fault pressure devices are used to detect high rates of pressure rise within the tank.

Rapid Rise Relay: There is a rapid rise relay on the unit. This safety component is designed for protection when a rapid increase in tank pressure occurs. The relay is suitable for detecting sudden pressure fluctuations above predetermined safe limits.

Surge arresters: This system comes with surge arresters on the primary side. 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 high elbow surge arresters that have mounting provisions for customer-provided surge arresters.

Load Breaker Switch: The transformer is equipped with a 2-position load breaker switch.

Valves: The MT-PSTC-R7-3P-DXF-8MVA-GMP-HT-LS-A6-BM-CZ-2Z2-M2 is equipped with a pressure relief valve, fill valve and drain valve with sampler port.

Protection Fuses: This transformer does not have bayonet protection fuses. For units without protection fuses, upstream protection is provided. We recommend provisions for protection fuses when possible, as blown fuses may require more frequent oil changes.

Mount: This conservator substation should be installed on supporting structures, such as the roof of the transformer main tank.

Benefits: The MT-PSTC-R7-3P-DXF-8MVA-GMP-HT-LS-A6-BM-CZ-2Z2-M2 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 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)

There are no Faqs

Product ID: 321533

Warranty: 24 Months.

Export Control Classification Number (ECCN): EAR99

Links (Click on the below items to view):

- **Operations Manual**(https://www.larsonelectronics.com//images/product/Manual/321533.PDF)
- **HigResPic1**(https://www.larsonelectronics.com//images/product/HigResPic1/321533.JPG)
- **Video1**(https://www.youtube.com/watch?v=4-JEyYeYcn8)
- **Video6**(https://www.youtube.com/watch?v=olihKUo24KU)
- **Video7**(https://www.youtube.com/watch?v=Yez7eCilgDE)
- **Video8**(https://www.youtube.com/watch?v=Ac5BDPSy964)
- **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)