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MT-TPT-VPM-R7-3P-DMR-5MVA-DNZ-A6-DZ-CZ-1Z-ZZ-Z-N3R-M1

5 MVA Vacuum Pressure Impregnated Traction Power Transformer, 12470V Delta Primary, 6900V Delta Secondary, ANN, Class H, W/O Fans, VPI

Product ID: 312078

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



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-TPT-VPM-R7-3P-DMR-5MVA-DNZ-A6-DZ-CZ-1Z-ZZ-Z-N3R-M1 Vacuum Pressure Impregnated Traction Power Transformer

Transformer Type: Vacuum Pressure Impregnated (VPI), Traction Power Transformer
Transformer Configuration: Dry Type, Ventilated
Phase: Three Phase
Capacity: 5 MVA
Vector Group: Dd0
Primary Voltage: 12470V AC
Primary Voltage Class: 15 kV Class
Primary Phasor: Delta
Primary BIL: 95 KV
Secondary Voltage: 6900V AC
Secondary Voltage Class: 8.7 kV Class
Secondary Phasor: Delta
Secondary Phasor Switch: N/A
Secondary BIL: 75 KV

Frequency: 60 Hz

Temperature Rise: 80°C

Cooling Class: ANN

Forced Air (Fans): None

Insulation Class: Class H
Tap Changer: 5-Position Tap Changer
Tap Qty: (2) FCAN Above, (2) FCBN Below
Tap %: 2.5%

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
Complies with IEEE Std 1653.1-2016
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): TBD
Full Load Loss(in watts): TBD
Total Load Loss (in watts): TBD

Tap Changer Switch Location: HV Compartment
Impedance (at 120°C): 5.0-7.5% Typical
Primary Connection Type: Bus
Primary Connection Arrangement: Side Mounted
Primary Surge Arrestors: N/A
Primary Surge Arrestor Voltage Rating: N/A
Primary Surge Arrestor MCOV Rating: N/A
Primary Over Current Protection (OCP): N/A
Primary Over Current Protection Method: N/A
Primary Grounding Provisions: N/A
Secondary Connection Type: Bus
Secondary Connection Arrangement: Side Mounted
Secondary Over Current Protection (OCP): N/A
Secondary Grounding Provisions: Lugs
Metering Current Transformer (CT): N/A
Metering Panel: N/A
Auxiliary Control Panel : N/A
Load Break Switch: N/A
Load Break Switch Qty: N/A
Load Break Switch Location: N/A
Rectifier Pulses: 12-Pulses
Efficiency Standard(s): DOE 2016, IEEE, ANSI
K-Factor Rating (Harmonic Mitigation): K-1 (Standard)
Temperature Sensors in Coil: Included
Temperature Gauge: Included
Seismic Bracing: Included
Weather Shield: N/A
Space Heaters: N/A
Winding Material: Copper
Ambient Temperature Rating: 40°C
Sound Level: 63 dBA
Elevation (Altitude) Rating: 3300ft (1000 meters) Above Sea Level
Enclosure Material: Coated Steel
Enclosure Rating: NEMA 3R Weatherproof
System Form Factor: N/A
Paint Type: Epoxy Paint
Finish: ANSI 61 Grey
Mount: Pad Mount / Floor Mount
Dimensions: TBD
Weight: TBD
*Please note that numbers are approximate and subject to change

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

Special Orders - Special Requirements
Contact us for special requirements

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The MT-TPT-VPM-R7-3P-DMR-5MVA-DNZ-A6-DZ-CZ-1Z-ZZ-Z-N3R-M1 Vacuum Pressure Impregnated Traction Power Transformer from Larson Electronics converts three-phase 12470V Delta to three-phase 6900V Delta. This power traction unit provides operators the ability to safely tap into and generate 5 MVA 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 5 MVA, the industrial dry type transformer features a primary voltage of three-phase 12470V AC Delta and a secondary voltage of three-phase 6900V Delta. 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 has copper windings for high strength and electrical conductivity. This VPI transformer features minimized air gaps and voids in the insulation, leading to increased durability and thermal stability.

The MT-TPT-VPM-R7-3P-DMR-5MVA-DNZ-A6-DZ-CZ-1Z-ZZ-Z-N3R-M1 does not have fans or mounting provision for fans.

Transformer Efficiency: The Class H 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-TPT-VPM-R7-3P-DMR-5MVA-DNZ-A6-DZ-CZ-1Z-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 VPI transformer does not include a load break switch. We can add a load break switch at an additional cost.
Surge Arresters: This transformer does not include 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 VPI transformer does not include a control transformer. We can add a control transformer for operating equipment at an additional cost.
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 VPI 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 traction 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-TPT-VPM-R7-3P-DMR-5MVA-DNZ-A6-DZ-CZ-1Z-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)

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Export Control Classification Number (ECCN): EAR99

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- **Shipping Time Map**