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MT-PDT-VPM-R7-3P-DVD-5MVA-GNF-A6-DB-CZ-2Z-CT-N1-M1

5/6.67/8.33 MVA Vacuum Pressure Impregnated (VPI) Dry-Type Transformer, 25kV Delta Primary, 4160Y/2400V Resistance-Grounded Wye Secondary (NGR), Dyn1, ANN/ANF/ANF Dual-Stage Forced Air, 80°C Rise (150°C with Fans), Class H, NEMA 1

Product ID: 332278

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Image: MT-PDT-VPM-R7-3P-DVD-5MVA-GNF-A6-DB-CZ-2Z-CT-N1-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-PDT-VPM-R7-3P-DVD-5MVA-GNF-A6-DB-CZ-2Z-CT-N1-M1 Vacuum Pressure Impregnated Transformer

Transformer Type: Vacuum Pressure Impregnated (VPI) Transformer
Transformer Configuration: Dry Type, Ventilated
Phase: Three Phase
Capacity: 5/6.67/8.33 MVA (ANN/ANF/ANF)
Vector Group: Dyn1
Primary Voltage: 25000V AC
Primary Voltage Class: 25 kV Class
Primary Phasor: Delta
Primary BIL: 150 KV
Secondary Voltage: 4160Y/2400V AC
Secondary Voltage Class: 5 kV Class
Secondary Phasor: Wye-N
Secondary BIL: 60 KV
Frequency: 60 Hz
Temperature Rise: 80°C / 80°C / 150°C
Cooling: ANN / ANF / ANF
Forced Air (Fans): Dual Stage Forced Air (Two Fan Stages)
Insulation Class: Class H
Tap Changer: De-Energized Tap Changer (DETC)
Tap Qty: (5) 2.5% Taps - (2) FCAN Above, (2) FCBN Below
Tap %: 2.5%
Tap Changer Switch Location: HV Compartment
Impedance: 5.5-6.0%, 5.75% Target
Primary Connection Type: Bottom Entry Terminal Lugs
Primary Surge Arrestors: Included – HV Side
Primary Surge Arrestor Voltage Rating: 25 kV Class
Primary Surge Arrestor MCOV Rating: 19.5 kV (Typical)
Primary Overcurrent Protection (OCP): External 25 kV LBS
Primary Overcurrent Protection Method: Closed-Coupled 600A Load Break Switch
Primary Grounding Provisions: Ground Pad Included
Secondary Connection Type: Bottom Entry Terminal Lugs
Secondary Overcurrent Protection (OCP): External 4.16 kV Switchgear
Secondary Grounding Provisions: Neutral Brought Out for NGR
Metering Current Transformer (CT): Included – Transformer & NGR Monitoring
Metering Panel: Relay Interface Provided
Auxiliary Control Panel: Included
Load Break Switch: External, Closed-Coupled
Load Break Switch Qty: (1) 25 kV, 600A
Load Break Switch Location: HV Side
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

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 1 Indoor Steel Enclosure
Seismic Qualified for Earthquake Loads
RoHS Certified
CE Certified

Efficiency %: 98.00%
Based on transformer operating at 50% of nameplate base kVA.

Load Losses at 145°C Reference Temp.
No Load Loss (in watts): +/- 8,889W
Full Load Loss (in watts): +/- 34,996W
Total Load Loss (in watts): +/- 43,885W

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

Weather Shield: N/A
Space Heaters: Strip Heater Included
Winding Material: Copper
Ambient Temperature Rating: 40°C
Sound Level: 70 dBA
Elevation (Altitude) Rating: 3300ft (1000 meters) Above Sea Level
Enclosure Material: Coated Steel
Enclosure Rating: NEMA 1Indoor
System Form Factor: Substation Lineup Compatible
Paint Type: Epoxy Paint
Finish: ANSI 61 Grey finish color
Mount: Pad Mount / Floor Mount
Dimensions: -
Weight: -
*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-VPM-R7-3P-DVD-5MVA-GNF-A6-DB-CZ-2Z-CT-N1-M1 Vacuum Pressure Impregnated (VPI) Dry-Type Transformer from Larson Electronics converts three-phase 25kV Delta electrical current to three-phase 4160Y/2400V Resistance-Grounded Wye (via NGR). This power distribution unit provides operators the ability to safely step down and distribute 5/6.67/8.33 MVA AC power to 4.16 kV switchgear, soft starters and large motor loads, such as 4000 HP industrial fan systems. The transformer is designed for indoor installation and integrates seamlessly with a closed-coupled 25 kV load break switch.

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

Transformer Features: With a triple rating of 5/6.67/8.33 MVA (ANN/ANF/ANF), the industrial dry-type transformer features a primary voltage of three-phase 25kV AC Delta and a secondary voltage of three-phase 4160Y/2400V AC Resistance-Grounded Wye. This transformer is equipped with a 5-position de-energized tap changer with five +/-2.5% taps (two FCAN above and two FCBN below) to allow small changes in voltage. The system utilizes copper windings for high strength and superior electrical conductivity. This VPI transformer features minimized air gaps and voids in the insulation, resulting in enhanced durability, mechanical strength and long-term thermal stability.

The MT-PDT-VPM-R7-3P-DVD-5MVA-GNF-A6-DB-CZ-2Z-CT-N1-M1 does have fans or mounting provisions 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-PDT-VPM-R7-3P-DVD-5MVA-GNF-A6-DB-CZ-2Z-CT-N1-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 is designed for closed-coupled operation with a 25 kV, 600A load break switch. The load break switch is supplied separately and mechanically

interlocked as required.

Surge Arresters: This transformer includes primary-side surge arresters for over-voltage and transient voltage protection. These components protect against lightning strikes, switching surges and internal voltage disturbances.

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: Strip heaters are included to prevent condensation during extended shutdown periods.

Enclosure Design: This VPI transformer is protected by a heavy-duty coated steel enclosure. The enclosure carries a NEMA 1 rating for indoor protection against contact and light debris.

Mount: The transformer is floor-mounted and constructed for permanent installation in electrical rooms and substation environments. Mounting provisions are reinforced to support large MVA applications.

Benefits: The MT-PDT-VPM-R7-3P-DVD-5MVA-GNF-A6-DB-CZ-2Z-CT-N1-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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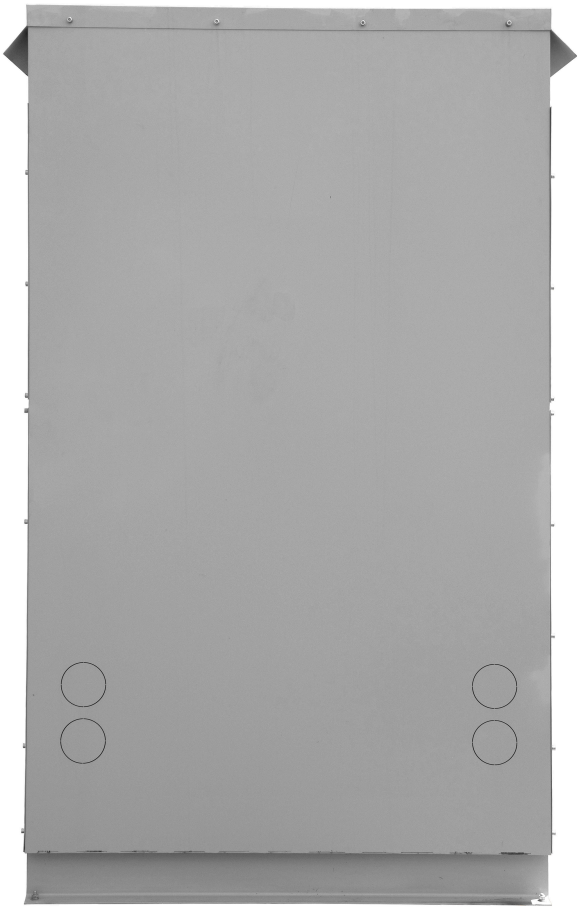
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Frequently Asked Questions (FAQ)

There are no Faqs