Larson Electronics LLC
9419 E US HWY 175, Kemp, TX 75143
Phone: 800.369.6671

www.LarsonElectronics.com
Email: sales@LarsonElectronics.com
Fax: 903.498.3364

MT-PDT-VPM-R7-3P-DNF-1.25MVA-YZE-A6-HZ-AZ-1Z-ZZ-H-N1-M1

1.25 MVA Vacuum Pressure Impregnated Transformer, 4160V Delta Primary, 416Y/240 Wye-N Secondary, ANN, Class R, Box Heater, W/O Fans, VPI

Product ID: 321451

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

Larson Electronics LLC
9419 E US HWY 175, Kemp, TX 75143
Phone: 800.369.6671



www.LarsonElectronics.com
Email: sales@LarsonElectronics.com
Fax: 903.498.3364

Larson Electronics LLC
9419 E US HWY 175, Kemp, TX 75143
Phone: 800.369.6671

www.LarsonElectronics.com
Email: sales@LarsonElectronics.com
Fax: 903.498.3364

Image: MT-PDT-VPM-R7-3P-DNF-1.25MVA-YZE-A6-HZ-AZ-1Z-ZZ-H-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-DNF-1.25MVA-YZE-A6-HZ-AZ-1Z-ZZ-H-N1-M1 Vacuum Pressure Impregnated Transformer

Transformer Type: Vacuum Pressure Impregnated (VPI) Transformer
Transformer Configuration: Dry Type, Ventilated
Phase: Three Phase
Capacity: 1.25 MVA (1.25 KVA)
Vector Group: Dyn11
Primary Voltage: 4160V AC
Primary Voltage Class: 1.2 kV Class
Primary Phasor: Delta
Primary BIL: 30 KV
Secondary Voltage: 416Y/240 AC
Secondary Voltage Class: 1.2 kV Class
Secondary Phasor: Wye-N
Secondary BIL: 10 KV
Frequency: 60 Hz
Temperature Rise: 150°C
Cooling: ANN

Forced Air (Fans): None

Insulation Class: 220°C (Class R)
Short Circuit Withstand: 85 kAIC
Tap Changer: 5-Position Tap changer
Tap Qty: (2) FCAN Above, (2) FCBN Below
Tap %: 2.5%
Tap Changer Switch Location: Front of Coils
Impedance (at 170°C): 6.9%
Primary Connection Type: Terminal Lugs
Primary Surge Arrestors: N/A
Primary Surge Arrestor Voltage Rating: N/A
Primary Surge Arrestor MCOV Rating: N/A
Primary Overcurrent Protection (OCP): N/A
Primary Overcurrent Protection Method: N/A
Primary Grounding Provisions: N/A
Secondary Connection Type: Terminal Lugs
Secondary Overcurrent Protection (OCP): N/A
Secondary Grounding Provisions: Grounded Studs
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
Efficiency Standard(s): DOE 2016, IEEE, ANSI
K-Factor Rating (Harmonic Mitigation): K-1 (Standard)

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
Built to CSA C9 Standard Rating
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 %: 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*

Control Transformer: Included for Compartment Illumination Lights
Lights: 130V, 69W "Traffic Lamp" Protected by 15A Breakers or Fuses
Temperature Sensors in Coil: Included
Temperature Gauge: Included
Seismic Bracing: Included
Weather Shield: N/A
Space Heaters: Included, Connected to Temp Controller on Primary and Secondary
Winding Material: Aluminum
Ambient Temperature Rating: -40°C to 40°C
Sound Level: 60 dBA
Elevation (Altitude) Rating: 3300ft (1000 meters) Above Sea Level
Enclosure Material: Coated Steel
Enclosure Rating: NEMA 1 Weatherproof
System Form Factor: N/A
Paint Type: Epoxy Paint
Finish: ANSI 61 Grey finish color
Mount: Pad Mount / Floor Mount
Dimensions: 74.80"L x 59.05"W x 86.61"H
Weight: 6,503 lbs
*Please note that numbers are approximate and subject to change

Special Orders - Special Requirements
Contact us for special requirements
Toll Free: 1-800-369-6671
Intl: 1-903-270-1187
Fax: 1-903-498-3364
E-mail: sales@larsonelectronics.com

The MT-PDT-VPM-R7-3P-DNF-1.25MVA-YZE-A6-HZ-AZ-1Z-ZZ-H-N1-M1 Vacuum Pressure Impregnated Transformer from Larson Electronics converts three-phase 4160V Delta electrical to three-phase 416V/240 Wye. This power distribution unit provides operators the ability to safely tap into and distribute 1250 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 1250 KVA, the industrial dry type transformer features a primary voltage of three-phase 4160V Delta (3-wire) and a secondary voltage of three-phase 416Y/240 AC Wye-N (4-wire). 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 in voltage.

The system has aluminum windings for high strength and electrical conductivity. The primary and secondary coils are separated and coaxially mounted. Electrostatic shielding is available between primary and secondary windings. This VPI transformer features minimized air gaps and voids in the insulation, leading to increased durability and thermal stability. The unit is designed with encapsulation, sealant impregnation and protective sealants to protect core and coil assembly against environment contamination and surface corrosion.

A removable front cover is available for access to terminals. Access is facilitated by lifting handles or hinged covers for heavy covers.

The MT-PDT-VPM-R7-3P-DNF-1.25MVA-YZE-A6-HZ-AZ-1Z-ZZ-H-N1-M1 does not have fans or mounting provisions for fans.

Transformer Efficiency: The Class R transformer meets standard efficiency requirements. Insulating materials are rated for continuous 220°C duty. The insulation does not support

combustion, and release noxious fumes, or corrosive liquids. 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 Indicator: The MT-PDT-VPM-R7-3P-DNF-1.25MVA-YZE-A6-HZ-AZ-1Z-ZZ-H-N1-M1 is equipped with three-stage temperature sensors on the primary and secondary sides for controls and remote monitoring by SCADA (indicators located externally). The temperature indicators monitor both winding temperature and transformer enclosure inside temperature. 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 includes a control transformer for compartment illumination lights. The 69-watt, "traffic lamp" type lights are compatible with 130V. The lights are protected by a 15-amp breaker or fuse.

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 includes a self powered thermostat controlled anti-condensation box heater. The box heater is connected to temperature controllers on the primary and secondary sides.

Grounding: Safety grounding studs, ball type installed on ground bus and each phase bus in each incoming and outgoing bus ducts compartment are available in the transformer. Grounding studs on safety ground bus of each termination compartment installed within 300 mm of compartment door are accessible. Grounding complies with CSA C9-M, CAN/CSA C22.2 No. 47 M requirements.

Enclosure Design: This VPI transformer is protected by a steel housing. The ventilated enclosure carries a NEMA 1 rating for protection from exposure to moisture, rain, dust and debris. Clearance around transformer core and coil assembly for ventilation is in accordance to CSA C22.1.

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-VPM-R7-3P-DNF-1.25MVA-YZE-A6-HZ-AZ-1Z-ZZ-H-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.

Larson Electronics LLC
9419 E US HWY 175, Kemp, TX 75143
Phone: 800.369.6671

www.LarsonElectronics.com
Email: sales@LarsonElectronics.com
Fax: 903.498.3364

Frequently Asked Questions (FAQ)

There are no Faqs

Larson Electronics LLC
9419 E US HWY 175, Kemp, TX 75143
Phone: 800.369.6671

www.LarsonElectronics.com
Email: sales@LarsonElectronics.com
Fax: 903.498.3364



Image: MT-PDT-VPM-R7-3P-DNF-1.25MVA-YZE-A6-HZ-AZ-1Z-ZZ-H-N1-M1

Larson Electronics LLC
9419 E US HWY 175, Kemp, TX 75143
Phone: 800.369.6671

www.LarsonElectronics.com
Email: sales@LarsonElectronics.com
Fax: 903.498.3364



Image: MT-PDT-VPM-R7-3P-DNF-1.25MVA-YZE-A6-HZ-AZ-1Z-ZZ-H-N1-M1

Larson Electronics LLC
9419 E US HWY 175, Kemp, TX 75143
Phone: 800.369.6671

www.LarsonElectronics.com
Email: sales@LarsonElectronics.com
Fax: 903.498.3364

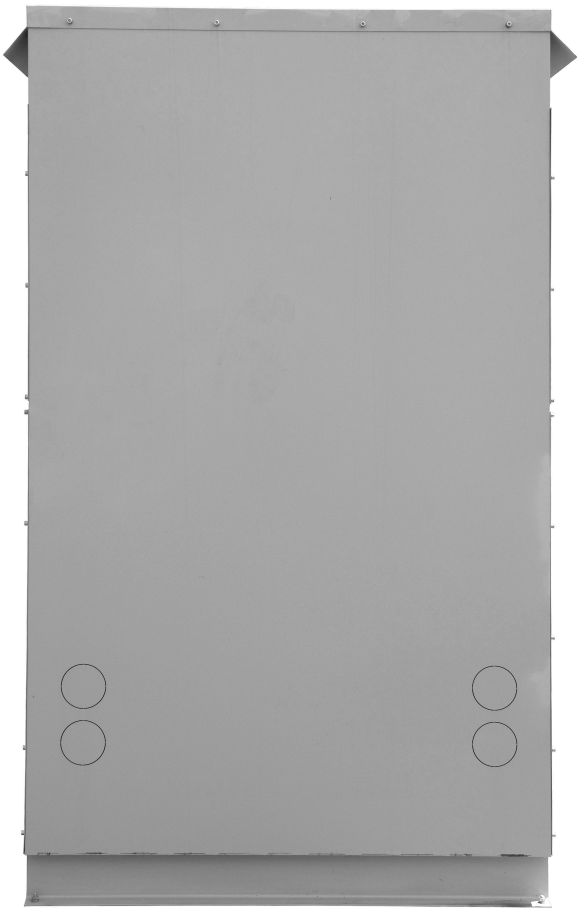


Image: MT-PDT-VPM-R7-3P-DNF-1.25MVA-YZE-A6-HZ-AZ-1Z-ZZ-H-N1-M1

Larson Electronics LLC
9419 E US HWY 175, Kemp, TX 75143
Phone: 800.369.6671

www.LarsonElectronics.com
Email: sales@LarsonElectronics.com
Fax: 903.498.3364



Image: MT-PDT-VPM-R7-3P-DNF-1.25MVA-YZE-A6-HZ-AZ-1Z-ZZ-H-N1-M1

Export Control Classification Number (ECCN): EAR99

Larson Electronics LLC
9419 E US HWY 175, Kemp, TX 75143
Phone: 800.369.6671

www.LarsonElectronics.com
Email: sales@LarsonElectronics.com
Fax: 903.498.3364

Links (Click on the below items to view):

- **HigResPic1**(https://www.larsonelectronics.com/images/product/HigResPic1/321451.JPG)
- **HigResPic2**(https://www.larsonelectronics.com/images/product/HigResPic2/321451.JPG)
- **HigResPic3**(https://www.larsonelectronics.com/images/product/HigResPic3/321451.JPG)
- **HigResPic4**(https://www.larsonelectronics.com/images/product/HigResPic4/321451.JPG)
- **HigResPic5**(https://www.larsonelectronics.com/images/product/HigResPic5/321451.JPG)
- **HigResPic6**(https://www.larsonelectronics.com/images/product/HigResPic6/321451.JPG)
- **HigResPic7**(https://www.larsonelectronics.com/images/product/HigResPic7/321451.JPG)
- **HigResPic8**(https://www.larsonelectronics.com/images/product/HigResPic8/321451.JPG)
- **HigResPic9**(https://www.larsonelectronics.com/images/product/HigResPic9/321451.JPG)
- **HigResPic10**(https://www.larsonelectronics.com/images/product/HigResPic10/321451.JPG)
- **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)