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MT-UPM-R7-1P-GMW.MU-167KVA-SZ-BB-A5-BM-CZ-Z-M1

167 KVA Overhead Distribution Transformer, Pole Mount, 23900Y/13800 & 11950Y/6900 Grounded Wye Pri., 120/240V Sec., Mineral Oil, Copper, 50 Hz

Product ID: 302295



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-UPM-R7-1P-GMW.MU-167KVA-SZ-BB-A6-BM-CZ-Z-M1 Pole Mount Overhead Transformer

Transformer Type: Overhead Distribution Transformer, Conventional Type
Transformer Configuration: Liquid Filled Pole Mounted
Transformer Polarity Type: Subtractive
Phase: Single Phase
Capacity: 167 KVA
Primary Voltage: 23900GrdY/13800 & 11950GrdY/6900
Primary Voltage Switch: N/A
Primary Voltage Class: 25 kV Class
Primary Phasor: Grounded Wye
Primary BIL: 125 kV
Secondary Voltage: 120/240V (L-N-L)
Secondary Voltage Class: 1.2 kV Class
Secondary Phasor: Dual Winding Single Phase
Secondary BIL: 30 KV
Frequency: 50 Hz
Temperature Rise: 65°C
Insulation Rating: Class E Insulation - 120°C, 248°F
Forced Air (Fans): None
Cooling Class: ONAN; Self-Cooled
Tap Changer: 5-Position Tap Changer w/ External Operating Handle, Operates on both voltages
Tap Qty: (2) FCAN Above, (2) FCBN Below
Tap %: 2.5%
Tap Changer Switch Location: Side of Tank Body
Impedance: 1.0-4.5% Typical
Primary Connection Type: Live Bushing Lug
Primary Termination: Porcelain High Voltage Bushing

Ratings

Meets/Exceeds DOE 2016 Efficiency Ratings
Meets/Exceeds CSA Efficiency Ratings
Complies with ANSI / IEEE C57 12.00
Complies with ANSI / IEEE C57 12.20
Complies with ANSI / IEEE C57 12.30
Complies with ANSI / IEEE C57 12.31
Complies with ANSI / IEEE C57 12.35
Complies with ANSI / IEEE C57.12.70
Complies with ANSI / IEEE C62.11
Complies with ANSI / IEEE C62.22
Complies with ANSI / IEEE C2
Complies with ANSI / IEEE C37.47
Complies with ANSI Z535.4
Complies with ASTM D3487
Complies with ASTM D6871
Complies with 10 CFR Part 431
Complies with CSA C2.2:06
Complies with CAN / CSA C50
Complies with CAN / CSA C233.1-87
Complies with CAN / CSA C802.1-13

Features:

Non-PCB Insulating Fluid
Lifting Lugs Included
Corrosion Resistant Cover Band

Primary Connection Qty: (2)

Primary Lightning Arrestors: (1) Externally Mounted Lightning Arrestors, Included

Primary Lightning Mounting Provision: Mounting Provisions for Installing Lightning Arrestor on H1 Primary Terminals

Primary Lightning Arrestors Voltage Rating: 9 kVrms

Primary Lightning Arrestors MCOV Rating: 7.65 kV Class

Secondary Connection Type: Live Bushing Lug

Secondary Connections: Threaded Stud Terminals

Secondary Connection Qty: (3)

Secondary Neutral Connection: Secondary X2 Neutral Grounded to Tank via 1/2”-13 UNC Tapped Hole, 7/16” Deep Bung & Copper Ground Strap

Terminals: Tin Plated Primary and Secondary - Accepts Copper or Aluminum Connections

Grounding Provisions: (1) Lug w/ Grounding Strap, Tank Grounding Lug

Transformer Protection: N/A

Load Break Switch: N/A

Efficiency Standard(s): Meets DOE 2016 Standards, Meets CSA Standards Meets ANSI/IEEE Standards

K-Factor Rating (Harmonic Mitigation): K-1 (Standard)

Pulse Drive Rating: N/A

Insulation Fluid: Mineral Oil - Non PCB Fluid

Fluid Capacity*: 33.73 Gallons

Fluid Weight*: 304.23 lb

Liquid Level Indicator: Internal In-Tank Oil Level Line

Temperature Indicator: N/A

Pressure/Vacuum Indicator: N/A

Pressure Relief Device: Included, Automatic Action

Fault Indicator: Non-Resettable Fault Indicator Devices, Included

Oil Level Marking: Internal

Fill Valve: N/A (Tank Filled via Removable Lid)

Drain Valve: 1/2" NPT Port w/ Removable Bolt

Winding Material: Copper

Ambient Temperature Rating: 40°C

Ambient Operating Temperature Range: -40°C to +40°C (-50°F to +104°F)

Sound Level: 55 dBA

Elevation Level: N/A

Core Material: Grain Oriented Steel

Tank Material: Coated Steel

Housing Material: Coated Steel w/ Corrosion Resistant Cover Band, Removable Top Cover

Hardware Material: Stainless Steel Hardware

Paint Type: Weatherproof and UV Resistant Epoxy Coating and Undercoating

Finish Color: Light gray #70, Munsell Notation 5BG.7.0/0.4

Mounting: Double Hanger Bracket

Mounting: Pole Mount via Hangar Brackets

Lifting Lugs: Included

Dimensions*: 43.31"-W x 35.04"-D x 55.5"-H

Tank Diameter*: 24" OD

Dry Weight*: 749.56 lb

Total Weight (Liquid Filled)*: 1,542 lb

*Please note that numbers are approximate and subject to change

Efficiency: 98.10%

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

Load Losses Based on 85°C Reference Temp.

No Load Loss (in watts): +/- 455W

Full Load Loss (in watts): +/- 2288W

Total Load Loss (in watts): +/- 1833W

Note: Losses offered are typical only, not guaranteed

Labeling:

Externally Stencilled (Painted) KVA Rating

Externally Stencilled (Painted) Voltage Rating

External Non-PCB Label

External Barcode Label

Stainless Steel Riveted Nameplate

Factory Tests:

Winding Resistance Test

Insulation Resistance Test

Voltage Ratio Error Test

Short-circuit Impedance Test

No-load Loss (Wattage) Test

Load Loss (Wattage) Test

Induced Voltage Withstand Test

Separate Source Voltage Withstand Test

Pressure Integrity Test Test

Shipping:

Shipped on pallet on open flatbed

Palletized on Wooden Pallet w/ Skid Pockets

Pallet Skid Facing Outward Sides of Truck

Note: For low quantity purchases, enclosed truck can be requested

Note: Crated shipping in lieu of palletizing can be done upon request for an additional fee

Special Orders - Special Requirements

Contact us for special requirements

Toll Free: 1-800-369-6671

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E-mail: sales@larsonelectronics.com

The MT-UPM-R7-1P-GMW.MU-167KVA-SZ-BB-A5-BM-CZ-Z-M1 Pole Mount Distribution Transformer from Larson Electronics is powerful and designed with the environment in mind. Suitable for both indoor and outdoor applications, the conventional type transformer provides increased reliability and protection against critical equipment failures.

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

Transformer Features: With a transformer rating of 167 kVA, the MT-UPM-R7-1P-GMW.MU-167KVA-SZ-BB-A5-BM-CZ-Z-M1 pole mount distribution transformer is a single phase unit with a primary voltage of 23900Y/13800 & 11950Y/6900 Grounded Wye. It also provides a secondary voltage of 120/240V 50Hz. Featuring robust construction, this unit's cores are manufactured with grain oriented steel. The conventional type transformer contains double bushings on the primary side

and three bushings on the secondary side. Efficiency at 100% load is 98.95 percent. The MT-UPM-R7-1P-GMW.MU-167KVA-SZ-BB-A5-BM-CZ-Z-M1 is a grounded wye connection transformer and therefore must be connected phase-to-ground on a grounded wye system.

This unit boasts a low cost of ownership and is highly energy efficient. Lower heat emissions mean less cooling is needed as well. The unit also features mineral oil insulation fluid (oil immersed) and copper windings.

Mount: The MT-UPM-R7-1P-GMW.MU-167KVA-SZ-BB-A5-BM-CZ-Z-M1 is compatible with pole mounting applications.

Applications: General purposes.

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.

Frequently Asked Questions (FAQ)