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MT-UPM-R7-1P-DMQ-250KVA-SLU-BF-A6-BF-CZ-2ZZ-M1

250 KVA Pole Mount Distribution Transformer - 13200V Delta Primary, 120/208V Secondary - FR3 Oil/ONAN

Product ID: 304048

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-UPM-R7-1P-DMQ-250KVA-SLU-BF-A6-BF-CZ-2ZZ-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: 250 KVA
Primary Voltage: 13200V
Primary Voltage Switch: N/A
Primary Voltage Class: 15 kV Class
Primary Phasor: Delta
Primary BIL: 95 kV
Secondary Voltage: 120/208V (L-N-L)
Secondary Voltage Class: 1.2 kV Class
Secondary Phasor: Dual Winding Single Phase
Secondary BIL: 30 KV
Frequency: 60 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
Tap Qty: (2) FCAN Above, (2) FCBN Below
Tap %: 2.5%
Tap Changer Switch Location: Middle of Tank Body, Left of Mounting Provisions
Impedance: 1.5-6.0% Typical

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

Primary Connection Type: Live Bushing Lug
Primary Termination: Porcelain High Voltage Bushing
Primary Connection Qty: (2)
Primary Lightning Arrestors: (1) Bolt-on High Voltage MCOV Lightning Arrestors, w/ Bird Guards, Side Mounted to Tank
Primary Lightning Mounting Provision: Mounting Provisions for Installing Lightning Arrestor on H1 Primary Terminal
Primary Lightning Arrestors Voltage Rating: 18 kV Class
Primary Lightning Arrestors MCOV Rating: 15.3 kVrms
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: FR3 Oil - Non PCB Fluid
Fluid Capacity*: 61.11 Gallons
Fluid Weight*: 551.15 Lbs
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: N/A
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: White
Mounting: Double Hanger Bracket
Mounting: Pole Mount via Hangar Brackets
Lifting Lugs: Included
Dimensions*: 37.8"-W x 49.21"-D x 57.48"-H
Tank Diameter*:25.98"-OD
Dry Weight*: 1,256.61 Lbs
Total Weight (Liquid Filled)*: 1,930 Lbs
*Please note that numbers are approximate and subject to change

Corrosion Resistant Cover Band

Efficiency: 99.20%
Based on transformer operating at 50% of nameplate base kVA.

Load Losses Based on 85°C Reference Temp.
No Load Loss (in watts): +/- 683W
Full Load Loss (in watts): +/- 2,763W
Total Load Loss (in watts): +/- 3,445W

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
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The MT-UPM-R7-1P-DMQ-250KVA-SLU-BF-Z6-BF-CZ-2ZZ-M1 Pole Mount Distribution Transformer from Larson Electronics offers powerful, reliable and efficient power distribution in outdoor and public locations. The low operating costs, low heat emissions and low cost of ownership makes this transformer ideal for a wide range of applications and businesses. This power distribution system is designed for overhead, pole mount installations and use.

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

Transformer Features: With a transformer rating of 250 kVA, the industrial transformer features a primary voltage of single-phase 13200V Delta and a

secondary voltage of single-phase 120/208V (L-L-N). This pole mount transformer features porcelain high-voltage, dual bushings on the primary side and three bushings on the secondary side. Equipped with copper windings and a grain oriented steel core, this single-phase transformer consists of one coil and two core loops. Tin plated terminals on the primary and secondary side accepts copper or aluminum connections.

The MT-UPM-R7-1P-DMQ-250KVA-SLU-BF-Z6-BF-CZ-2ZZ-M1 is air cooled and does not have fans or mounting provision for fans. This unit features a 65°C temperature rise for reduced heat waste, increased reliability and longer life. 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 unit features FR-3 oil insulation fluid. Internal marking is available for proper oil level monitoring. We offer transformers with mineral oil fluid, if needed.

Gauges: There are no gauges on this transformer. We can add liquid level, temperature and pressure/vacuum gauges at an additional cost. Standard liquid level, temperature and pressure/vacuum gauges are analog, manual reading types.

Pressure Relief Device: An automatic pressure relief device is included with this transformer.

Rapid Rise Relay: There are no rapid rise relays 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 a lightning arrestor on the H1 primary terminal. Mounting provisions for installing lightning arrestor on the H2 primary terminal are available. 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 MT-UPM-R7-1P-DMQ-250KVA-SLU-BF-Z6-BF-CZ-2ZZ-M1 does not have a load breaker switch.

Valves: The MT-UPM-R7-1P-DMQ-250KVA-SLU-BF-Z6-BF-CZ-2ZZ-M1 is not equipped with a fill valve and drain valve with sampler port.

Protection Fuses: This transformer does not contain fuses or circuit breakers. For units without protection fuses, up stream protection is provided. We recommend provisions for protection fuses when possible, as blown fuses may require more frequent oil changes.

Mount: The heavy-duty enclosure makes the unit suitable for and outdoor applications. Equipped with hangar brackets and lifting lugs, this overhead power distribution system can be mounted on poles.

Benefits: The MT-UPM-R7-1P-DMQ-250KVA-SLU-BF-Z6-BF-CZ-2ZZ-M1 heavy-duty 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.

We offer completely self protected (CSP) pole mount overhead transformers at an additional cost.

Applications: General purposes, industrial sites, electrical rooms, public locations, 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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Product ID: 304048

Export Control Classification Number (ECCN): EAR99

Links (Click on the below items to view):

- **HigResPic1**
- **HigResPic2**
- **HigResPic3**
- **HigResPic4**
- **HigResPic5**
- **HigResPic6**
- **HigResPic7**
- **Video1**
- **ISO 9001 Certification**
- **Business Certificate**
- **Shipping Time Map**