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MT-UPM-R4-1P-DNF-250KVA-SVD-BB-A6-CMP-AZ-2Z2-M1

250 KVA Overhead Distribution Transformer, Pole Mount, 4160V Delta Primary, 25000/14400V Secondary, Mineral Oil/ONAN, Aluminum, Light Grey - NEMA 4X

Product ID: 314480



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-R4-1P-DNF-250KVA-SVD-BB-A6-CMP-AZ-2Z2-M1 Pole Mount Overhead Transformer

Transformer Type: Overhead Distribution Transformer, Conventional Type
Transformer Configuration: Liquid Filled Pole Mounted
Transformer Feed: Radial Feed
Phase: Single Phase
Capacity: 250 KVA
Primary Voltage: 4160V
Primary Voltage Switch: N/A
Primary Voltage Class: 5 kV Class
Primary Phasor: Delta
Primary BIL: 30 kV
Secondary Voltage: 25000/14400V
Secondary Voltage Class: 25 kV Class
Secondary Phasor: Dual Windings Single Phase
Secondary BIL: 110 KV
Frequency: 60 Hz
Temperature Rise: 55/65°C
Insulation Rating: Class E Insulation - 120°C, 248°F
Forced Air (Fans): None
Mounting Provisions For Fans: Included
Radiators: Included
Cooling Class: ONAN; Self-Cooled
Tap Changer: 5-Position De-energized Tap Changer w/ External Operating Handle
Tap Qty: (2) FCAN Above, (2) FCBN Below
Tap %: 2.5%
Tap Changer Switch Location: High Voltage Side
Impedance (@ 55°C): 4.0%
Primary Bushing Type: Dead Front 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 12.10
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 C57.12.90
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 C88
Complies with CAN / CSA C50
Complies with NEMA TP-1 2002
Complies with CAN / CSA C802.1-13
Complies with CAN / CSA C233.1-87

Features:

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

Primary Connection: Cable

Primary Size: TBD

Primary Entry: Top

Primary Connection Arrangment: Top Mounted, Enclosed in a Full Height ATC w/ a Space Heater (Fron accessibility)
Primary Termination: Externally clamped and front removable molded epoxy bushing
Primary Connection Qty: (2)
Primary Current Transformers: Included, (1) 100:5 Relaying Type

Primary Lightning Arrestors: Included

Primary Lightning Mounting Provision: Included
Primary Lightning Arrestors Voltage Rating: 6 kV
Primary Lightning Arrestors MCOV Rating: 5.1 kV
Secondary Bushing Type: Dead Front Bushing
Secondary Connection: Cable
Secondary Size: 1C #1/0 AWG ACSR type

Secondary Entry: Top

Secondary Connection Arrangment: Top Mounted, Enclosed in a Full Height ATC w/ a Space Heater (Fron accessibility)
Secondary Connections: Externally clamped and front removable molded epoxy bushing
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

Secondary Current Transformers: N/A

Secondary Lightning Mounting Provision: Included

Secondary Lightning Arrestors Voltage Rating: 27 kV

Secondary Lightning Arrestors MCOV Rating: 22 kV

Pot-heads: Included
Grounding Provisions: (1) Lug w/ Grounding Strap, Tank Grounding Lug
Transformer Protection: N/A
Load Break Switch: 2-Position Load Break Switch
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*: 61.11 Gallons
Fluid Weight*: 551.15 lbs
Liquid Level Indicator: Included, Magnetic Type Gauge, w/ Contacts
Winding Temperature Indicator: Included, Dial Type Gauge, w/ Contacts
Oil Temperature Indicator: Included, Dial Type Gauge, w/ Contacts
Pressure/Vacuum Indicator: N/A
Pressure Relief Device: Included, Automatic Action
Sudeen Pressure Relay: Included
Oil Level Marking: Internal
Fill Valve: Included
Drain Valve: 1/2" NPT Valve w/ Sampling Device
Pressure Relief Valve: Included

Pressure Vacum Bleeder: Included, w/ Purge Valve

Winding Material: Aluminum
Ambient Temperature Rating: 40°C
Ambient Operating Temperature Range: -20°C to +40°C (-50°F to +104°F)
Sound Level: 55 dBA, Complies with IEEE Std. C57.12.90
Elevation Level: 66ft Above Sea Level
Core Material: Cold Rolled Grain Oriented Steel
Tank Material: Coated Steel

Tank Type: Sealed Tank

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: ANSI 61 light gray

Control Cabinet Rating: NEMA 4X for unclassified area

Control Cabinet Location: Side

Voltage Supply and Controls: 120VAC, 5A Dry contacts for alarms

Mounting: Double Hanger Bracket

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 (All labels are stainless steel):
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
Polarity 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
Excitation Current 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*

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*: 1256.61 lbs
Total Weight (Liquid Filled)*: 1,930 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-UPM-R4-1P-DNF-250KVA-SVD-BB-A6-CMP-AZ-2Z2-M1 Overhead Distribution Pole Mounted 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 4160V Delta and a secondary voltage of single-phase 25000/14400V. This transformer connects to a three phase electrical grid system to provide single phase low voltage power for indoor distribution. This pole mount transformer features high-voltage, dual bushings on the primary side and three bushings on the secondary side. Equipped with aluminum windings and a grain oriented steel core, this overhead distribution 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-R4-1P-DNF-250KVA-SVD-BB-A6-CMP-AZ-2Z2-M1 is air cooled and does not have fans but it has mounting provisions for fans. This unit features a 55/65°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 MT-UPM-R4-1P-DNF-250KVA-SVD-BB-A6-CMP-AZ-2Z2-M1 features mineral oil insulation fluid. Internal marking is available for proper oil level monitoring. We offer transformers with FR-3 oil fluid, if needed.

Gauges: There are winding temperature and oil temperature gauges and a liquid level gauge on this transformer.

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

Rapid Rise Relay: There is a rapid rise relay on this 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 is equipped with lightning arresters on both the primary and secondary terminals.

Valves: The MT-UPM-R4-1P-DNF-250KVA-SVD-BB-A6-CMP-AZ-2Z2-M1 is equipped with fill and drain valves.

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

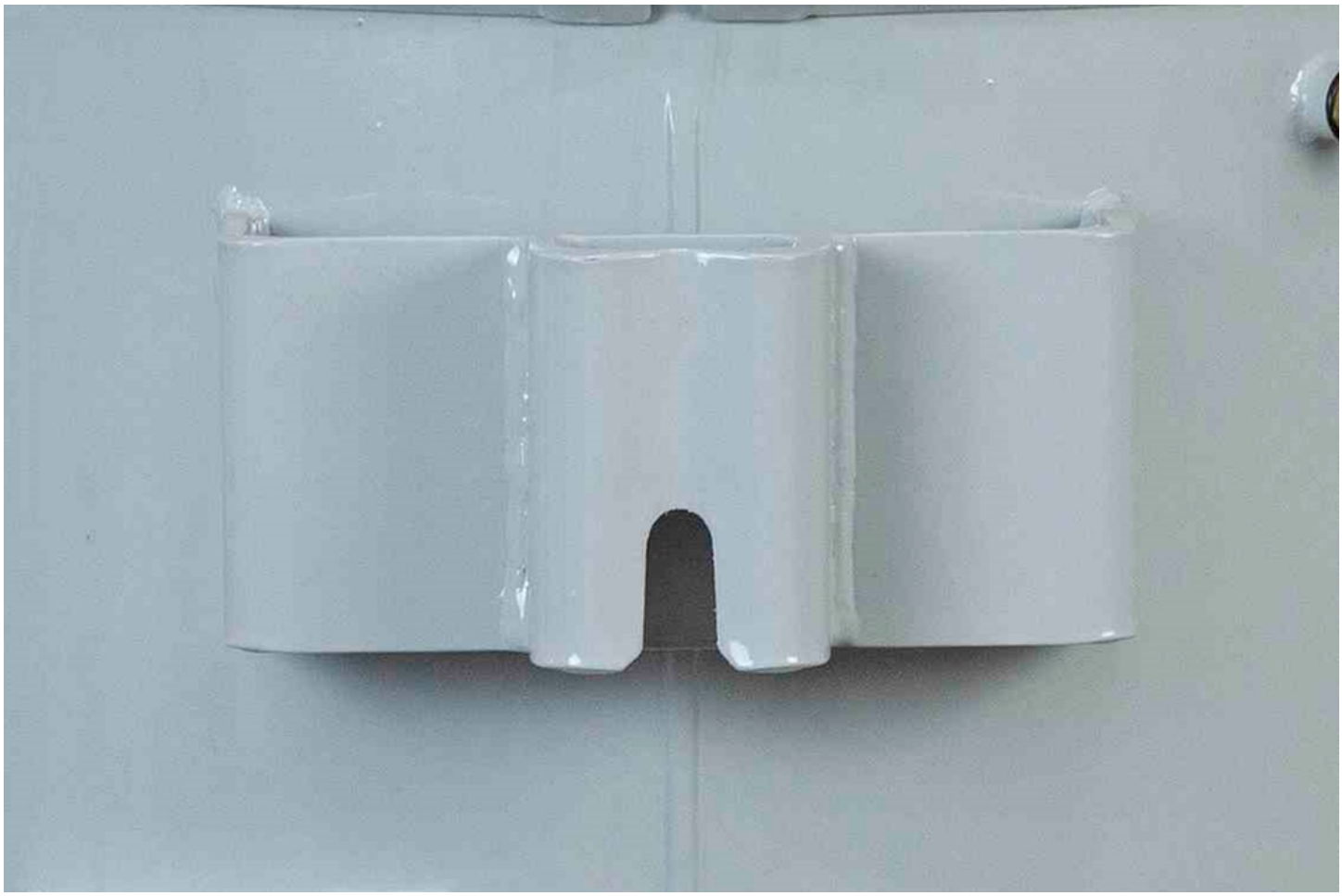
Mount: The heavy-duty enclosure makes the unit suitable for and outdoor applications. Equipped with hangar brackets and lifting lugs, this overhead power distribution system can be mounted on poles.

Benefits: The MT-UPM-R4-1P-DNF-250KVA-SVD-BB-A6-CMP-AZ-2Z2-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.


NON-PCBs
X1
X2
X3






X3
X2
X1

Frequently Asked Questions (FAQ)