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-UPM-R7-1P-GMW.MR-50KVA-SZ-BB-A6-BM-CZ-Z-M1**

# 50 KVA Overhead Distribution Transformer, Pole Mount, 23900GrdY/13800 & 12470GrdY/7200 Grounded Wye Pri., 120/240V Sec., Mineral Oil, Copper, ONAN

**Product ID: 299690**

**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-GMW.MR-50KVA-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: 50 KVA**
**Primary Voltage: 23900GrdY/13800 & 12470GrdY/7200**
**Primary Voltage Switch: Included Primary Selector Switch**
**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: 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: N/A**
**Tap %: N/A**
**Tap Changer Switch Location: N/A**
**Impedance: 1.4-2.4% 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: (1)**

**Primary Lightning Arrestors: N/A**

**Primary Lightning Mounting Provision: Mounting Provisions for Installing Lightning Arrestor on H1 and H2 Primary Terminals**
**Primary Lightning Arrestors Voltage Rating: 10 kV**
**Primary Lightning Arrestors MCOV Rating: 8.4 kV**
**Secondary Connection Type: Live Bushing Lug**
**Secondary Connections: NEMA Spade Terminal, 4-hole H Type Spade**
**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*: 15.16 Gallons**
**Fluid Weight*: 136.68 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: Included, non-resettable device detects and provides indication of transformer internal faults**
**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: 48 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*: 24.8"-W x 26.77"-D x 40.16"-H**
**Tank Diameter*: 20.47" OD**
**Dry Weight*: 374.78 lb**
**Total Weight (Liquid Filled)*: 605 lb**
*Please note that numbers are approximate and subject to change

Corrosion Resistant Cover Band

**Efficiency: 98.90%**
*Based on transformer operating at 50% of nameplate base kVA.*

**Load Losses Based on 85°C Reference Temp.**
**No Load Loss (in watts): +/- 176W**
**Full Load Loss (in watts): +/- 650W**
**Total Load Loss (in watts): +/- 479W**
***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**
**Intl: 1-903-270-1187**
**Fax: 1-903-498-3364**
**E-mail: sales@larsonelectronics.com**

**The MT-UPM-R7-1P-GMW.MR-50KVA-SZ-BB-A6-BM-CZ-Z-M1 23900GrdY/13800 & 12470GrdY/7200 V Grounded Wye 1 Phase Energy Efficient Remanufactured Utility Pole Mount Transformer from Larson Electronics is powerful, reliable and designed with the environment in mind. Suitable for both indoor and outdoor applications, the MT-UPM-R7-1P-GMW.MR-50KVA-SZ-BB-A6-BM-CZ-Z-M1 provides increased reliablity and protection against critical equipment failures. The lower operating costs, lower heat emissions and lower cost of ownership make this transformer ideal for a wide range of applications and businesses.**
***PLEASE NOTE: ANY FREE SHIPPING OFFERS DO NOT APPLY TO POWER DISTRIBUTION PANELS, TRANSFORMERS, OR SUBSTATIONS***

**Transformer Features:** With a transformer rating of 50 kVA, the MT-UPM-R7-1P-GMW.MR-50KVA-SZ-BB-A6-BM-CZ-Z-M1 remanufactured utility pole mount transformer is a single phase unit with a primary voltage of 23900GrdY/13800 & 12470GrdY/7200 Grounded Wye. It also provides a secondary voltage of 120/240 V. Featuring robust construction, this unit`s cores are manufactured with non-aging, cold-rolled silicon steel laminations using state of the art technology.
This remanufactured unit boasts a low cost of ownership and is highly energy efficient. Lower heat emissions mean less cooling is needed as well. The MT-UPM-R7-1P-GMW.MR-50KVA-SZ-BB-A6-BM-CZ-Z-M1 comes with one set of hanger brackets for utility pole mounting. The unit also features mineral oil insulation fluid with a 65°C temperature rise and ONAN class cooling.
**Benefits:** The MT-UPM-R7-1P-GMW.MR-50KVA-SZ-BB-A6-BM-CZ-Z-M1 general purpose transformer offers many benefits to the consumer. Precision cut copper transformer winding material help to improve performance. The close tolerances used during manufacturing also eliminates burrs which hinder performance. Each core is specially coated to prevent the ingress of moisture and are electrically balanced to minimize axial forces during short circuit situations.
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 turn into cost savings for owners in the form of lower energy bills and decreased cost of ownership.
**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.

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)

**MT-UPM-R7-1P-GMW.MR-50KVA-SZ-BB-A6-BM-CZ-Z-M1**

**Product ID: 299690**

**Export Control Classification Number (ECCN):** EAR99

Links (Click on the below items to view):

- **HigResPic1**
- **Video1**
- **Video2**
- **ISO 9001 Certification**
- **Business Certificate**
- **Shipping Time Map**