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## MT-UPM-R7-3P-DMA-500KVA-YE-CC-A6-BM-CZ-1ZZ-M1

# 500 KVA 3PH Overhead Distribution Transformer, Pole Mount, 34500V Delta Primary, 480Y/277 Wye-N Secondary, Mineral Oil, Copper, ONAN

**Product ID: 331541**

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



Image: MT-UPM-R7-3P-DMA-500KVA-YE-CC-A6-BM-CZ-1ZZ-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-UPM-R7-3P-DMA-500KVA-YE-CC-A6-BM-CZ-1ZZ-M1 Pole Mount Overhead Transformer**

**Transformer Type:** Overhead Distribution Transformer, Conventional Type
**Transformer Configuration:** Liquid Filled Pole Mounted
**Transformer Polarity Type:** Subtractive
**Phase:** Three Phase
**Capacity:** 500 KVA
**Primary Voltage:** 34500V
**Primary Voltage Switch:** N/A
**Primary Voltage Class:** 35 kV Class
**Primary Phasor:** Delta
**Primary BIL:** 150 kV
**Secondary Voltage:** 480Y/277
**Secondary Voltage Class:** 1.2 kV Class

**Secondary Phasor:** Wye-N

**Secondary BIL:** 30 KV
**Frequency:** 60 Hz
**Temperature Rise:** 65°C
**Insulation Rating:** Class E Insulation - 120°C, 248°F
**Forced Air (Fans):** None

**Ratings**

Meets/Exceeds DOE 2016 Efficiency Ratings
Complies with ANSI / IEEE #C57.12.00
Complies with ANSI / IEEE #C57.12.20
Complies with ANSI / IEEE #C57.12.28
Complies with ANSI / IEEE #C57.12.31
Complies with ANSI / IEEE C57.12.70
Complies with ANSI / IEEE C57.12.80
Complies with ASTM D3487
Non-PCB Insulating Fluid
Lifting Lugs Included

**Efficiency:** 99.30%
*Based on transformer operating at 50% of nameplate base kVA.*

**Load Losses Based on 85°C Reference Temp.**
**No Load Loss (in watts):** +/- 1,363W
**Full Load Loss (in watts):** +/- 5,489W
**Total Load Loss (in watts):** +/- 6,851W

**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:** 1.5-7.0% Typical
**Primary Connection Type:** Live Bushing Lug
**Primary Termination:** Porcelain High Voltage Bushing
**Primary Connection Qty:** (3)
**Primary Lightning Arrestors:** N/A
**Primary Lightning Mounting Provision:** Mounting Provisions for Installing Lightning Arrestor on H1, H2 and H3 Primary Terminals
**Primary Lightning Arrestors Voltage Rating:** N/A
**Primary Lightning Arrestors MCOV Rating:** N/A
**Secondary Connection Type:** Live Bushing Lug
**Secondary Connections:** Threaded Stud Terminals
**Secondary Connection Qty:** (4)
**Secondary Neutral Connection:** Secondary X0 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 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*:** 127.11 Gallons
**Fluid Weight*:** 1,146.38 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
**Sound Level:** 56 dBA
**Elevation Level:** 3,300ft Above Sea Level
**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 Orientation:** Vertical
**Mounting:** Pole Mount via Hanger Brackets
**Lifting Lugs:** Included
**Dimensions*:** 49.21"-W x 59.06"-D x 65.35"-H
**Tank Diameter*:** 38.98"
**Dry Weight*:** 2,270.72 lbs
**Total Weight (Liquid Filled)*:** 3055 lbs
*Please note that numbers are approximate and subject to change

***Note:*** *Losses offered are typical only, not guaranteed*

**Special Orders - Special Requirements**
Contact us for special requirements
**Toll Free:** 1-800-369-6671
**Intl:** 1-903-270-1187
**Fax:** 1-903-765-7664
**E-mail:** sales@larsonelectronics.com

**The MT-UPM-R7-3P-DMA-500KVA-YE-CC-A6-BM-CZ-1ZZ-M1 3-Phase 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 make 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 500 KVA, the industrial transformer features a primary voltage of 34500V Delta and a secondary voltage of three-phase 480Y/277 Wye-N. This transformer connects to a three phase electrical grid system to provide three phase low voltage power for indoor distribution. This pole mount transformer features porcelain high-voltage, three bushings on the primary side and four bushings on the secondary side. Tin plated terminals on the primary and secondary sides accept copper or aluminum connections.

The MT-UPM-R7-3P-DMA-500KVA-YE-CC-A6-BM-CZ-1ZZ-M1 is air cooled and does not have fans or mounting provisions 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 MT-UPM-R7-3P-DMA-500KVA-YE-CC-A6-BM-CZ-1ZZ-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 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 is not equipped with lightning arresters. Mounting provisions for installing customer provided lightning arresters on the H1, H2 and H3 primary terminals are included for installing arresters in-field.

**Valves:** The MT-UPM-R7-3P-DMA-500KVA-YE-CC-A6-BM-CZ-1ZZ-M1 is not equipped with fill or drain valves. The transformer can be filled via removing the top lid. A drain port w/ bolt plug is equipped.

**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 outdoor applications. Equipped

with hanger brackets and lifting lugs, this overhead power distribution system can be mounted on poles.

**Benefits:** The MT-UPM-R7-3P-DMA-500KVA-YE-CC-A6-BM-CZ-1ZZ-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)

There are no Faqs

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