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MT-PML-R7-1P-SE-100KVA-SZ-RT-LF-A6-BM-CZ-1Z2-M1

100 KVA Pad Mount Transformer - 480V Primary, 240/120V Secondary - Mineral Oil Fluid / ONAN

Product ID: 345536

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



Image: MT-PML-R7-1P-SE-100KVA-SZ-RT-LF-A6-BM-CZ-1Z2-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-PML-R7-1P-SE-100KVA-SZ-RT-LF-A6-BM-CZ-1Z2-M1 Pad Mount Transformer

Transformer Type: Pad Mounted, Compartmental-Type II
Transformer Configuration: Liquid Filled Pad Mounted
Transformer Feed Type: Radial Feed
Polarity: Additive
Phase: Single Phase (Connects to 3-Phase electrical grid)
Capacity: 100 KVA
Vector Group: II6
Primary Voltage: 480V
Primary Voltage Switch: N/A
Primary Voltage Class: 1.2 kV Class
Primary Phasor: Single Phase
Primary BIL: 30 KV
Secondary Voltage: 240V/120 (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

Cooling Class: ONAN; Self-Cooled

Ratings

Meets/Exceeds DOE 2016 Efficiency Ratings
Complies with ANSI / IEEE C57.12.00
Complies with ANSI / IEEE C57.12.21
Complies with ANSI / IEEE C57.12.25
Complies with ANSI / IEEE C57 12.28
Complies with ANSI / IEEE C57 12.29
Complies with ANSI / IEEE C57 12.35
Complies with ANSI / IEEE C57 12.38
Complies with ANSI / IEEE C57.12.70
Complies with ANSI / IEEE C62.11
Complies with ASTM D3487
Pentahead Bolt Entry Assembly
High-Fire Point Insulating Fluid
Non-PCB Insulating Fluid
Tamper Proof Housing
NEMA 3R Wiring Compartment
Lift-Up Pad lockable Lid

Efficiency: 99.00%
Based on transformer operating at 50% of nameplate base kVA.

Forced Air (Fans): None
Tap Changer: 5-Position Tap Changer, Hot Stick Operable
Tap Qty: (2) FCAN Above Taps, (2) FCBN Below Taps
Tap %: 2.50%
Tap Changer Switch Rating: 200-Amp, 600V
Tap Changer Switch Location: Front Compartment, High Voltage (HV) Left Side
Impedance: 1.0-4.5% Typical
Primary Connection Type: Live Front
Primary Termination Arrangement: ANSI Type II Arrangement
Primary Termination: Externally Clamped One-Piece Epoxy Bushings Copper Threaded Studs
Primary Connection: NEMA Spade Terminals, 2-Hole Spade, Externally Clamped, Accepts up to (2) Double Lug connections with (1) cables per side of Spade connector
Primary Connection Qty: (3) Externally Clamped One-Piece Epoxy Bushings Copper Threaded Studs
Primary Parking Stand Qty: N/A
Primary Bushing Rating: 1.2 kV Class, 30 kV BIL, 200A
Primary Surge Arrestors: N/A
Primary Surge Arrestor Voltage Rating: N/A
Primary Surge Arrestor MCOV Rating: N/A
Primary Over Current Protection (OCP): N/A
Primary Over Current Protection Method: N/A
Primary Over Current Protection Holder: N/A
Primary Neutral Connection: N/A
Primary Grounding Provisions: (1) Welded Ground Bung, 1/2”-13 UNC Tapped Hole, 7/16” Deep Bung, w/ Grounding Terminal Clamp for 2/0-8 AWG Stranded Wire
Secondary Connection Type: Live Font
Secondary Termination Arrangement: ANSI Type II Arrangement
Secondary Connections: NEMA Spade Terminals, 4-Hole Spade, Externally Clamped, Accepts up to (4) Double Lug connections with (2) cables per side of Spade connector
Secondary Over Current Protection (OCP): N/A
Secondary Connection Qty: (3) Externally Clamped One-Piece Epoxy Bushings w/ 5/8"-11 x 1-1/2" Long Copper Threaded Studs
Secondary Neutral Connection: Secondary X2 Neutral Grounded to Tank via 1/2”-13 UNC Tapped Hole, 7/16” Deep Bung & Copper Ground Strap
Secondary Grounding Provisions: (1) Welded Ground Bung, 1/2”-13 UNC Tapped Hole, 7/16” Deep Bung, w/ Grounding Terminal Clamp for 2/0-8 AWG Stranded Wire
Metering Current Transformer (CT): N/A
Metering Panel: N/A
Auxiliary Control Panel: N/A
Load Break Switch: 2-Position Load Break Switch
Load Break Switch Qty: 1
Load Break Switch Rating: 200-Amp, 1.2 kV
Load Break Switch Location: Front Compartment
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 (Oil Type): Mineral Oil - Non-PCBFluid
Fluid (Oil) Capacity*: 63.56 Gallons
Fluid (Oil) Weight*: 573.19 lb
Liquid Level Indicator: Analog Gauge
Temperature Indicator: Analog Gauge
Pressure/Vacuum Indicator: Analog Gauge
Pressure Relief Device: Automatic Action, Cracking Pressure @ 10 PSIG, Releasing Pressure @ 8 PSIG, Flow @ 15 PSIG (50 SCFM) @ 14.7 PSGI
Gas Sampler Valve: N/A
Fill Valve: 1/2" NPT w/ Removable Bolt Plug

Load Losses Based on 85°C Reference Temp.
No Load Loss (in watts)*: +/- 273W
Load Loss (in watts)*: +/- 1,105W
Total Load Loss (in watts)*: +/- 1,378W
Note: *Losses offered are typical only, not guaranteed*

Labeling:
Externally Stencilled (Painted) KVA Rating
Externally Stencilled (Painted) Voltage Rating
External Non-PCB Label
External Warning & Danger Label
External Barcode Label
Internal Busing & Accessory Labeling
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*

Fill Valve Location: Front Compartment
Drain Valve: 1/2" NPT w/ Removable Bolt Plug, w/o Sampler
Drain Valve Location: Front Compartment
Winding Material: Copper
Ambient Temperature Rating: 40°C
Sound Level: 51 dBA
Elevation (Altitude): 3300ft (1000 meters) Above Sea Level or Below
Core Material: Grain Oriented Steel
Tank Material: Coated Steel
Cabinet Material: Coated Steel
Base Platform Material: Coated Steel
Portability: Lifting lugs
Housing Type: Low Profile Air-Filled Cabinet w/ Locking Hinged Door, HV/LV in Same Compartment ,Tamper Resistant, w/ Pad-lockable Lift-up Lid
Enclosure Rating: NEMA 3R Weatherproof Wiring Cabinet, Sealed Tank
Paint Type: Weatherproof and UV Resistant Epoxy Coating and Undercoating
Finish Color: Munsell™ 7.0 GY 3.29/1.5 Bell Green
Mounting: Pad Mount
Conduit Opening: Bottom Feed Underground Entry/Exit
Compartment Base Wireway Dimensions*: 41"-L x 21"-D
Compartment Cabinet Depth: 19"-D
Dimensions*: 41.34"-W x 45.28"-D x 29.53"-H
Dry Weight (w/o Oil)*: 881.83 lb
Total Weight (Liquid Filled)*: 1940.04 lb
*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: 1-903-765-7664
E-mail: sales@larsonelectronics.com

The MT-PML-R7-1P-SE-100KVA-SZ-RT-LF-A6-BM-CZ-1Z2-M1 Industrial Pad Mount Transformer from Larson Electronics offers powerful, reliable, and efficient power distribution in indoor, 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. An enclosed design caters to installations on concrete pads without protective fencing.

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

Transformer Features: With a transformer rating of 100 kVA, the industrial transformer features a primary voltage of single-phase 480V and a secondary voltage of single-phase 240/120V (L-N-L). The unit has a primary radial feed and dead-front primary connections. We also offer systems with radial feed and dead front primary/live front secondary connections. This transformer features a 5-position tap changer with (2) +/- 2.5% taps above and (2) +/- 2.5% taps below to allow small changes for voltage. This pad mount transformer features primary well bushings and standard spade connectors on the secondary side. Equipped with copper windings, this transformer consists of one coil and two core loops.

The MT-PML-R7-1P-SE-100KVA-SZ-RT-LF-A6-BM-CZ-1Z2-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 transformer meets DOE 2016 efficiency standards. 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-PML-R7-1P-SE-100KVA-SZ-RT-LF-A6-BM-CZ-1Z2-M1 features mineral oil insulation fluid. We offer transformers with FR-3 oil fluid, if needed.

Gauges: The following gauges are included with the system: liquid level, temperature and pressure/vacuum gauges. Standard liquid level, temperature and pressure/vacuum gauges are analog, manual reading types. These gauges do not have auxiliary contacts.

Fault Pressure Devices: This transformer features an automatic action fault pressure device. Fault pressure devices are used to detect high rates of pressure rise within the tank.

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 does not come with high elbow surge arresters on the primary side. 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 Break Switch: The transformer is equipped with a load break switch. This switch has two positions: transformer on, transformer off.

Valves: The MT-PML-R7-1P-SE-100KVA-SZ-RT-LF-A6-BM-CZ-1Z2-M1 is equipped with a fill valve and drain valve with sampler port.

Protection Fuses: This transformer does not contain protection fuses on the primary side. 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 both indoor and outdoor applications. This power distribution system can be pad mounted on concrete pads.

Benefits: The MT-PML-R7-1P-SE-100KVA-SZ-RT-LF-A6-BM-CZ-1Z2-M1 pad mount 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.

Applications: General purposes, industrial sites, electrical rooms, underground vaults, 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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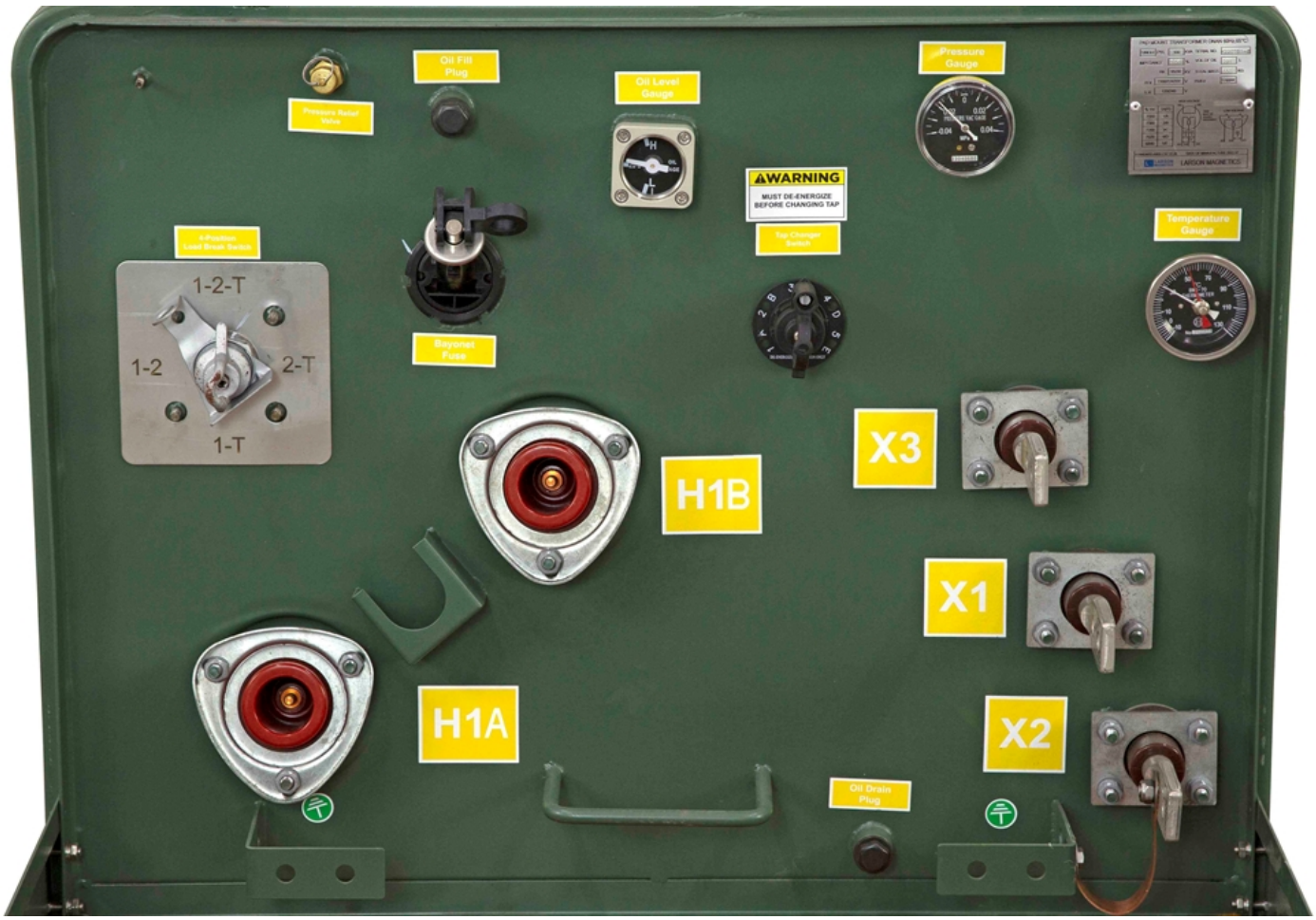


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Export Control Classification Number (ECCN): EAR99

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- **Video1** (https://www.youtube.com/watch?v=mpt7J5hdJp8)
- **Video2** (https://www.youtube.com/watch?v=KIzsyVtvSWM)
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