

MT-PML-R7-1P-DMR-50KVA-SLZ-RT-DF-A6-BF-CZ-1B2-M2

50 KVA Pad Mount Transformer - 12470V Delta Primary, 120/240V Secondary - FR3/KNAN - Bell Green

Product ID: 313008



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-DMR-50KVA-SLZ-RT-DF-A6-BF-CZ-1B2-M2 1PH 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

Capacity: 50 KVA

Vector Group: II6

Primary Voltage: 12470V

Primary Voltage Switch: N/A

Primary Voltage Class: 15 kV Class

Primary Phasor: Delta

Primary BIL: 95 KV

Secondary Voltage: 120/240 V (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: KNAN; Self-Cooled

Forced Air (Fans): None

Tap Changer: 5-Position Tap Changer, Hot Stick Operable

Tap Qty: (2) FCAN Above Taps, (2) FCBN Below Taps

Tap %: 2.5%

Tap Changer Switch Rating: 200-Amp, 15 kV

Tap Changer Switch Location: Front Compartment, High Voltage (HV) Left Side

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

Penta-head 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: 98.70%

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

Load Losses Based on 85°C Reference Temp.

No Load Loss (in watts)*: +/- 176W

Load Loss (in watts)*: +/- 650W

Total Load Loss (in watts)*: +/- 826W

Note: Losses offered are typical only, not guaranteed

Impedance: 1.0-4.5%

Primary Connection Type: Dead Front

Primary Termination Arrangement: ANSI Type II Arrangement

Primary Termination: Externally Clamped Well Bushings w/ Removable Studs, 200A Load Break Elbows w/o Inserts

Primary Connection Qty: (2) Primary Connections for use w/ Elbow Connectors

Primary Parking Stand Qty: (2) Welded Bracket for Installing Accessory Parking Stand Bushings

Primary Bushing Rating: 15 kV Class, 95 kV BIL, 200A, Load Break

Primary Surge Arrestors: N/A

Primary Surge Arrestor Voltage Rating: N/A

Primary Surge Arrestor MCOV Rating: N/A

Primary Over Current Protection (OCP): Bayonet Expulsion Fuses

Primary Over Current Protection Method: Fused, Oil-Immersed

Primary Over Current Protection Holder: Bayonet Fuse Holder w/ External Drip Shield

Primary Neutral Connection: Primary H2 Neutral Internally Bonded to Tank

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 Front

Secondary Termination Arrangement: ANSI Type II Arrangement

Secondary Connections: NEMA Spade Terminals, 4-Hole Spade, Accepts up to (4) Single Lug connections with (1) 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, 15 kV

Load Break Switch Location: High Voltage (HV) 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): Biodegradable Natural Vegetable Oil Ester Insulating Fluid - Non-PCB Fluid

Fluid (Oil) Capacity*: 61.11 Gallons

Fluid (Oil) Weight*: 551.15 lbs

Liquid Level Indicator: Analog Gauge

Temperature Indicator: Analog Gauge

Pressure/Vacuum Indicator: Analog Gauge

Pressure Relief Device: Included, Automatic Action

Fault Indicator: N/A

Gas Sampler Valve: N/A

Fill Valve: 1/2" NPT w/ Removable Bolt Plug

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: 48 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, provisions for jacking under base, w/ base construction suitable for using rollers or skidding

Housing Type: Compartmental Air-Filled Cabinet w/ Locking Doors, HV Compartment Left, LV Compartment Right, Steel Barrier Separation, HV Door Spring-Loaded Release Pin in LV Compartment

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

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

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: Pad Mount

Conduit Opening: Bottom Feed Underground Entry/Exit

Compartment Base Wireway Dimensions*: 34"-L x 21"-D

Compartment Cabinet Depth: 19"-D

Dimensions*: 34.25"-W x 37.4"-D x 25.2"-H

Dry Weight (w/o Oil)*: 507.05 lbs

Total Weight (Liquid Filled)*: 1432.98 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-PML-R7-1P-DMR-50KVA-SLZ-RT-DF-A6-BF-CZ-1B2-M2 from Larson Electronics is an Industrial Pad Mount that Transformer 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 50 kVA, the industrial transformer features a primary voltage of single-phase 12470V Delta and a secondary voltage of single-phase 120/240V (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-DMR-50KVA-SLZ-RT-DF-A6-BF-CZ-1B2-M2 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-DMR-50KVA-SLZ-RT-DF-A6-BF-CZ-1B2-M2 features FR-3 cooling fluid (KNAN). We offer transformers with mineral oil fluid, if needed.

Biodegradable Fluid: Biodegradable cooling fluid (vegetable oil) has a higher heat capacity compared to mineral oil, making the liquid safer to use and more reliable during operations. Vegetable oil has a higher flash point and fire point than mineral oil, hydrocarbon oil, silicone oil and synthetic ester. This cooling fluid is also non-toxic and can tolerate higher breakdown voltages than mineral oil. When operating at high temperatures, biodegradable cooling liquid sustains up to 120% load conditions, which helps preserve the transformer's lifespan and performance.

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.

Valves: The MT-PML-R7-1P-DMR-50KVA-SLZ-RT-DF-A6-BF-CZ-1B2-M2 is equipped with a fill valve and drain valve with sampler port.

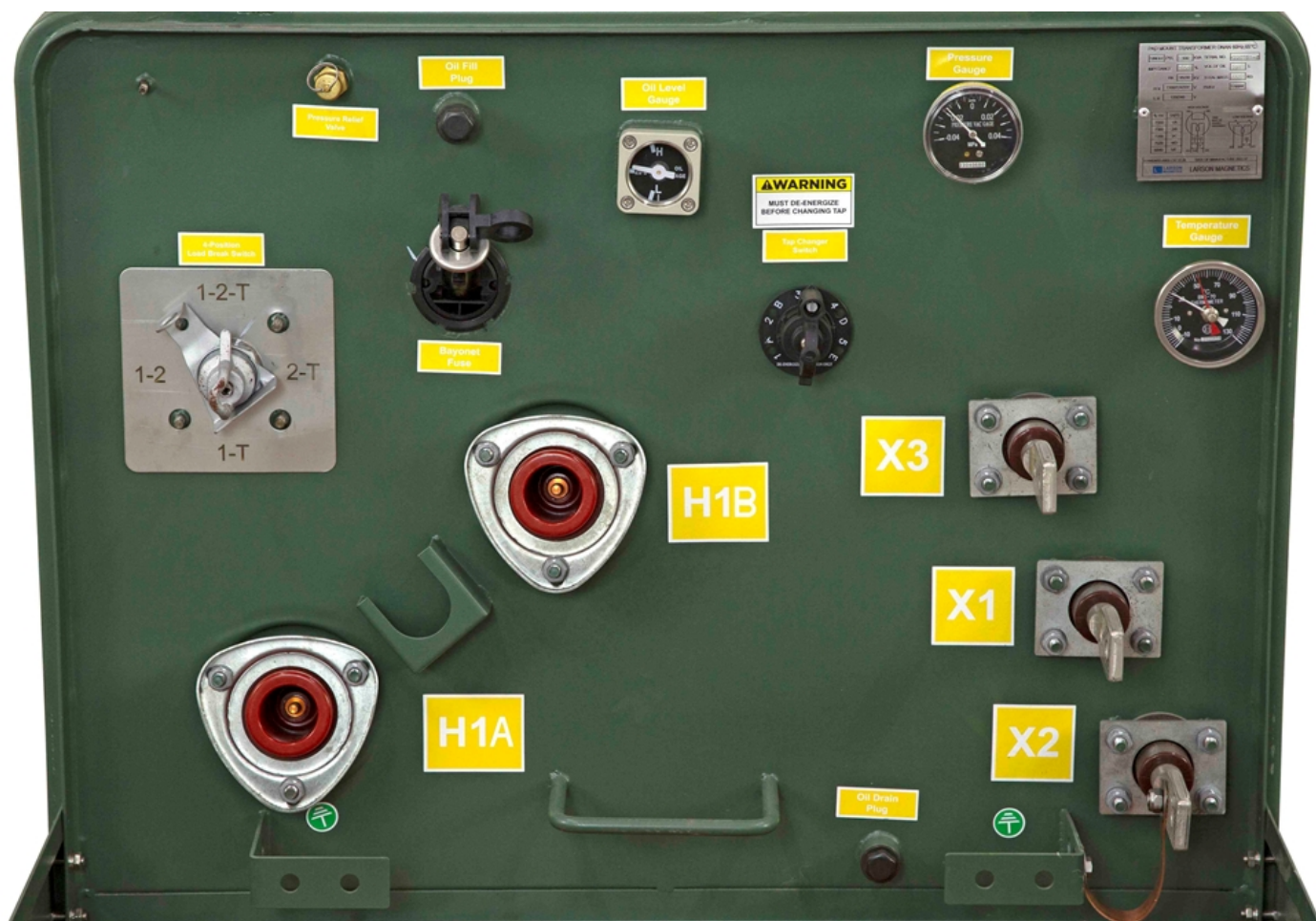
Protection Fuses: This transformer contains bayonet protection fuses on the primary side. For units without protection fuses, up stream protection is provided. We recommend provisions for protection fuses when possible, as blown fuses may require more frequent oil changes.

Mount: The heavy-duty enclosure makes the unit suitable for both indoor and outdoor applications. This power distribution system can be pad mounted on concrete pads.

Benefits: The MT-PML-R7-1P-DMR-50KVA-SLZ-RT-DF-A6-BF-CZ-1B2-M2 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.









Frequently Asked Questions (FAQ)