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MT-PML-R7-1P-DRC-25KVA-SLZ-RT-DF-A6-BM-CZ-2C4-M1

25 KVA Pad Mount Transformer - 44000V Open Delta Primary, 120/240V Secondary, Mineral Oil Fluid /ONAN, Bell Green

Product ID: 313929



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-DRC-25KVA-SLZ-RT-DF-A6-BM-CZ-2C4-M1 1-Wire 1PH Pad Mount Transformer

Transformer Type: Pad Mounted, Compartmental-Type II
Transformer Configuration: Liquid Filled Pad Mounted
Transformer Feed Type: Radial Feed
Polarity: -
Phase: Single Phase (Connects to 3-Phase electrical grid)
Capacity: 25 KVA
Vector Group: II6
Primary Voltage: 44000V
Primary Voltage Switch: N/A
Primary Voltage Class: 46 kV Class
Primary Phasor: Open Delta
Primary BIL: 250 KV
Secondary Voltage: 120/240 V (L-N-L)
Secondary Voltage Class: 1.2 kV Class
Secondary Phasor: Dual Windings, Single Phase
Secondary BIL: 30 KV
Frequency: 60 Hz
Temperature Rise: 65°C
Insulation Rating: Class F Insulation - 155°C, 248°F

Cooling Class: ONAN; 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 %: 2.50%
Tap Changer Switch Rating: 200-Amp, 8.7 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
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.

Load Losses Based on 85°C Reference Temp.
No Load Loss (in watts)*: +/- 104W
Load Loss (in watts)*: +/- 377W
Total Load Loss (in watts)*: +/- 481W
Note: Losses offered are typical only, not guaranteed

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Impedance: 5.0% ± 0.375
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/ 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: 46 kV Class, 250 kV BIL, 200A, Load Break
Primary Surge Arrestors: Included, (2) High Voltage Elbow Surge Arrestors
Primary Surge Arrestor Voltage Rating: 45 kV Class
Primary Surge Arrestor MCOV Rating: 36.5 kVrms
Primary Over Current Protection (OCP): (2) Bayonet Expulsion Fuses (46 kV, 12 A, 25,000 AIC) in series w/ Partial-Range Current-Limiting Fuses
Primary Over Current Protection Method: Fused, Oil-Immersed
Primary Over Current Protection Holder: Bayonet Fuse Holder w/ External Drip Shield
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, 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: 4-Postion LBOR, Hot Stick Operable
Load Break Switch Qty: 1
Load Break Switch Rating: 200-Amp, 46 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 Insulating Fluid - Non-PCB Fluid

Fluid (Oil) Capacity*: 70.89 Gallons

Fluid (Oil) Weight*: 639.33 lbs
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
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: Complies to NEMA TR-1
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

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:

Ratio Tests - on all tap connections

Phase Sequence/Polarity Test

Resistance test of all windings

Exciting current test

No-load Loss (Wattage) Test (witnessed by SEPTA)
Impedance and full load loss Test (witnessed by SEPTA)

Insulation resistance test with at least 1 KV megger

Dielectric withstand test (Applied potential - Induced potential), (witnessed by SEPTA)

Impulse Test (witnessed by SEPTA)

Power Factor Test (witnessed by SEPTA)

Temperature Rise Test (witnessed by SEPTA)

Percent regulation at 85%, 90%, and 95% Power Factor
Efficiency at 50%, 75%, and 100% loads
"Gas-in-oil" analysis and "dielectric breakdown voltage" tests

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*

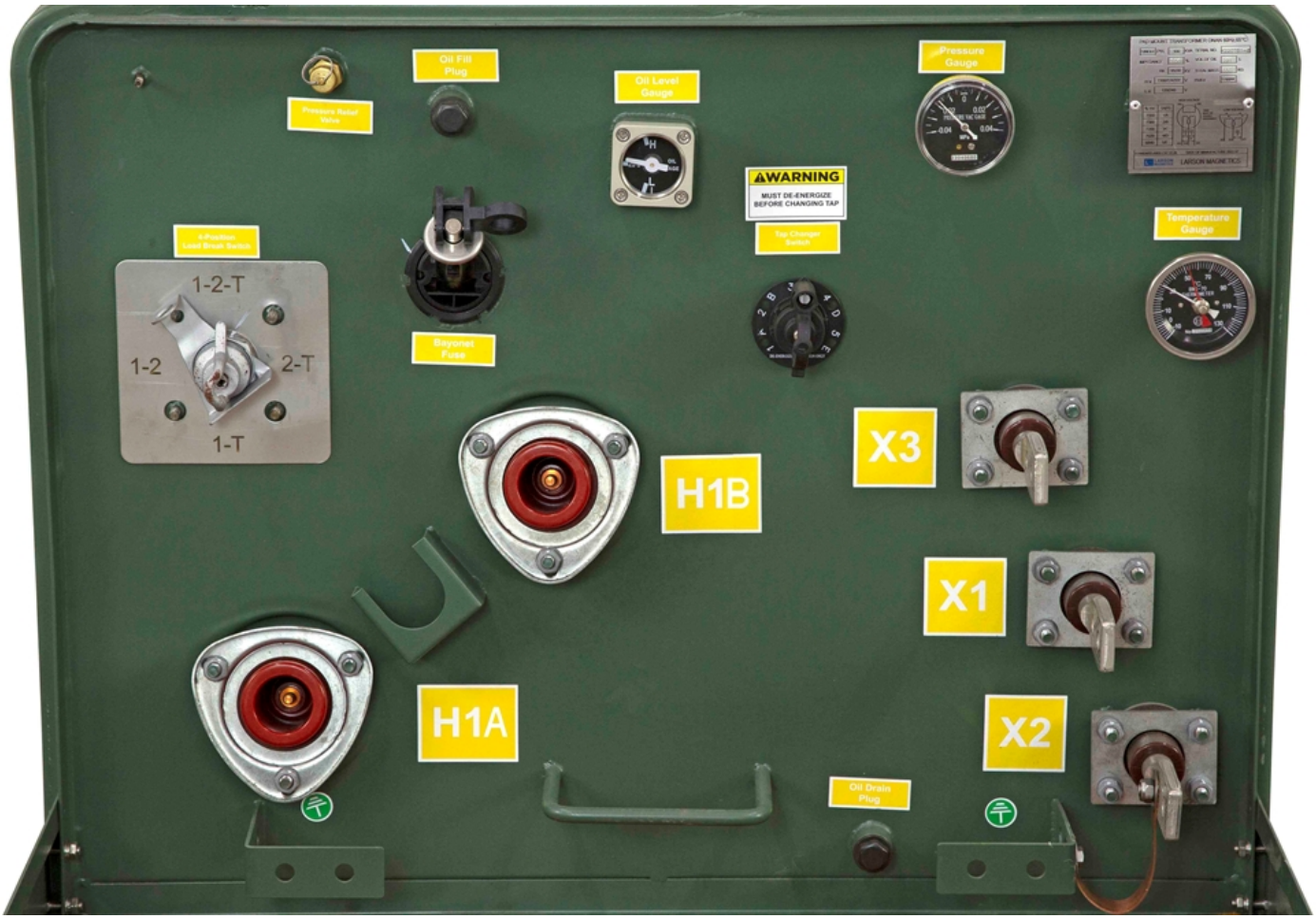
Finish Color: Munsell™ 7.0 GY 3.29/1.5 Bell Green
Mounting: Pad Mount
Conduit Opening: Bottom Feed Underground Entry/Exit
Compartment Base Wireway Dimensions*: 33.5"-L x 25"-D
Compartment Cabinet Depth: 27"-D
Dimensions*: 37.4"-W x 51.93"-D x 31.72"-H
Dry Weight (w/o Oil)*: 330.69 lbs
Total Weight (Liquid Filled)*: 1366.84 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-DRC-25KVA-SLZ-RT-DF-A6-BM-CZ-2C4-M1 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 25 kVA, the industrial transformer features a primary voltage of single-phase 44000V Open 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 loop 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-DRC-25KVA-SLZ-RT-DF-A6-BM-CZ-2C4-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-DRC-25KVA-SLZ-RT-DF-A6-BM-CZ-2C4-M1 features mineral oil cooling fluid (ONAN) with a capacity of 40.33 gallons. We offer transformers with biodegradable or FR-3 fluids, 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% loan 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 comes 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 Breaker Switch: The MT-PML-R7-1P-DRC-25KVA-SLZ-RT-DF-A6-BM-CZ-2C4-M1 is equipped with a load break switch. This switch has four positions: A side on + transformer on, B side on + transformer on, A and B sides + transformer on, and A and B sides + transformer off.
Valves: The MT-PML-R7-1P-DRC-25KVA-SLZ-RT-DF-A6-BM-CZ-2C4-M1 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-DRC-25KVA-SLZ-RT-DF-A6-BM-CZ-2C4-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.


NO PCBs
LARSONELECTRONICS.COM
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WARNING
HAZARDOUS VOLTAGE INSIDE.
KEEP OUT!
Can shock, burn or cause death.
If found damaged or unlocked call your local utility company.
WARNING
Underground power cables are located in this area.
Before digging call 811.
Can shock, burn or cause death.
NOTICE


Pressure Relief Valve
Oil Fill Plug
Oil Level Gauge
Pressure Gauge
WARNING
MUST DE-ENERGIZE BEFORE CHANGING TAP
Tap Changer Switch
Temperature Gauge
4-Position Load Break Switch
1-2-T
1-2
2-T
1-T
Bayonet Fuse
H1B
X3
X1
H1A
X2
Oil Drain Plug





Frequently Asked Questions (FAQ)