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MT-PML-R4-3P-DE-200KVA-D.GTQ-LT-DF-XX-BM-AZ-2B4-M1

200 KVA Pad Mount Transformer - 480V Delta Primary, 4500V Delta/ Grounded Wye Secondary, Mineral Oil Fluid /ONAN, Aluminum, RAL9010

Product ID: 319162



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-R4-3P-DE-200KVA-D.GTQ-LT-DF-XX-BM-AZ-2B4-M1 Pad Mount Transformer	Ratings
Transformer Type: Pad Mounted, Compartmental-Type	Meets/Exceeds DOE 2016 Efficiency Ratings
Transformer Configuration: Liquid Filled Pad Mounted	Meets/Exceeds CSA Efficiency Ratings
Transformer Feed Type: Loop Feed	Complies with ANSI / IEEE C57.12.00
Operation: Step-Up Operation (Not Approved for Step-Down)	Complies with ANSI / IEEE C57 12.28
Phase: Three Phase	Complies with ANSI / IEEE C57 12.29
Capacity: 200 KVA	Complies with ANSI / IEEE C57 12.34
Vector Group: Dd0+Yd11	Complies with ANSI / IEEE C57 12.35
Primary Voltage: 480V	Complies with ANSI / IEEE C57.12.70
Primary Voltage Switch: N/A	Complies with ANSI / IEEE C57.12.110
Primary Voltage Class: 1.2 kV Class	Complies with ANSI / IEEE C57.12.131
Primary Phasor: Delta	Complies with ANSI / IEEE C62.11
Primary BIL: 30 KV	Complies with ANSI / IEEE C62.22
Secondary Voltage: 4500V (Range of 1500-4500V)	Complies with ANSI / IEEE 386
Secondary Voltage Class: 5 kV Class	Complies with ANSI / IEEE C2
Secondary Phasor: Delta/Grounded Wye	Complies with ANSI / IEEE C37.47
Secondary BIL: 60 KV	Complies with ANSI Z535.4
Frequency: 30-90 Hz	Complies with ASTM D3487
Temperature Rise: 65°C	Complies with ASTM D6871
Insulation Rating: Class E Insulation - 120°C, 248°F	Complies with NEMA 260-1996
Cooling Class: ONAN; Self-Cooled	Complies with 10 CFR Part 431
Forced Air (Fans): None	Complies with CSA C2.1-06
Tap Changer: 30-Position De-energized Tap Changer	Complies with CSA C50
Tap Qty: (29) FCBN Below Taps	Complies with CSA C88
Tap %: 2.3%	Complies with CSA C88.1
Tap Changer Switch Rating: 5 kV	Complies with CSA C88-16
Tap Changer Switch Location: HV Side	Complies with CSA C227.4
Impedance: 1.2-6.0% Typical, Target 3.10-5.75%	Complies with CSA C227.5
Primary Connection Type: Live Front	Complies with CSA C802-3

Primary Termination Arrangement: Staggered Terminal Arrangement

Primary Connections: NEMA Spade Terminals, 4-Hole Spade, Externally Clamped, Accepts up to (4) Double Lug connections with (2) cables per side of Spade connector

Primary Connection Qty: (4) Externally Clamped One-Piece Epoxy Bushings Copper Threaded Studs

Primary Connection Supports: N/A

Primary Overcurrent Protection (OCP): N/A

Primary Neutral Connection: Primary X0 Neutral Grounded to Tank via 1/2"-13 UNC Tapped Hole, 7/16" Deep Bung & Copper Ground Strap

Primary Grounding Provisions: (1) NEMA Ground Bar attached to tank via (2) Welded Ground Bungs in LV Cabinet

Secondary Connection Type: Dead Front

Secondary Termination Arrangement: V Terminal Arrangement

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

Secondary Connection Qty: (6) Secondary Connections for use w/ Elbow Connectors

Secondary Parking Stand Qty: (6) Welded Brackets for Installing Accessory Parking Stand Bushings

Secondary Bushing Rating: 5 kV Class, 60 kV BIL, 200A, Load Break, IEEE 386 Color Red

Secondary Neutral Connection: Secondary HO Neutral Internally Bonded to Tank

Secondary Surge Arrestors: Included, (3) High Voltage Elbow Surge Arrestors

Secondary Surge Arrestor Voltage Rating: 6 kV

Secondary Surge Arrestor MCOV Rating: 5.1 kV

Secondary Overcurrent Protection (OCP): Bayonet Expulsion Fuses

Secondary Overcurrent Protection Method: Fused, Oil-Immersed

Secondary Overcurrent Protection Holder: Bayonet Fuse Holder w/ Flapper Valve and External Drip Shield

Secondary Grounding Provisions: (1) NEMA Ground Bar attached to tank via (2) Welded Ground Bungs in HV Cabinet

Metering Current Transformer (CT): N/A

Metering Panel: N/A

Auxiliary Control Panel: N/A

Load Break Switch: 4-Position Load Break Switch

Load Break Switch Qty: (1)

Load Break Switch Rating: 200-Amp, 5 kV

Load Break Switch Location: High Voltage (HV) Front Compartment

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: 6-Pulses

Insulation Fluid: Mineral Oil Insulating Fluid, Non-PCB Fluid

Fluid (Oil) Capacity*: 126 Gallons

Fluid (Oil) Weight*: 970 Lbs

Liquid Level Indicator: Analog Dial Gauge

Temperature Indicator: Analog Dial Gauge

Pressure/Vacuum Indicator: Analog Dial Gauge

Pressure Relief Device: Included, Automatic Action

Fault Indicator: N/A

Gas Sampler Valve: Included, Schrader Valve

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

Fill Valve Location: Front Compartment

Drain Valve: 1" NPT Port w/ 5/8" NPT Sampler Valve

Drain Valve Location: Front Compartment

Winding Material: Aluminum

Ambient Temperature Rating: 60°C

Ambient Operating Temperature Range: -40°C to +60°C

Sound Level: 55 dBA

Elevation (Altitude): 3300ft (1000 meters) Above Sea Level

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 3 Weatherproof Wiring Cabinet, Sealed Tank

Seismic Rating: Yes

Complies with CSA C802.1

Features

Penta-head Bolt Entry Assembly

High-Fire Point Insulating Fluid

Non-PCB Insulating Fluid
Tamper Proof Housing
Hinged Front Compartment Doors, Pad Lockable
NEMA 3 Wiring Compartment
Hot Stick Included, HV Door Mount

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
Dissolved Gas Analysis

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): +/- 400W
Full Load Loss (in watts) at 100%: +/- 2,300W
Total Load Loss (in watts) at 100%: +/- 2,700W
Total Losses at 55°C LL Temp.& 20°C NL Temp.
Total Load Loss (in watts) at 50%: +/- 942W
Note: Losses offered are typical only, not guaranteed

Shipping:

Shipped on pallet on open flatbed

Palletized on Wooden Pallet w/ Skid Pockets
Pallet Skid Facing Outward Sides of Truck

Paint Type: Weatherproof and UV Resistant Epoxy Coating and Undercoating

Finish Color: RAL9010
Mounting: Pad Mounted
Conduit Opening: Bottom Feed Underground Entry/Exit
HV Compartment Base Wireway Dimensions*: 20"-W x 5"-D
LV Compartment Base Wireway Dimensions*: 16"-W x 5"-D
MV/LV Compartment Cabinet Depth*: 20"-D
Tank Cover Access Handhole: N/A
Dimensions*: 61"-W x 49"-D x 69"-H
Dry Weight (w/o Oil)*: 1,463 Lbs
Total Weight (Liquid Filled)*: 3,420 Lbs
*Please note that numbers are approximate and subject to change

Note: Crated shipping in lieu of palletizing can be done upon request for an additional fee

Special Orders - 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-R4-3P-DE-200KVA-D.GTQ-LT-DF-XX-BM-AZ-2B4-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 make 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 200 kVA, the industrial transformer features a primary voltage of three-phase 480V Delta and a secondary voltage of 4500V Delta/Grounded Wye. The unit has a primary loop feed and dead-front primary connections. We also offer systems with radial feed and live front primary/live front secondary connections. 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-R4-3P-DE-200KVA-D.GTQ-LT-DF-XX-BM-AZ-2B4-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 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-R4-3P-DE-200KVA-D.GTQ-LT-DF-XX-BM-AZ-2B4-M1 features mineral oil cooling fluid (ONAN). We offer transformers with biodegradable or FR-3 fluids, 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.

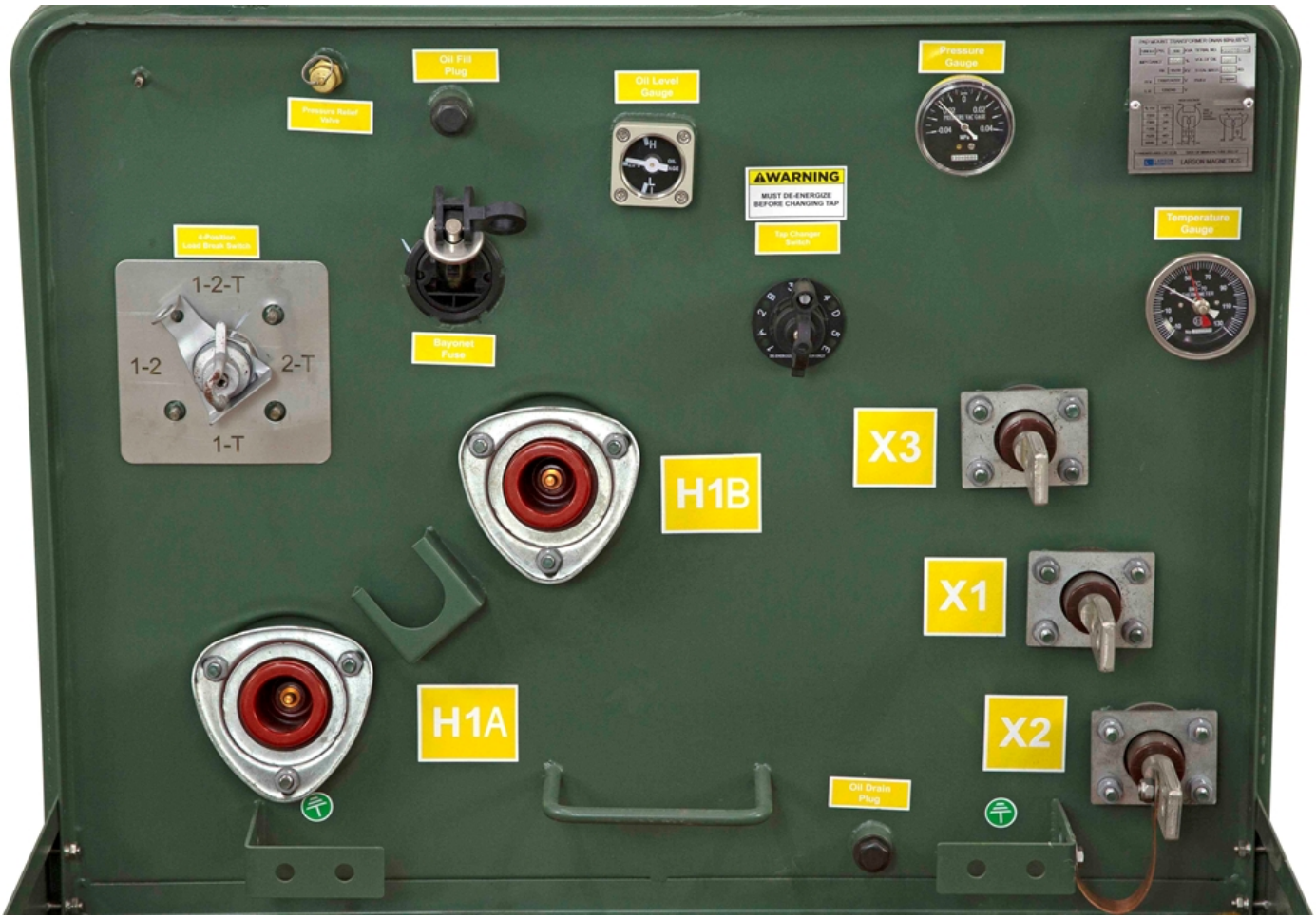
Surge arresters: This system comes with high elbow surge arresters on the secondary (medium voltage) side. Designed for over-voltage and transient voltage protection, the components prevent damage caused by lightning, internal switching or voltage surges. We can offer models without high elbow surge arresters that have mounting provisions for customer-provided surge arresters.

Load Break Switch: This transformer 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-R4-3P-DE-200KVA-D.GTQ-LT-DF-XX-BM-AZ-2B4-M1 is

equipped with a fill valve and drain valve with sampler port.
Protection Fuses: This transformer contains bayonet protection fuses on the secondary (medium voltage) 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-R4-3P-DE-200KVA-D.GTQ-LT-DF-XX-BM-AZ-2B4-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
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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)