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MT-PML-R7-1P-GNF-167KVA-SZ-LT-DF-A6-BM-AZ-2B4-M1

167 KVA Pad Mount Transformer - 4160Y/2400 Grounded Wye Primary, 240/120V Secondary - Mineral Oil Fluid /ONAN - Aluminum

Product ID: 304049



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-GNF-167KVA-SZ-LT-DF-A6-BM-AZ-2B4-M1 Pad Mount Transformer

Transformer Type: Pad Mounted, Compartmental-Type II
Transformer Configuration: Liquid Filled Pad Mounted
Transformer Feed Type: Loop Feed
Phase: Single Phase
Capacity: 167 KVA
Vector Group: II6
Primary Voltage: 4160GrdY/2400
Primary Voltage Switch: N/A
Primary Voltage Class: 5 kV Class
Primary Phasor: Grounded Wye
Primary BIL: 60 KV
Secondary Voltage: 240/120V (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
Forced Air (Fans): None
Tap Changer: 5-Position Tap Changer
Tap Qty: (2) FCAN Above Taps, (2) FCBN Below Taps
Tap %: 2.50%
Tap Changer Switch Location: Front Compartment
Impedance: 1.0-4.5% Typical
Primary Connection Type: Dead Front
Primary Termination: Standoff Well Bushings w/ Removable Studs, 200A Load Break

Ratings

Meets/Exceeds DOE 2016 Efficiency Ratings
Complies with ANSI / IEEE #C57.12.00
Complies with ANSI / IEEE #C57.12.25
Complies with ANSI / IEEE C57 12.28
Complies with ANSI / IEEE C57 12.38
Complies with ANSI / IEEE C57.12.70
Complies with ASTM D3487
Pentahead Entry Assembly
High-Fire Point Natural Ester Insulating Fluid
Non-PCB Insulating Fluid
Tamper Proof Housing
Lift Up Pad lockable Lid

Efficiency: 99.10%
Based on transformer operating at 50% of nameplate base kVA.

Load Losses Based on 85°C Reference Temp.
No Load Loss (in watts)*: +/- 455W
Load Loss (in watts)*: +/- 1,833W
Total Load Loss (in watts)*: +/- 2,288W

Note: Losses offered are typical only, not guaranteed

Elbows w/ Inserts
Primary Connection Qty: (2) Primary Connections w/ (2) Standoff Brackets for Parked Elbows
Primary Surge Arrestors: (1) High Voltage Elbow Surge Arrestors, Included
Primary Surge Arrestor Voltage Rating: 6 kV Class
Primary Surge Arrestor MCOV Rating: 5.1 kVrms
Primary Over Current Protection (OCP): Bayonet Fuses, Partial-Range Current-Limiting Fuses, Oil-Immersed Isolation Links
Primary Over Current Protection Method: Fused w/ Isolation Links
Primary Over Current Protection Holder: Bayonet Fuse Holder w/ Drip Shield
Primary Grounding Provisions: (1) Grounding lug, accepts #2 copper
Secondary Connection Type: Live Font, Type 2 Arrangement
Secondary Connections: 5/8" x 11" One-Piece Epoxy Bushings w/ 1-1/2" Long Copper Threaded Studs, Externally Clamped, w/ NEMA Spade Terminals, 4-Hole Spade, Externally Clamped, 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)
Secondary Grounding Provisions: (1) Grounding lug, accepts #2 copper
Metering Current Transformer (CT): N/A
Metering Panel: N/A
Auxilary Control Panel : N/A
Load Break Switch: 4-Position Switch, 200A
Load Break Switch Qty: (1)
Load Break Switch Location: Front Compartment, HV Side
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 - Non-PCB Fluid
Fluid Capacity*: 125 Gallons
Liquid Level Indicator: Analog Gauge
Temperature Indicator: Analog Gauge
Pressure/Vacuum Indicator: Analog Gauge
Pressure Relief Device: Included, Automatic Action
Fill Valve: Removable Bolt
Fill Valve Location: Front Compartment
Drain Valve: Included, w/ Sampler
Drain Valve Location: Front Compartment
Winding Material: Aluminum
Ambient Temperature Rating: 40°C
Sound Level: 55 dBA
Elevation (Altitude): 3300ft (1000 meters) Above Sea Level or Below
Core Material: Steel
Tank Material: Coated Steel
Cabinet Material: Coated Steel
Base Platform Material: Coated Steel
Housing Type: Tamper Resistant w/ Pad-lockable Lift-up Lid
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
Dimensions*: 36"-W x 47"-D x 47"-H
Weight*: 1,950 lb
*Please note that numbers are approximate and subject to change

Special Orders - Special Requirements
Contact us for special requirements
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The MT-PML-R7-1P-GNF-167KVA-SZ-LT-DF-A6-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 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 167 kVA, the industrial transformer features a primary voltage of single-phase 4160Y/2400 Grounded Wye and a secondary voltage of single-phase 240/120V (L-N-L). The unit has a primary loop 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 aluminum windings, this transformer consists of one coil and two core loops.

The MT-PML-R7-1P-GNF-167KVA-SZ-LT-DF-A6-BM-AZ-2B4-M1 is air cooled and does not have fans or mounting provision for fans. This unit features a 60°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-GNF-167KVA-SZ-LT-DF-A6-BM-AZ-2B4-M1 features mineral oil cooling fluid (ONAN) that is comparable to FR3 fluid. We offer transformers with mineral 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 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-GNF-167KVA-SZ-LT-DF-A6-BM-AZ-2B4-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-GNF-167KVA-SZ-LT-DF-A6-BM-AZ-2B4-M1 is equipped with a fill valve and drain valve with sampler port.

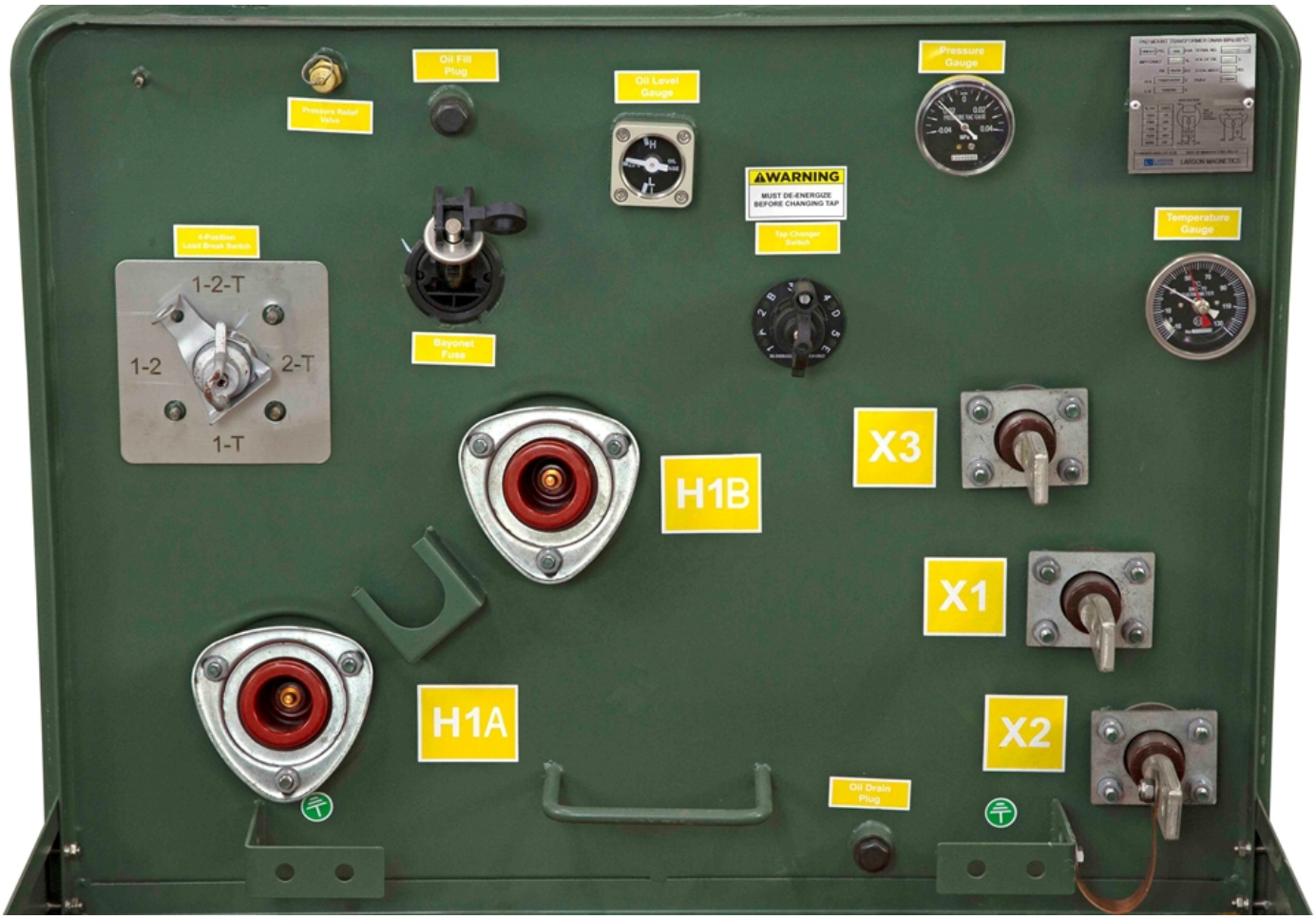
Protection Fuses: This transformer contains bayonet protection fuses on the primary side. For units without protection fuses, up stream protection is provided. We recommend provisions for protection fuses when possible, as blown fuses may require more frequent oil changes.

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-GNF-167KVA-SZ-LT-DF-A6-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)