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## MT-PML-R3-1P-GNF-50KVA-SF-LT-DF-A6-BM-CS-2B4-M1

# 50 KVA Pad Mount Transformer - 460V/230 Primary, 4160Y/2400 Grounded Wye Secondary - Mineral Oil Fluid / ONAN - 304 Stainless

**Product ID: 296746**

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



**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-R3-1P-GNF-50KVA-SF-LT-DF-A6-BM-CS-2B4-M1 1-Wire 1PH Pad Mount Transformer**

**Transformer Type:** Pad Mounted, Compartmental-Type
**Transformer Configuration:** Liquid Filled Pad Mounted Step-Up Transformer
**Transformer Feed Type:** Loop Feed
**Phase:** Single Phase
**Capacity:** 50
**Vector Group: II6**
**Primary Voltage:** 460V/230 (L-N-L)
**Primary Voltage Class:** 1.2 kV Class
**Primary Phasor:** Dual Winding Single Phase
**Primary BIL:** 30 KV
**Secondary Voltage:** 4160GrdY/2400
**Secondary Phasor:** Grounded Wye
**Secondary BIL:** 60 KV
**Frequency:** 60 Hz
**Temperature Rise:** 65°C

**Cooling Class:** ONAN; Self-Cooled

**Forced Air (Fans):** None
**Tap Changer:** N/A
**Tap Qty:** N/A
**Tap %:** N/A
**Tap Changer Switch Location:** Front Compartment
**Impedance:** 1.0-4.5% Typical
**Primary Connection Type:** Live Front

**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
100% Stainless Steel Construction, Corrosion Resistant

**Efficiency:** 98.90%
*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*

**Primary Connections:** Threaded Stud Terminals
**Primary Connection Qty:** (3)
**Primary Surge Arrestors:** -
**Primary Surge Arrestor Voltage Rating:** -
**Primary Over Current Protection (OCP):** -
**Primary Over Current Protection Method:** -
**Primary Over Current Protection Holder:** -
**Primary Grounding Provisions:** (1) Grounding lug, accepts #2 copper
**Secondary Connection Type:** Dead Front
**Secondary Termination:** Well Bushings, 200A
**Secondary Over Current Protection (OCP):** Bayonet Fuses, Partial-Range Current-Limiting Fuses
**Secondary Over Current Protection Method:** Fused
**Secondary Over Current Protection Holder:** Bayonet Fuse Holder w/ Drip Shield
**Secondary Connection Qty:** (2)
**Secondary Surge Arrestors:** High Voltage Elbow Surge Arrestors, Included
**Secondary Surge Arrestor Voltage Rating:** 6 kV Class
**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:** (2) 2-Position Load Break Switches: (1) Transformer, (1) Loop Feed
**Load Break Switch Qty:** (1)
**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:** Mineral Oil - Non PCB Fluid
**Fluid Capacity*:** 61.11 Gallons
**Liquid Level Indicator:** Analog Dial Gauge
**Temperature Indicator:** Analog Dial Gauge
**Pressure/Vacuum Indicator:** Analog Dial 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: Copper**
**Ambient Temperature Rating:** 40°C
**Sound Level:** 48 dBA
**Elevation (Altitude):** 3300ft (1000 meters) Above Sea Level
**Core Material:** Grain Oriented Steel
**Tank Material:** 304 Stainless Steel
**Cabinet Material:** 304 Stainless Steel
**Base Platform Material:**304 Stainless 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*:** 34.25"-W x 37.4"-D x 25.2"-H

**Weight*:** 1432.98 Lbs

*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-R3-1P-GNF-50KVA-SF-LT-DF-A6-BM-CS-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 50 kVA, the industrial transformer features a primary voltage of single-phase 460V/230 (L-N-L) and a secondary voltage of single-phase 4160Y/2400 Grounded Wye. The unit has a

primary loop feed and live-front primary connections. We also offer systems with radial feed and dead front primary/live front secondary connections. Equipped with copper windings, this transformer consists of one coil and two core loops.
The MT-PML-R3-1P-GNF-50KVA-SF-LT-DF-A6-BM-CS-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-R3-1P-GNF-50KVA-SF-LT-DF-A6-BM-CS-2B4-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 comes with high elbow surge arresters on the secondary 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 MT-PML-R3-1P-GNF-50KVA-SF-LT-DF-A6-BM-CS-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-R3-1P-GNF-50KVA-SF-LT-DF-A6-BM-CS-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-R3-1P-GNF-50KVA-SF-LT-DF-A6-BM-CS-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.

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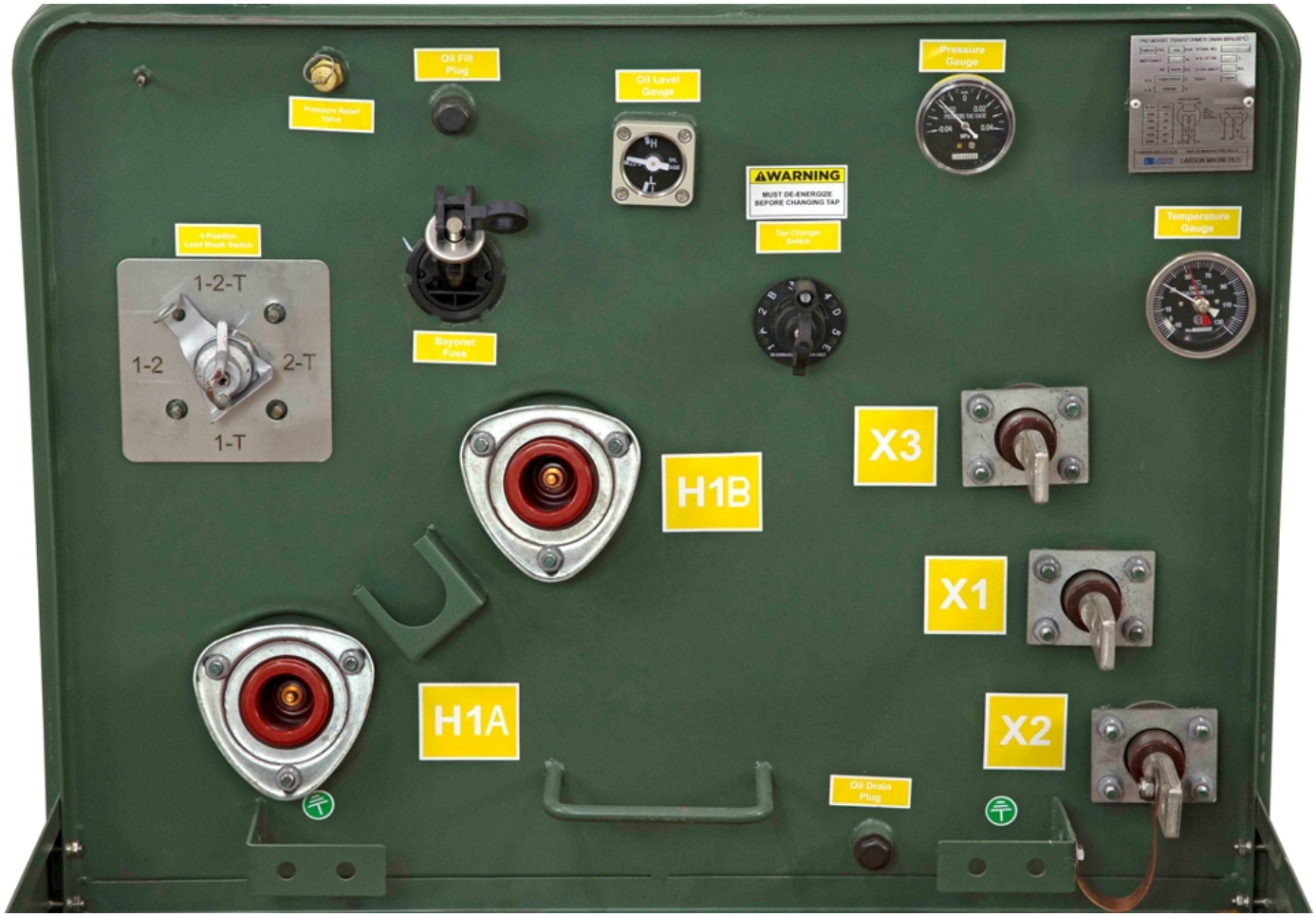
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NOTICE

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**Product ID: 296746**

**Harmonized System (HS) Code:** 85043300
**Export Control Classification Number (ECCN):** EAR99

Links (Click on the below items to view):

- HigResPic1
- HigResPic2
- HigResPic3
- HigResPic4
- HigResPic5
- Video1
- Video2
- Video3
- Video4
- ISO 9001 Certification
- Business Certificate
- Shipping Time Map