Larson Electronics LLC
9419 E US HWY 175, Kemp, TX 75143
Phone: 800.369.6671

www.LarsonElectronics.com
Email: sales@LarsonElectronics.com
Fax: 903.498.3364

MT-PML-R7-1P-GMP-100KVA-SLZ-LT-DF-A6-BF-CZ-2B4-M1

100 KVA Pad Mount Transformer - 13800Y/7970 Grounded Wye Primary, 120/240V Secondary - FR-3 Fluid/KNAN - Bell Green

Product ID: 316828



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-GMP-100KVA-SLZ-LT-DF-A6-BF-CZ-2B4-M1 1PH Pad Mount Transformer

Transformer Type: Pad Mounted, Compartmental-Type
Transformer Configuration: Liquid Filled Pad Mounted
Transformer Feed Type: Loop Feed
Phase: Single Phase
Capacity: 100 kVA
Primary Voltage: 13800Y/7970
Primary Phasor: Grounded Wye
Primary BIL: 95 KV
Secondary Voltage: 120/240V (L-N-L)
Secondary Phasor: Dual Windings, Single Phase
Secondary BIL: 30 KV
Frequency: 60 Hz
Temperature Rise: 65°C
Cooling Class: KNAN; Self-Cooled
Forced Air (Fans): None
Tap Changer: 5-position Tap Changer
Tap Qty: (2) FCAN Taps Above, (2) FCBN Taps Below
Tap %: 2.5%
Impedance: 1.0-4.5%
Primary Connection Type: Dead Front
Primary Termination: Externally Clamped, Externally Removable 15 kV 200A Loadbreak Bushing Wells, w/ Inserts (Bushing Well Height is 23" +/- ½")
Primary Connection Qty: (2)
Primary Parking Stand Qty: (2) Welded Brackets for Installing Accessory Parking Stand Bushings
Primary Overcurrent Protection (OCP): Bayonet Fuses, Dual Sensing
Primary Grounding Provisions: (1) Grounding lug, accepts #2 copper

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
Penta-head Entry Assembly
High-Fire Point Natural Ester Insulating Fluid
Non-PCB Insulating Fluid
Tamper Proof Housing
Lift Up Pad lockable Lid

Efficiency: 99.00%
No Load Loss (in watts)*: 273W
Load Loss (in watts)*: 1,105W
Total Load Loss (in watts)*: 1,378W

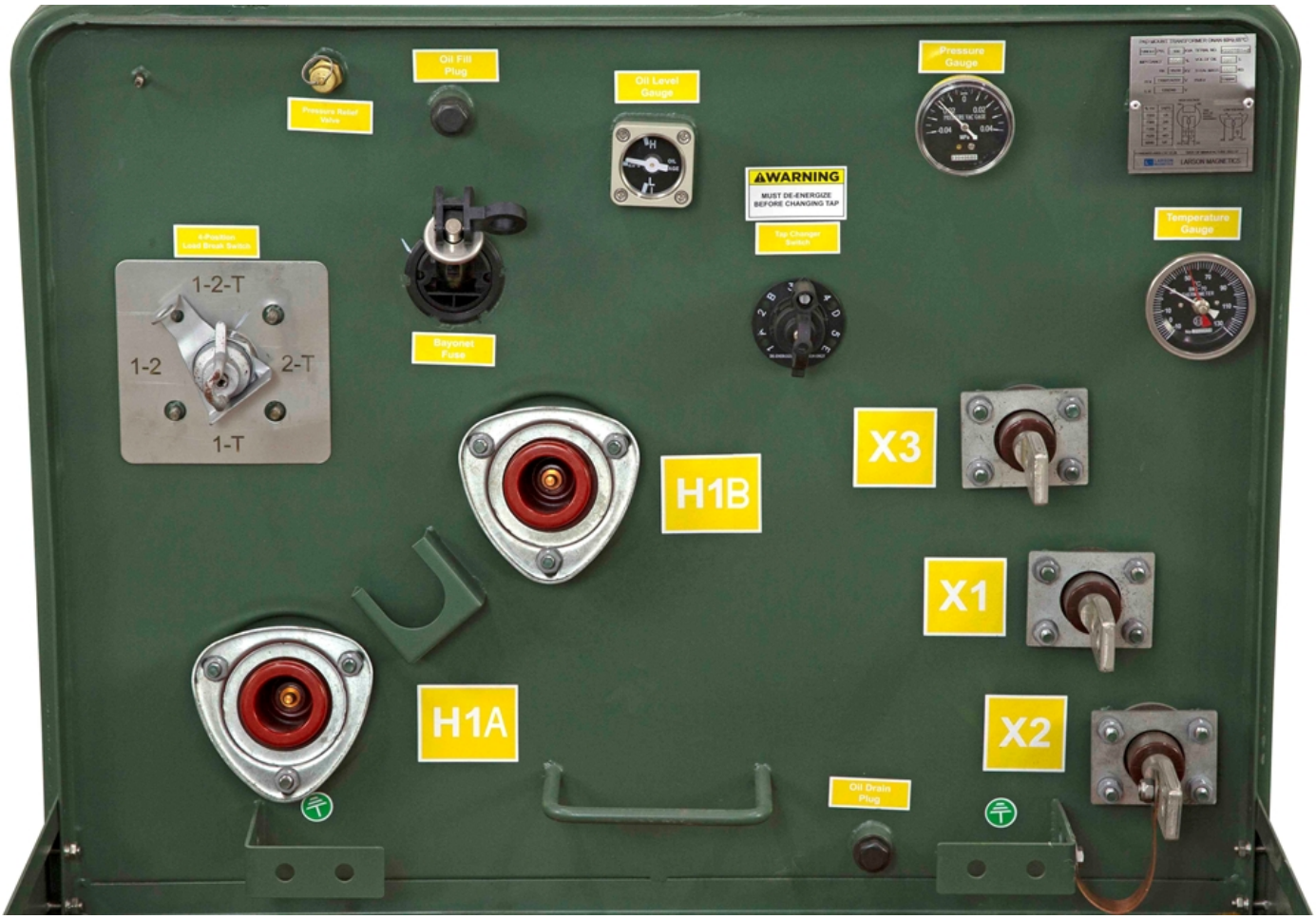
Secondary Connection Type: Live Font
Secondary Connections: Externally Clamped Tank Wall Mounted Gasket Bushings with NEMA (4) Hole Spade Lugs
Secondary Connection Qty: (3)
Secondary Neutral Connection: Neutral X2 bushing to be the middle of the secondary bushings and to be provided with copper ground strap connection to tank wall ground pad
Secondary Grounding Provisions: (1) Grounding lug, accepts #2 copper
Load Break Switch: (1) 4-Position Load Break Switch
Efficiency: Meet DOE 2016 Standard
Insulation Fluid: FR-3 Insulating Fluid, Non-PCB Fluid
Fluid Capacity*: 63.56 Gallons
Liquid Level Indicator: Analog Gauge
Temperature Indicator: Analog Gauge
Pressure/Vacuum Indicator: Analog Gauge
Pressure Relief Device: Included, Automatic Action, IFD
Fill Valve: Included
Drain Valve: Included
Tank Grounding Connection: Included, (2) 1/2-13 tapped hole, 7/16" deep
Surge Arrestors: Included, 18 kV Voltage Rating, 15.3 kV MCOV Rating
Front: Dead Front Primary, Live Front Secondary
Winding Material: Copper
Ambient Temperature Rating: 40°C
Sound Level: 51 dBA
Elevation (Altitude): 3300ft (1000 meters) Above Sea Level
Tank Material: Coated Steel
Cabinet Material: Coated Steel
Base Platform Material: Coated Steel
Hardware Material: Stainless Steel
Compartment Latching: Included, w/ Padlock Provisions
Housing Type: Tamper Resistant w/ Pad-lockable Lift-up Lid
Paint Type: Munsell Green Paint 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*: 41.34"-W x 45.28"-D x 29.53"-H
Weight*: 1,940.04 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-GMP-100KVA-SLZ-LT-DF-A6-BF-CZ-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 100 kVA, the industrial transformer features a primary voltage of single-phase 13800Y/7970 Grounded Wye and a secondary voltage of single-phase 120/240V (L-N-L). 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 transformer features a 5-position tap changer with (2) +2.5% taps above and (2) -2.5% taps below to allow small changes in 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-GMP-100KVA-SLZ-LT-DF-A6-BF-CZ-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-R7-1P-GMP-100KVA-SLZ-LT-DF-A6-BF-CZ-2B4-M1 features FR-3 cooling fluid (KNAN). We offer transformers with biodegradable or mineral oil 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-GMP-100KVA-SLZ-LT-DF-A6-BF-CZ-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-GMP-100KVA-SLZ-LT-DF-A6-BF-CZ-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, 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-R7-1P-GMP-100KVA-SLZ-LT-DF-A6-BF-CZ-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
LARSONELECTRONICS.COM
877-875-2747
sales@larsonelectronics.com
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)