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## MT-PML-R109-1P-GMW-25KVA-SLZ-LT-DF-A6-BM-CZ-2B4-M1

# El Paso Electric Company, 25 KVA Pad Mount Transformer - 23900Y/13800 Grounded Wye Primary, 120/240V Secondary - Mineral Oil Fluid /ONAN - 087.110

**Product ID: 305864**



**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-R109-1P-GMW-25KVA-SLZ-LT-DF-A6-BM-CZ-2B4-M1 Pad Mount Transformer**

**Transformer Type: Pad Mounted, Compartmental-Type I**
**Transformer Configuration: Liquid Filled Pad Mounted**
**Transformer Feed Type: Loop Feed**
**Phase: Single Phase**
**Capacity: 25 KVA**
**Vector Group: II6**
**Primary Voltage: 23900GrdY/13800**
**Primary Voltage Switch: N/A**
**Primary Voltage Class: 25 kV Class**
**Primary Phasor: Grounded Wye**
**Primary BIL: 125 KV**
**Secondary Voltage: 120/240V (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, Type I**

**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: 98.70%**
*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***

**Labeling:**
Externally Stencilled (Painted) KVA Rating
Externally Stencilled (Painted) Voltage Rating

**Primary Termination: Standoff Well Bushings w/ Removable Studs, 200A Load Break Elbows w/ Inserts**
**Primary Connection Qty: (2) Primary Connections w/ (1) Standoff Brackets for Parked Elbows**
**Primary Surge Arrestors: (1) High Voltage Elbow Surge Arrestors, Included**
**Primary Surge Arrestor Voltage Rating: 18 kV Class**
**Primary Surge Arrestor MCOV Rating: 15.3 kVrms**
**Primary Over Current Protection (OCP): Bayonet-type, liquid-immersed, expulsion fuse in series with liquid immersed, partial-range, current-limiting fuse**
**Primary Over Current Protection Method: Fused**
**Primary Over Current Protection Holder: Bayonet Fuse Holder w/ Drip Shield**
**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, Type I**
**Secondary Connections: Threaded Stud Terminals, 5/8"-11 size**
**Secondary Over Current Protection (OCP): N/A**
**Secondary Connection Qty: (3)**
**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**
**Auxilary Control Panel : N/A**
**Load Break Switch: N/A**
**Load Break Switch Qty: N/A**
**Load Break Switch Location: N/A**
**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*: 40.33 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: Copper**
**Ambient Temperature Rating: 40°C**
**Sound Level: 48 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. Equipped with raised locking handle located minimum 12"**
**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*: 33.86"-W x 37.4"-D x 25.2"-H**
**Pad Dimensions*: 44"-W x 40"-D w/ 28"W x 15"D Wire Way Opening**
**Weight*: 1,049.38 Lbs**
*Please note that numbers are approximate and subject to change

External Non-PCB Label
External Warning & Danger Label
External Barcode Label
Internal Busing & Accessory Labeling
Stainless Steel Riveted Nameplate
"EPE" Serial Number Sticker included on the inside and front of transformer (2" and 7" in length)
Serial Number Lettering "El Paso Electric" included

**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 Test

**Special Orders - Special Requirements**

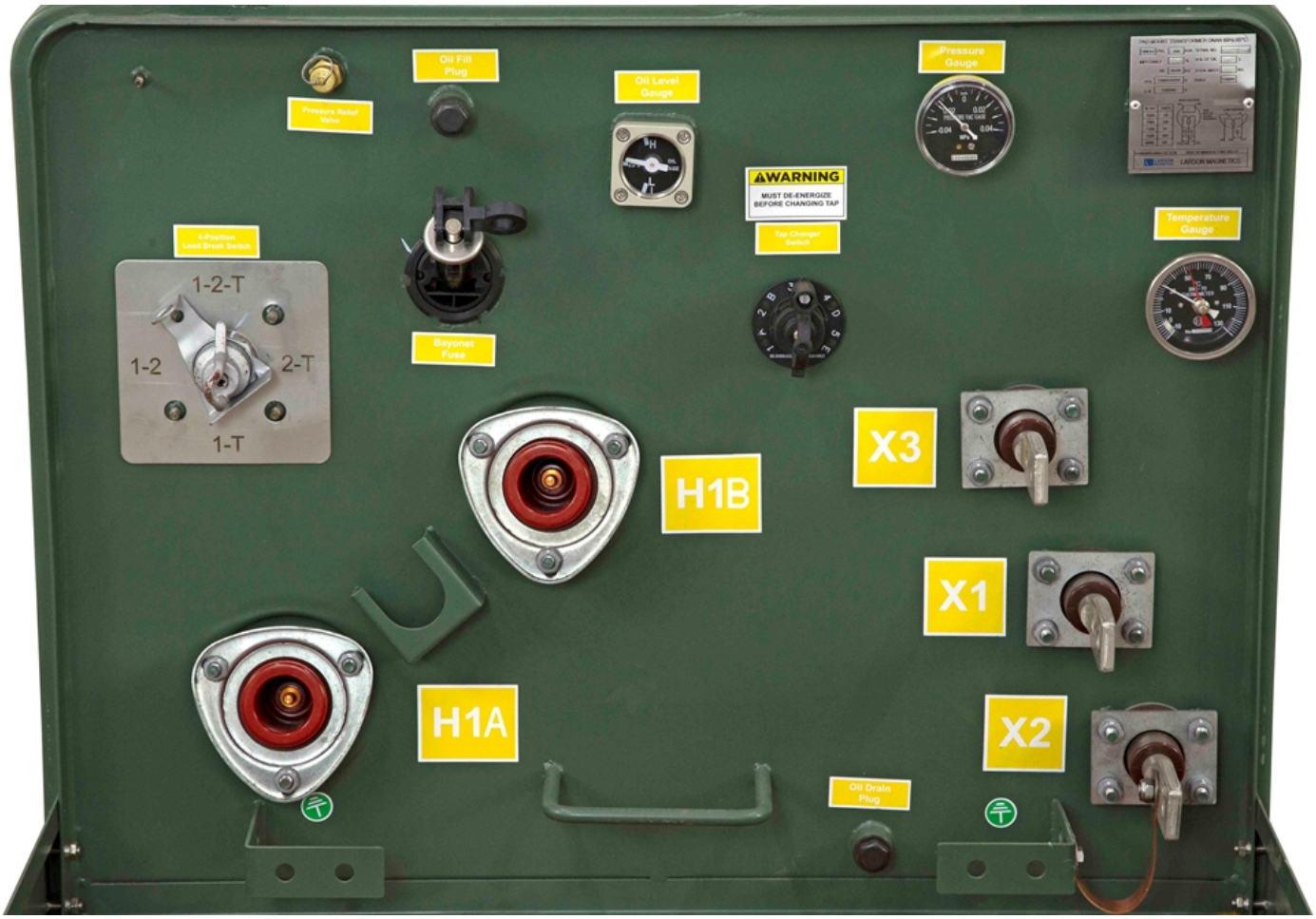
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**The MT-PML-R109-1P-GMW-25KVA-SLZ-LT-DF-A6-BM-CZ-2B4-M1 Industrial Pad Mount Transformer from Larson Electronics offers powerful, reliable and efficient power distribution in indoor, outdoor and public locations. The low operating costs, low heat emissions and low cost of ownership 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 23900Y/13800 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 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-R109-1P-GMW-25KVA-SLZ-LT-DF-A6-BM-CZ-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-R109-1P-GMW-25KVA-SLZ-LT-DF-A6-BM-CZ-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 does not come with high elbow surge arresters on the primary side.
**Load Breaker Switch:** The MT-PML-R109-1P-GMW-25KVA-SLZ-LT-DF-A6-BM-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-R109-1P-GMW-25KVA-SLZ-LT-DF-A6-BM-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, 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-R109-1P-GMW-25KVA-SLZ-LT-DF-A6-BM-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
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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)