Larson Electronics LLC
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Product ID: 310299

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



Image:

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-R24-1P-GMA-167KVA-SZ-LT-DF-Z6-BM-CZ-3B4-M1 Pad Mount Transformer

Transformer Type: Pad Mounted, Compartmental-Type I & II
Transformer Configuration: Liquid Filled Pad Mounted
Transformer Feed Type: Loop Feed
Polarity: Subtractive
Phase: Single Phase (Connects to 3-Phase electrical grid)
Capacity: 167 KVA
Vector Group: II6
Primary Voltage: 34500GrdY/19920
Primary Voltage Switch: N/A
Primary Voltage Class: 35 kV Class
Primary Phasor: Grounded Wye
Primary BIL: 150 KV
Secondary Voltage: 240/120 (L-N-L) for 120/240V Distribution
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: N/A
Tap Qty: N/A
Tap %: N/A

Ratings

Meets/Exceeds DOE 2016 Efficiency Ratings
Meets/Exceeds CSA Efficiency Ratings
Complies with ANSI / IEEE C57.12.00
Complies with ANSI / IEEE C57.12.21
Complies with ANSI / IEEE C57.12.25
Complies with ANSI / IEEE C57 12.28
Complies with ANSI / IEEE C57 12.29
Complies with ANSI / IEEE C57 12.35
Complies with ANSI / IEEE C57 12.38
Complies with ANSI / IEEE C57.12.70
Complies with ANSI / IEEE C57.12.110
Complies with ANSI / IEEE C57.12.131
Complies with ANSI / IEEE C62.11
Complies with ANSI / IEEE C62.22
Complies with ANSI / IEEE 386
Complies with ANSI / IEEE C2
Complies with ANSI / IEEE C37.47
Complies with ANSI Z535.4
Complies with ASTM D3487
Complies with ASTM D6871
Complies with NEMA 260-1996
Complies with 10 CFR Part 431
Complies with CSA C2.1-06
Complies with CSA C50

Tap Changer Switch Rating: 200-Amp, 35 kV
Tap Changer Switch Location: Front Compartment, High Voltage (HV) Left Side
Impedance: 1.7-2.7% Typical
Primary Connection Type: Dead Front
Primary Termination Arrangement: ANSI Type I Arrangement
Primary Termination: Externally Clamped Integral Bushings w/ Removable Studs, 200A Dead Break. Size for 4/0 AWG Cable
Primary Connection Qty: (2) Primary Connections for use w/ Elbow Connectors
Primary Parking Stand Qty: (2) Welded Bracket for Installing Accessory Parking Stand Bushings
Primary Bushing Rating: 35 kV Class, 150 kV BIL, 200A, Dead Break, IEEE 386 Color Off-White
Primary Surge Arresters: (1) Under Oil, Internal In-Tank Surge Arrestor, Factory Installed
Primary Surge Arrester Voltage Rating: 27 kV Class
Primary Surge Arrester MCOV Rating: 22 kVrms
Primary Over Current Protection (OCP): C06 Curve, Current Sensing Dual Element Bayonet Fuse in series w/ Dual Element Current Limiting Fuse
Primary Over Current Protection Method: Fused, Oil-Immersed & In-Tank
Primary Over Current Protection Holder: Bayonet Fuse Holder w/ Flapper Valve and External Drip Shield
Primary Neutral Connection: Primary H2 Neutral Internally Bonded to Tank
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
Secondary Termination Arrangement: ANSI Type II Arrangement
Secondary Over Current Protection (OCP): N/A
Secondary Connections: Jam Nuts, w/ (1) Jam Nut on X3 and X1, and (2) Jam Nuts on X2
Secondary Connection Qty: (3) Externally Clamped One-Piece Epoxy Bushings w/ 1"-14 x 1-3/4" Long Copper Threaded Studs
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
Auxiliary Control Panel : N/A
Load Break Switch: 4-Postion LBOR, Hot Stick Operable
Load Break Switch Qty: 1
Load Break Switch Rating: 200-Amp, 35 kV, 10kArms
Load Break Switch Location: 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: N/A
Insulation Fluid: Mineral Oil - Non PCB Fluid
Fluid (Oil) Capacity*: 102.67 Gallons
Fluid (Oil) Weight*: 925.93 Lbs
Liquid Level Indicator: N/A
Temperature Indicator: N/A
Pressure/Vacuum Indicator: N/A
Pressure Relief Device: Automatic Action, Cracking Pressure @ 10 PSIG, Releasing Pressure @ 8 PSIG, Flow @ 15 PSIG (50 SCFM) @ 14.7 PSGI
Fault Indicator: N/A
Fault Indicator Provisions: : (3) 5/16" Dia. Mounting Provisions in Base Sill. (1) on Left Side 3" From Front Edge, (1) on Right Side 3" From Front Edge, (1) on Front Left Side, 3" For Left Edge
Gas Sampler Valve: N/A

Complies with CSA C88
Complies with CSA C88.1
Complies with CSA C88-16
Complies with CSA C227.3
Complies with CSA C802.1
Complies with CSA C802.2
Complies with CSA C802.3

Features

Pentahead Bolt Entry Assembly
High-Fire Point Insulating Fluid
Non-PCB Insulating Fluid
Tamper Proof Housing
NEMA 3R Wiring Compartment
Lift-Up Pad lockable Lid

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)*: +/- 273W
Load Loss (in watts)*: +/- 1,105W
Total Load Loss (in watts)*: +/- 1,378W

***Note:** Losses offered are typical only, not guaranteed*

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 Test

Fill Valve: 1/2" NPT w/ Removable Bolt Plug, Fill Plug at 25°C Oil Level
Fill Valve Location: Front Compartment
Drain Valve: 1/2" NPT w/ Removable Bolt Plug, w/o Sampler Valve
Drain Valve Location: Front Compartment
Winding Material: Copper

Ambient Temperature Rating: 40°C

Ambient Operating Temperature Range: -40°C to +40°C (-50°F to +104°F)

Sound Level: 51 dBA
Elevation (Altitude): 3300ft (1000 meters) Above Sea Level or Below
Core Material: Grain Oriented Steel
Tank Material: Coated Steel
Cabinet Material: Coated Steel
Base Platform Material: Coated Steel
Portability: Lifting lugs, 5/8"-11 Thread, Compatible w/ 2.5"-" Lifting Bolts
Housing Type: Low Profile Air-Filled Cabinet w/ Locking Hinged Door, HV/LV in Same Compartment ,Tamper Resistant, w/ Pad-lockable Lift-up Lid, w/ 2.5" Access Hole on Front Base Sill
Enclosure Rating: NEMA 3R Weatherproof Wiring Cabinet, Sealed Tank
Paint Type: Weatherproof and UV Resistant Epoxy Coating Top Coat, Heavy Duty Primer Base Coat, Corrosion Resistant Undercoating and 2" Up Sides of Base Sill and Tank
Finish Color: Munsell™ 7.0 GY 3.29/1.5 Bell Green

Mounting: Pad Mount

Conduit Opening: Bottom Feed Underground Entry/Exit
Compartment Base Wireway Dimensions*: 34"-L x 19"-D
Compartment Cabinet Depth: 19"-D
Dimensions*: 36.5"-W x 42.5"-D x 38"-H
Dry Weight (w/o Oil)*: 749.56 Lbs
Total Weight (Liquid Filled)*: 2,024.36 Lbs
*Please note that numbers are approximate and subject to change

Shipping:
Shipped on pallet on open flatbed
Palletized on Wooden Pallet w/ Skid Pockets
Pallet Skid Facing Outward Sides of Truck
Note: *For low quantity purchases, enclosed truck can be requested*
Note: *Crated shipping in lieu of palletizing can be done upon request for an additional fee*

Cross for Entergy Equipment # 19654
Complies with Entergy Standard DE03-01
w/ Non-Standard Bushing Layout

Special Orders - Special Requirements
Contact us for special requirements
Toll Free: 1-800-369-6671
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E-mail: sales@larsonelectronics.com

The MT-PML-R24-1P-GMA-167KVA-SZ-LT-DF-Z6-BM-CZ-3B4-M1 Industrial Pad Mount Transformer from Larson Electronics is equivalent to Entergy # 19655 (modified version in Type I secondary bushing layout). This unit complies with Entergy Standard DE03-01 except for bushing layout.

PLEASE NOTE: ANY FREE SHIPPING OFFERS DO NOT APPLY TO POWER DISTRIBUTION PANELS, TRANSFORMERS, OR SUBSTATIONS*

Transformer Design Features:
Pad Mounted, Liquid Filled, Sealed Tank transformer
Off-Load Tap Changer
No Tap Changer
Primary 150 kV BIL, 35 kV Insulation Class
Secondary 30 kV BIL, 1.2 kV Insulation Class
1.70%-2.70% Impedance
ANSI Type I Bushing Layout
Compartmental Design, HV Left & LV Right
Can operate at up to 4° Tilt w/o Derating
Pentahead Locking Device w/ Padlock Provisions
304 Stainless Steel Hinges & Hardware
3" Length, 0.34" Dia. Hinges Welded to Lid/Tank
Removable Base Sill

(3) 5/16" Dia. Fault Indicator Mounting Provisions on Base Sill
Additional 2.5" Access Hole on Secondary Side, 6" From Faceplate
Fault Indicator & Access Holes Include Removable Cover Plates
Heavy Duty, Corrosion Resistant Primer Coat
Munsell 7GY 3.29/1.5, 3 Mil Thick Top Coat
Additional Corrosion Resistant Coating for Base and 2" From Base
Lifting Lugs, 5/8"-11 Thread, Compatible w/ 2.5"-" Lifting Bolts
Primary 200A Dead Break Integral Bushing
Secondary Copper Studs w/ Jam Nuts
Bayonet Fuse in Series w/ Current Liming Fuse
Under Oil Internal Lightning arresters
Automatic Pressure Relief Device
Stainless Steel Nameplate, Blue Coating w/ White or Black Letters
Nameplate w/ Barcode
Fill & Drain Plugs, Fill Plug at 25°C Oil Level
Cabinet Internal Markings in Yellow Stencil, Minimum 1" Tall
Cabinet Internal Danger Decal
External Safety Warning Decal, Bi-Lingual
External KVA, Primary Voltage, Secondary Voltage Stencils, Minimum 2" Tall
External Entergy Standard Equipment # Stencil, Minimum 2" Tall
External Entergy Barcode & Supplier Temporary Barcode

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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Frequently Asked Questions (FAQ)

There are no Faqs

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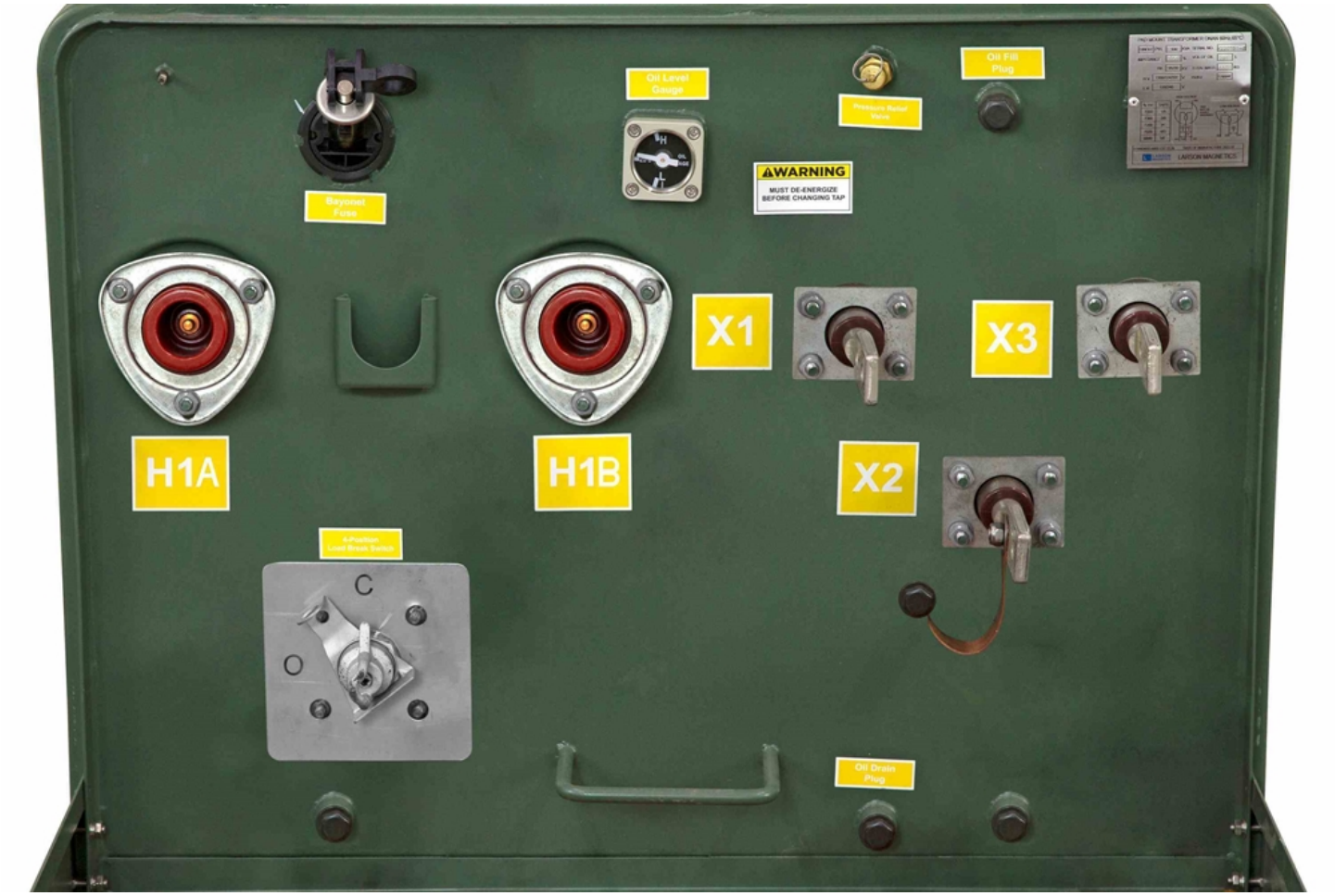


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Export Control Classification Number (ECCN): EAR99

Links (Click on the below items to view):

- **Operations Manual**(https://www.larsonelectronics.com//images/product/Manual/310299.PDF)
- **HigResPic1**(https://www.larsonelectronics.com//images/product/HigResPic1/310299.JPG)
- **HigResPic2**(https://www.larsonelectronics.com//images/product/HigResPic2/310299.JPG)
- **HigResPic3**(https://www.larsonelectronics.com//images/product/HigResPic3/310299.JPG)
- **HigResPic4**(https://www.larsonelectronics.com//images/product/HigResPic4/310299.JPG)
- **HigResPic5**(https://www.larsonelectronics.com//images/product/HigResPic5/310299.JPG)
- **Video1**(https://www.youtube.com/watch?v=YBY4x0CofvU)
- **Video2**(https://www.youtube.com/watch?v=KIzsyVtvSWM)
- **Video3**(https://www.youtube.com/watch?v=mpt7J5hdJp8)
- **Video4**(https://www.youtube.com/watch?v=mN2qPmdLwW4)
- **ISO 9001 Certification**(http://larsonelectronics.com/images/pdfdocs/ISO9001.PDF)
- **Business Certificate**(https://www.larsonelectronics.com/images/pdfdocs/w9.PDF)
- **Shipping Time Map**(https://www.larsonelectronics.com/images/product/ShippingTimeMap/ShippingTimeMap.pdf)