Larson Electronics LLC
9419 E US HWY 175, Kemp, TX 75143
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Product ID: 317421

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-R7-3P-GMR-45KVA-YE-LT-DF-A6-BM-CS-2C4-M1 Pad Mount Transformer	Ratings
Transformer Type: Pad Mounted, Compartmental-Type	Meets/Exceeds DOE 2016 Efficiency Ratings
Transformer Configuration: Liquid Filled Pad Mounted	Meets/Exceeds CSA Efficiency Ratings
Transformer Feed Type: Loop Feed	Complies with ANSI / IEEE C57.12.00
Operation: Step-Down Operation (Not Approved for Step-Up)	Complies with ANSI / IEEE C57 12.28
Phase: Three Phase	Complies with ANSI / IEEE C57 12.29
Capacity: 45 KVA	Complies with ANSI / IEEE C57 12.34
Vector Group: YNyn0	Complies with ANSI / IEEE C57 12.35
Primary Voltage: 12470Y/7200	Complies with ANSI / IEEE C57.12.70
Primary Voltage Switch: N/A	Complies with ANSI / IEEE C57.12.110
Primary Voltage Class: 15 kV Class	Complies with ANSI / IEEE C57.12.131
Primary Phasor: Grounded Wye	Complies with ANSI / IEEE C62.11
Primary BIL: 95 KV	Complies with ANSI / IEEE C62.22
Secondary Voltage: 480Y/277	Complies with ANSI / IEEE 386
Secondary Voltage Class: 1.2 kV Class	Complies with ANSI / IEEE C2
Secondary Phasor: Wye-N	Complies with ANSI / IEEE C37.47
Secondary BIL: 30 KV	Complies with ANSI Z535.4
Frequency: 60 Hz	Complies with ASTM D3487
Temperature Rise: 65°C	Complies with ASTM D6871
Insulation Rating: Class E Insulation - 120°C, 248°F	Complies with NEMA 260-1996
Cooling Class: ONAN; Self-Cooled	Complies with 10 CFR Part 431

Forced Air (Fans): None
Tap Changer: 5-position De-energized Tap Changer
Tap Qty: (2) FCAN Above Taps, (2) FCBN Below Taps
Tap %: 2.5%
Tap Changer Switch Rating: 200-Amp, 15 kV
Tap Changer Switch Location: High Voltage (HV) [Left Side] Front Compartment
Impedance: 1.0-4.5% Typical
Primary Connection Type: Dead Front
Primary Termination Arrangement: V Terminal Arrangement
Primary Termination: Externally Clamped Well Bushings w/ Removable Studs, 200A Load Break Elbows w/ Inserts
Primary Connection Qty: (6) Primary Connections for use w/ Elbow Connectors
Primary Parking Stand Qty: (6) Welded Brackets for Installing Accessory Parking Stand Bushings
Primary Bushing Rating: 15 kV Class, 95 kV BIL, 200A, Load Break, IEEE 386 Color Red
Primary Neutral Connection: Primary H0 Neutral Internally Bonded to Tank
Primary Surge Arrestors: Included, (3) High Voltage Elbow Surge Arrestors
Primary Surge Arrestor Voltage Rating: 15 kV Class Elbow Arrestor
Primary Surge Arrestor MCOV Rating: 12.7 kVrms
Primary Overcurrent Protection (OCP): Bayonet Expulsion Fuses in series w/ Partial-Range Current-Limiting Fuses. 50 kA Fault Current
Primary Overcurrent Protection Method: Fused, Oil-Immersed
Primary Overcurrent Protection Holder: Bayonet Fuse Holder w/ Flapper Valve and External Drip Shield
Primary Grounding Provisions: (1) Ground Pad with NEMA 2-hole Configuration
Secondary Connection Type: Live Front
Secondary Termination Arrangement: Staggered Terminal Arrangement
Secondary Connections: NEMA Spade Terminals, 8-Hole Spade, Externally Clamped, Accepts up to (8) Double Lug connections with (4) cables per side of Spade connector
Secondary Connection Qty: (4) Externally Clamped One-Piece Epoxy Bushings Copper Threaded Studs
Secondary Connection Supports: N/A
Secondary Overcurrent Protection (OCP): N/A
Secondary Neutral Connection: Secondary X0 Neutral Grounded to Tank via 1/2"-13 UNC Tapped Hole, 7/16" Deep Bung & Copper Ground Strap
Secondary Grounding Provisions: (1) Ground Pad with NEMA 2-hole Configuration
Metering Current Transformer (CT): N/A
Metering Panel: N/A
Auxiliary Control Panel: N/A
Load Break Switch: 4-Position

Complies with CSA C2.1-06
Complies with CSA C50
Complies with CSA C88
Complies with CSA C88.1
Complies with CSA C88-16
Complies with CSA C227.4
Complies with CSA C227.5
Complies with CSA C802-3
Complies with CSA C802.1

Features

Penta-head Bolt Entry Assembly
High-Fire Point Insulating Fluid
Non-PCB Insulating Fluid
Tamper Proof Housing
Hinged Front Compartment Doors, Pad Lockable
NEMA 3R Wiring Compartment
Hot Stick Included, HV Door Mount

Efficiency %: 98.50%

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

Load Losses Based on 85°C Reference Temp.

No Load Loss (in watts): +/- 114W

Full Load Loss (in watts) at 100%: +/- 570W

Total Load Loss (in watts) at 100%: +/- 684W

Total Losses at 55°C LL Temp.& 20°C NL Temp.

Total Load Loss (in watts) at 50%: +/- 248W

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

Labeling:
Externally Stencilled (Painted) KVA

Load Break Switch, Gang Operated

Load Break Switch Qty: (1)

Load Break Switch Rating: 200-Amp, 15 kV

Load Break Switch Location: High Voltage (HV) 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 Insulating Fluid, Non-PCB Fluid

Fluid (Oil) Capacity*: 70 Gallons

Fluid (Oil) Weight*: 539 lbs

Liquid Level Indicator: Analog Dial Gauge

Temperature Indicator: Analog Dial Gauge

Pressure/Vacuum Indicator: Analog Dial Gauge

Pressure Relief Device: Included, Automatic Action

Fault Indicator: N/A

Gas Sampler Valve: Included, Schrader Valve

Fill Valve: 1" NPT Port w/ Removable Bolt Plug

Fill Valve Location: Front Compartment

Drain Valve: 1" NPT Port w/ 5/8" NPT Sampler Valve

Drain Valve Location: Front Compartment

Pressure Relief Valve: Included

Winding Material: Copper

Ambient Temperature Rating: 40°C

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

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

Hardware Material: 304 Stainless Steel

Portability: Lifting lugs, provisions for jacking under base, w/ base construction suitable for using rollers or skidding

Housing Type: Compartmental Air-Filled Cabinet w/ Locking Doors, HV Compartment Left, LV Compartment Right, Steel Barrier Separation, HV Door Spring-Loaded Release Pin in LV Compartment

Enclosure Rating: NEMA 3R Weatherproof Wiring Cabinet, Sealed Tank

Seismic Rating: Yes

Paint Type: Weatherproof and UV Resistant Epoxy Coating and Undercoating

Finish Color: Munsell™ 7.0 GY 3.29/1.5 Bell Green

Mounting: Pad Mounted

Conduit Opening: Bottom Feed Underground Entry/Exit

HV Compartment Base Wireway Dimensions*: 20"-W x 5"-W

LV Compartment Base Wireway Dimensions*: 16"-W x 5"-D

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

Dissolved Gas Analysis

Shipping:

Shipped on pallet on open flatbed
Palletized on Wooden Pallet w/ Skid Pockets

Pallet Skid Facing Outward Sides of Truck

Note: *Crated shipping in lieu of palletizing can be done upon request for an additional fee*

MV/LV Compartment Cabinet Depth*: 18"-D **Tank Cover Access Handhole:** N/A **Dimensions*:** 68"-W x 39"-D x 50"-H **Dry Weight (w/o Oil)*:** 663 lbs **Total Weight (Liquid Filled)*:** 1.701 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:** 1-903-765-7664 **E-mail:** sales@larsonelectronics.com

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Frequently Asked Questions (FAQ)

There are no Faqs

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Export Control Classification Number (ECCN): EAR99

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- **Video1**(https://www.youtube.com/watch?v=KIzsyVtvSWM)
- **Video2**(https://www.youtube.com/watch?v=mpt7J5hdJp8)
- **Video3**(https://www.youtube.com/watch?v=mN2qPmdLwW4)
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