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MT-PML-R15-1P-GRU-100KVA-SZ-LT-DB-A6-BM-2B4-M1

Austin Energy 1510-31-05, 100 KVA Pad Mount Transformer, 15000GrdY/8660 Pri., 240/120V Sec., Mineral Oil, ONAN, CU, Green, City of Austin Spec

Product ID: 301587



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-R15-1P-GRU-100KVA-SZ-LT-DB-A6-BM-2B4-M1 Pad Mount Transformer	Ratings
Transformer Type: Pad Mounted, Compartmental-Type II	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
Polarity: Additive	Complies with ANSI / IEEE C57.12.21
Phase: Single Phase (Connects to 3-Phase electrical grid)	Complies with ANSI / IEEE C57.12.25
Capacity: 100 KVA	Complies with ANSI / IEEE C57 12.28
Vector Group: II6	Complies with ANSI / IEEE C57 12.29
Primary Voltage: 15000GrdY/8660	Complies with ANSI / IEEE C57 12.35
Primary Voltage Switch: N/A	Complies with ANSI / IEEE C57 12.38
Primary Voltage Class: 15 kV Class	Complies with ANSI / IEEE C57.12.70
Primary Phasor: Grounded Wye	Complies with ANSI / IEEE C57.12.110
Primary BIL: 95 KV	Complies with ANSI / IEEE C57.12.131
Secondary Voltage: 240V/120 (L-N-L)	Complies with ANSI / IEEE C62.11
Secondary Voltage Class: 1.2 kV Class	Complies with ANSI / IEEE C62.22
Secondary Phasor: Dual Winding Single Phase	Complies with ANSI / IEEE 386
Secondary BIL: 30 KV	Complies with ANSI / IEEE C2
Frequency: 60 Hz	Complies with ANSI / IEEE C37.47
Temperature Rise: 65°C	Complies with ANSI Z535.4
Insulation Rating: Class E Insulation - 120°C, 248°F	Complies with ASTM D3487
Cooling Class: ONAN; Self-Cooled	Complies with ASTM D6871
Forced Air (Fans): None	Complies with NEMA 260-1996
Tap Changer: 5-Position Tap Changer, Hot Stick Operable	Complies with 10 CFR Part 431
Tap Qty: (2) FCAN Above Taps, (2) FCBN Below Taps	Complies with CSA C2.1-06
Tap %: 2.50%	Complies with CSA C50
Tap Changer Switch Rating: 200-Amp, 15 kV	Complies with CSA C88
Tap Changer Switch Location: Front Compartment, High Voltage (HV) Left Side	Complies with CSA C88.1
Impedance: 1.0-4.5% Typical	Complies with CSA C88-16
Primary Connection Type: Dead Front	Complies with CSA C227.3

Primary Termination Arrangement: ANSI Type I Arrangement
Primary Termination: Externally Clamped Well Bushings w/ Removable Studs, 200A Load Break Elbows w/ Inserts
Primary Connection Qty: (2) Primary Connections for use w/ Elbow Connectors
Primary Parking Stand Qty: (1) Welded Bracket for Installing Accessory Parking Stand Bushings
Primary Bushing Rating: 15 kV Class, 95 kV BIL, 200A, Load Break, IEEE 386 Color Red
Primary Surge Arrestors: (1) High Voltage Elbow Surge Arrestors, Included
Primary Surge Arrestor Voltage Rating: 10 kV Class
Primary Surge Arrestor MCOV Rating: 8.4 kVrms
Primary Over Current Protection (OCP): C10 Curve, 25 Amp Rated Dual Rated Bayonet Fuse in series w/ (2) 80 Amp Partial Current Limiting Fuses (Wired in Parallel)
Primary Over Current Protection Method: Fused, Oil-Immersed
Primary Over Current Protection Holder: Bayonet Fuse Holder w/ Flapper Valve and External Drip Shield, Drip Shield Non-Metallic nad Removable
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 I Arrangement
Secondary Over Current Protection (OCP): N/A
Secondary Connections: NEMA Spade Terminals, 6-Hole Single Row Spade, Externally Clamped, Accepts up to (6) Single Lug connections with (1) cables per side of Spade connector
Secondary Connection Qty: (3) Externally Clamped One-Piece Epoxy Bushings w/ 5/8"-11 x 1-1/2" 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, 15 kV
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*: 63.56 Gallons
Fluid (Oil) Weight*: 573.19 lb
Liquid Level Indicator: Analog Gauge
Temperature Indicator: Analog Gauge
Pressure/Vacuum Indicator: Analog Gauge
Pressure Relief Device: Automatic Action, Combination Fault Indicator & Pressure Relif Device, (comparable to IFD Corporation part number IFD-ORCA-10PSI-aA), Resettable, Installed on Tank Face Inside HV Cabinet
Fault Indicator: Combination Fault Indicator & Pressure Relif Device; External Fault Indicator Light Mounting Provisions (Light not included)
Gas Sampler Valve: N/A
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

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 w/ HV/LV Barrier

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:
“HIGH VOLTAGE SIGN," "SIZE kVA,"
"ONE-CALL SYSTEM" "CLEARANCE REQUIRED,"
and "NO PCBs" labels
per Austin Energy #1000-13
External Barcode Label

Stainless Steel Riveted Nameplate w/ Barcode

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

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 Austin Energy #: (insert Austin Energy part #)
Cross for AE MU-ID #: (insert Austin Energy mu-id)
Complies with Specification E-1581 & 1510- 31
Residentail
HV/LV Barrier Between Bushings
30" Minimum Cabinet Width

Housing Type: Low Profile Air-Filled Cabinet w/ Locking Hinged Door, HV/LV in Same Compartment, w/ HV/LV Barrier, Tamper Resistant, w/ Pad-lockable Lift-up Lid
Enclosure Rating: NEMA 3R Weatherproof Wiring Cabinet, Sealed Tank
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
Compartment Base Wireway Dimensions*: 41"-L x 21"-D
Compartment Cabinet Depth: 19"-D
Dimensions*: 41.34"-W x 45.28"-D x 29.53"-H
Dry Weight (w/o Oil)*: 881.83 lb
Total Weight (Liquid Filled)*: 1940.04 lb
*Please note that numbers are approximate and subject to change

16" HV & 14" LV Compartment Minimum Widths
Fault Indicator Light Provisions
Resettable Fault Indicator / Pressure Relief Device

Special Orders - Requirements
Contact us for special requirements
Toll Free:1-800-369-6671
Intl:1-214-616-6180
Fax:1-903-498-3364
E-mail:sales@larsonelectronics.com

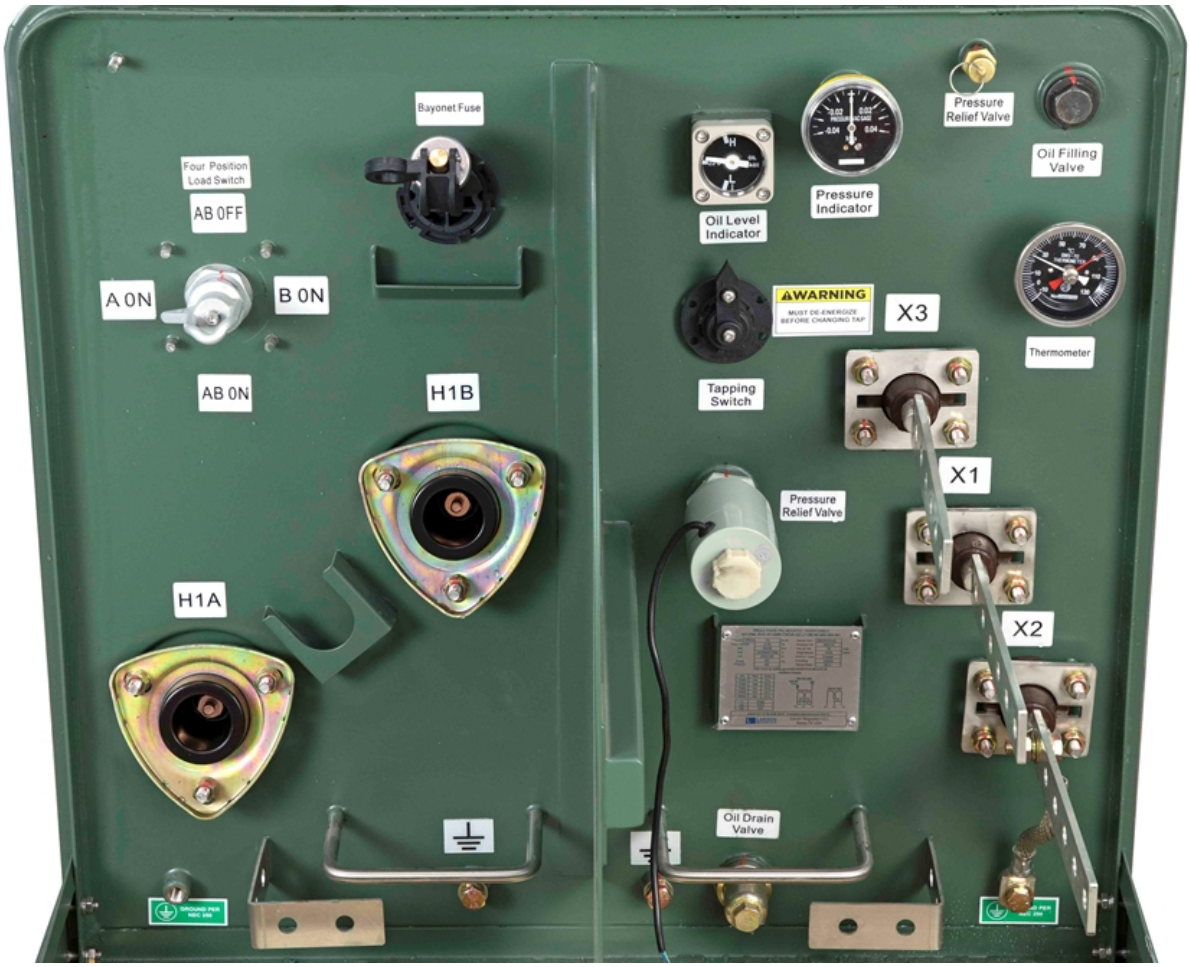
The MT-PML-R15-1P-GRU-100KVA-SZ-LT-DB-A6-BM-2B4-M1 Industrial Pad Mount Transformer from Larson Electronics is equivilant to Austin Energy # 1510-31-05. This unit complies with the City of Austin Electric Utility Department (Austin Energy) Specification E-1581 for TRANSFORMERS, SINGLE PHASE PADMOUNTED DISTRIBUTION 25 kVA THROUGH 250 kVA.
PLEASE NOTE: ANY FREE SHIPPING OFFERS DO NOT APPLY TO POWER DISTRIBUTION PANELS, TRANSFORMERS, OR SUBSTATIONS*
MU-ID: XFMRPM1PH120/240-100-LFR
MU-REF: 15103105
MU-DESCRIPTION: XFMR PM 1PH 120/240 100KVA LP FD RES
Transformer Design Features:
Built to 1510-31 for Residential Applications
15000GrdY/8660 High Voltage
95 kV HV BIL
240/120V Low Voltage
30 kV LV BIL
65°C Temp rise (85°C Hotspot)
HV lead length shall be sufficient to allow for 3.0" withdrawal of the bushing well
200A Primary Well Bushings
Type I Primary Bushing Layout
Primary Bay-O-Net type draw out the fuse in a flapper valve holder & removable drip shield (non metallic)
Primary Partial Current Limiting Fuse
HV/LV Barrier
Epoxy Secondary Bushings w/ Copper Studs
6-Hole Single Row Spade Secondary Bushings
Type I Secondary Bushing Layout
Mineral Oil, Non-PCBs Containing Cooling Fluid, ONAN Cooling Class
14.375" Minimum Cabinet Depth
30" Minimum Cabinet Width
16" HV Compartment Width (Left Side)
14" HV Compartment Width (Right Side)
Padlock Provisions & Pentahead Bolt Lock
19/64” hole in the upper left-hand corner 10” from the top and 10” from the left-hand side for customer provided fault indicator light w/ factory installed plug
Resettable Fault Indicator & Pressure Relief Device (comparable to IFD Corporation part number IFD-ORCA-10PSI-aA)
Transformer to fit on 60" x 60" Concrete Pad
Munsell Number 7GY 3.29/1.5 pad-mount green finish
Nameplate w/ Barcode
"HIGH VOLTAGE SIGN," "SIZE kVA," "ONE-CALL SYSTEM" "CLEARANCE REQUIRED," and "NO PCBs" labels per Austin Energy #1000-13
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
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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






Four Position Load Switch
AB 0FF
A 0N
B 0N
AB 0N
Bayonet Fuse
H1B
H1A
Oil Level Indicator
Pressure Indicator
Pressure Relief Valve
Oil Filling Valve
Thermometer
WARNING
MUST DE-ENERGIZE BEFORE CHANGING TAP
X3
Tapping Switch
X1
Pressure Relief Valve
X2
Oil Drain Valve

Frequently Asked Questions (FAQ)