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MT-PML-R7-1P-GMA-333KVA-SZ-RT-DF-A6-BB-CZ-2B4-M4

333 KVA Pad Mount Transformer - 34500Y/19920 Grounded Wye Primary, 240/120V Secondary - Biodegradable Fluid /KNAN

Product ID: 309668



Image: MT-PML-R7-1P-GMA-333KVA-SZ-RT-DF-A6-BB-CZ-2B4-M4

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-GMA-333KVA-SZ-RT-DF-A6-BB-CZ-2B4-M4 1-Wire 1PH Pad Mount Transformer

Transformer Type: Pad Mounted, Compartmental-Type II
Transformer Configuration: Liquid Filled Pad Mounted
Transformer Feed Type: Radial Feed
Phase: Single Phase
Capacity: 333
Vector Group: II6
Primary Voltage: 34500GrdY/19920
Primary Voltage Class: 35 kV Class
Primary Phasor: Grounded Wye
Primary BIL: 150 KV
Secondary Voltage: 240/120V (L-N-L)
Secondary Phasor: Dual Winding 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%
Tap Changer Switch Location: Front Compartment
Impedance: 1.5-60% Typical
Primary Connection Type: Dead Front

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
Complies with State of CA Seismic Requirements
Pentahead Entry Assembly
High-Fire Point Natural Ester Insulating Fluid
Non-PCB Insulating Fluid
Tamper Proof Housing
Lift Up Pad lockable Lid

Efficiency: 99.20%
Based on transformer operating at 50% of nameplate base kVA.

Load Losses Based on 85°C Reference Temp.
No Load Loss (in watts)*: +/- 910W
Load Loss (in watts)*: +/- 3,656W
Total Load Loss (in watts)*: +/- 4,566W
***Note:** Losses offered are typical only, not guaranteed*

Primary Termination: Standoff Well Bushings w/ Removable Studs, 200A Load Break Elbows w/ Inserts
Primary Connection Qty: (2) Primary Connections w/ (2) Standoff Brackets for Parked Elbows
Primary Surge Arrestors: (1) High Voltage Elbow Surge Arrestors, Included
Primary Surge Arrestor Voltage Rating: 24.4 kV MCOV
Primary Over Current Protection (OCP): Bayonet Fuses, Partial-Range Current-Limiting Fuses
Primary Over Current Protection Method: Fused
Primary Over Current Protection Holder: Bayonet Fuse Holder w/ Drip Shield
Primary Grounding Provisions: (3) Grounding lug, accepts #4/0 copper
Secondary Connection Type: Live Font
Secondary Connections: NEMA Spade Terminals, 6-Hole Spade, Externally Clamped, Accepts up to (6) Double Lug connections with (3) cables per side of Spade connector
Secondary Over Current Protection (OCP): N/A
Secondary Connection Qty: (3)
Secondary Grounding Provisions: (3) Grounding lug, accepts #4/0 copper
Metering Current Transformer (CT): N/A
Metering Panel: N/A
Auxiliary Control Panel : N/A
Load Break Switch: (1) 2-Position Load Break Switch
Load Break Switch Qty: (1)
Load Break Switch Location: High Voltage (HV) Front Compartment
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: Biodegradable Natural Vegetable Oil Ester Insulating Fluid - Non-PCB Fluid
Fluid Capacity*: 124.67 Gallons
Liquid Level Indicator: Analog Dial 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: 56 dBA
Elevation (Altitude): 3300ft (1000 meters) Above Sea Level or Lower
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
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*: 54.5"-W x 63.5"-D x 35.5"-H
Weight*: 3,968 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

The MT-PML-R7-1P-GMA-333KVA-SZ-RT-DF-A6-BB-CZ-2B4-M4 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 333 kVA, the industrial transformer features a primary voltage of single-phase 34500Y/19920 Grounded Wye and a secondary voltage of single-phase 240/120V (L-N-L). The unit has a primary radial 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-R7-1P-GMA-333KVA-SZ-RT-DF-A6-BB-CZ-2B4-M4 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-R7-1P-GMA-333KVA-SZ-RT-DF-A6-BB-CZ-2B4-M4 features biodegradable cooling fluid (KNAN) that is comparable to FR3 fluid. We offer transformers with mineral oil fluid, 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-GMA-333KVA-SZ-RT-DF-A6-BB-CZ-2B4-M4 is equipped with a load break switch. This switch has two positions: transformer on and

transformer off.

Valves: The MT-PML-R7-1P-GMA-333KVA-SZ-RT-DF-A6-BB-CZ-2B4-M4 is equipped with a fill valve and drain valve with sampler port.

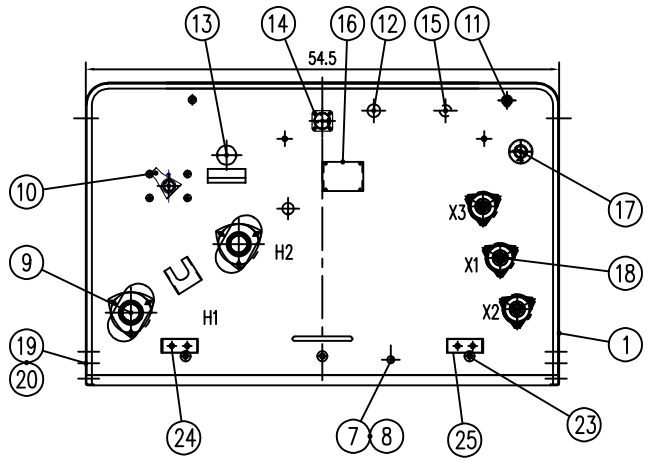
Protection Fuses: This transformer contains bayonet protection fuse and current limiting fuse on the primary side. For units without protection fuses, up stream protection is provided. We recommend provisions for protection fuses when possible, as blown fuses may require more frequent oil changes.

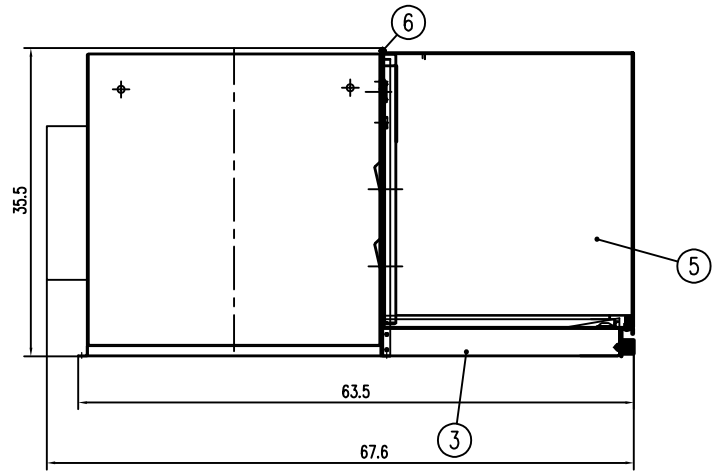
Mount: The heavy-duty enclosure makes the unit suitable for both indoor and outdoor applications. This power distribution system can be pad mounted on concrete pads.

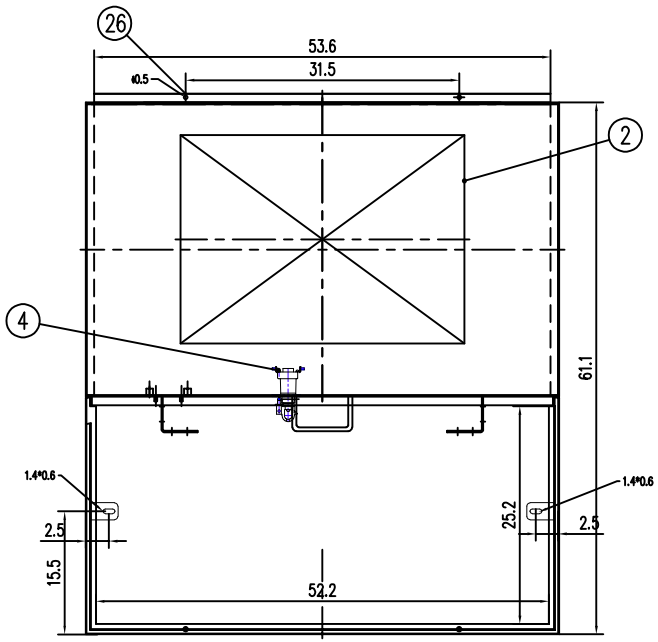
Benefits: The MT-PML-R7-1P-GMA-333KVA-SZ-RT-DF-A6-BB-CZ-2B4-M4 pad mount transformer offers many benefits to consumers. This transformer provides owners with significant energy savings, as well as offering environmental benefits. Higher efficiency not only extends the life of the transformer, but also turns into cost savings for owners in the form of lower energy bills and decreased cost of ownership.

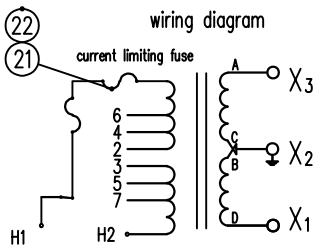
Applications: General purposes, industrial sites, electrical rooms, underground vaults, manufacturing facilities, steel plants, offshore, commercial, military, processing plants, electric power distribution, utilities, public locations and more.

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.









Approx. weight: LBS

Untanked	Oil	Total
1477	1609	3968

mark	revise	revision	signature	date
designed			standard	
checked			examined	
audited			approved	
crafted			date	

Pad Mount TR

34500GrdY/19920V
240/120V, 116, 333kVA

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signature

date

No.	Code	Name	QTY	Material	Unit Weight	Total Weight	Remark
26		anchor point	4				
25		grounding pad	1				for LV
24		grounding pad	1				for HV
23		grounding strap	1				from X2
22		fuse holder	2				
21		current limit fuse	1				
20		nut M8	4				
19		bolt M8X25	4				
18		LV bushing	3				
17		temperature indicator	1				
16		nameplate	1				
15		pressure indicator	1				
14		oil level indicator	1				
13		bayonet fuse	1				
12		oil filling valve	1				
11		pressure relief valve	1				
10		load break switch	1				2-position
9		HV bushing	2				
8		insulation oil	1		730	730	
7		drain valve	1				
6		hinge axis	2				
5		tank cover	1				
4		tap changer	1				
3		tank base	1				
2		coverplate	1				
1		tank	1				

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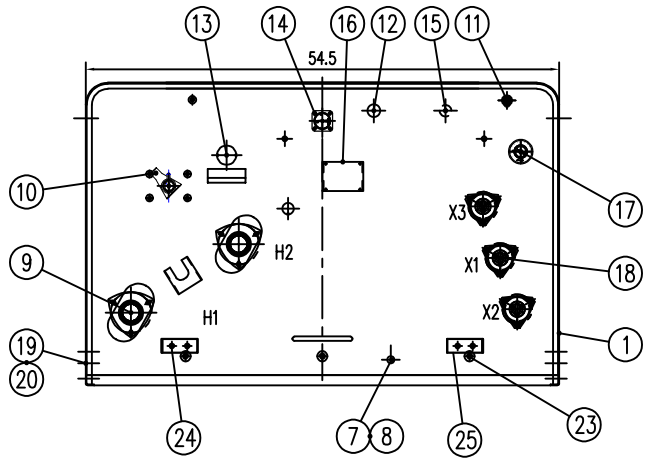
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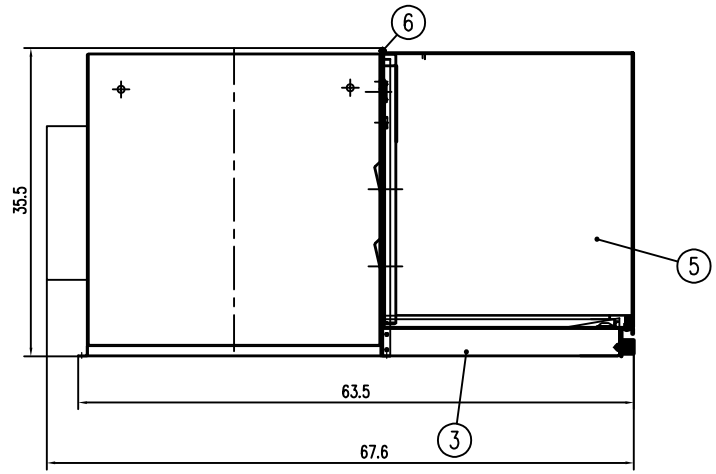
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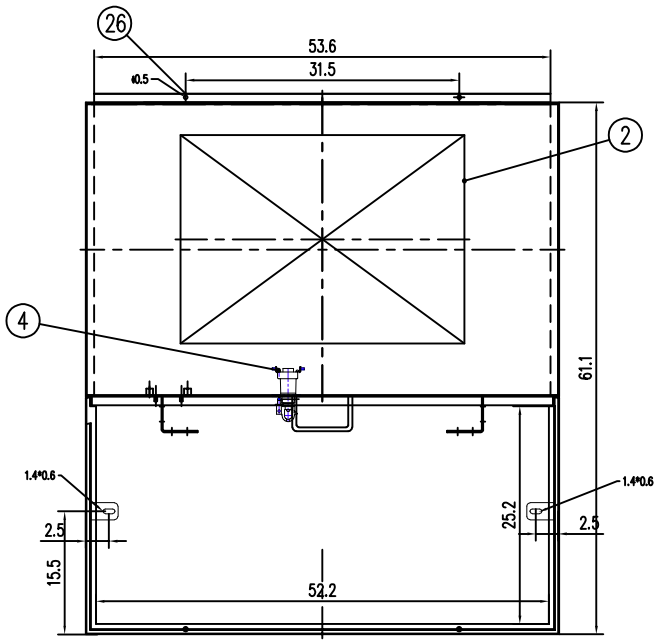
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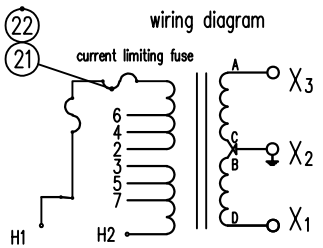
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2		coverplate	1				
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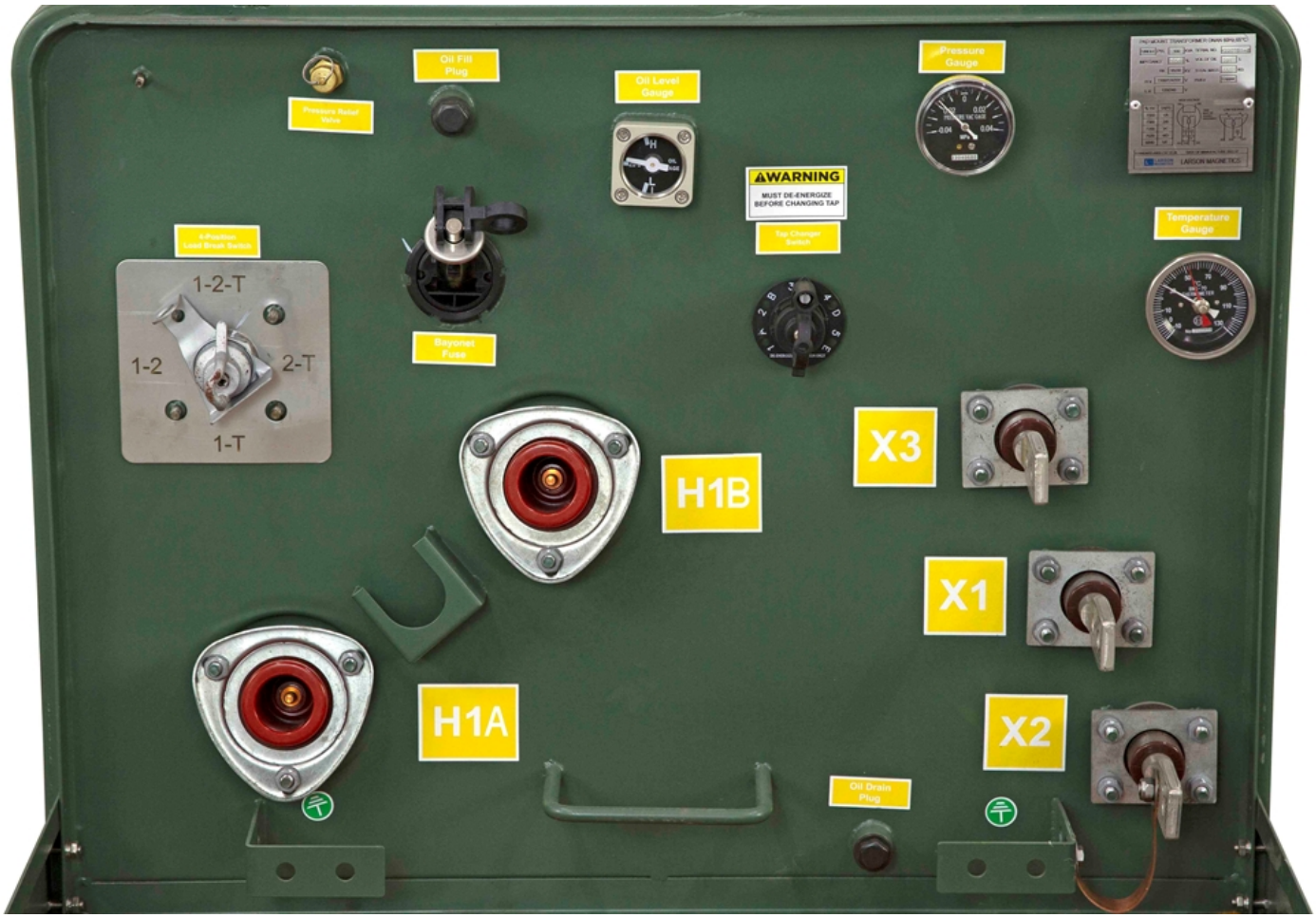
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Frequently Asked Questions (FAQ)

There are no Faqs