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MT-UPM-R7-1P-DMA-167KVA-SLZ-BB-A6-BM-CZ-Z-M1

167 KVA Overhead Distribution Transformer, Pole Mount, 34500V Delta Primary, 120/240V Secondary, Mineral Oil, Copper, ONAN, Light Grey

Product ID: 309019



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-UPM-R7-1P-DMA-167KVA-SLZ-BB-A6-BM-CZ-Z-M1 Pole Mount Overhead Transformer

Transformer Type: Overhead Distribution Transformer, Conventional Type
Transformer Configuration: Liquid Filled Pole Mounted
Transformer Polarity Type: Subtractive
Phase: Single Phase
Capacity: 167 KVA
Primary Voltage: 34500V
Primary Voltage Switch: N/A
Primary Voltage Class: 35 kV Class
Primary Phasor: Delta
Primary BIL: 200 kV
Secondary Voltage: 120/240V (L-N-L)
Secondary Voltage Class: 1.2 kV Class
Secondary Phasor: Dual Windings Single Phase
Secondary BIL: 30 KV
Frequency: 60 Hz
Temperature Rise: 65°C
Insulation Rating: Class E Insulation - 120°C, 248°F
Forced Air (Fans): None
Cooling Class: ONAN; Self-Cooled
Tap Changer: 5-Position Tap Changer w/ External Operating Handle
Tap Qty: (2) FCAN Taps Above, (2) FCBN Taps Below
Tap %: 2.5%
Tap Changer Switch Location: N/A
Impedance: 1.0-4.5% Typical
Primary Connection Type: Live Bushing Lug
Primary Termination: Porcelain Live Front Bushings With Terminal Pads
Primary Connection Qty: (2)

Ratings

Meets/Exceeds DOE 2016 Efficiency Ratings
Meets/Exceeds CSA Efficiency Ratings
Complies with ANSI / IEEE C57 12.00
Complies with ANSI / IEEE C57 12.20
Complies with ANSI / IEEE C57 12.30
Complies with ANSI / IEEE C57 12.31
Complies with ANSI / IEEE C57 12.35
Complies with ANSI / IEEE C57.12.70
Complies with ANSI / IEEE C62.11
Complies with ANSI / IEEE C62.22
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 10 CFR Part 431
Complies with CSA C2.2:06
Complies with CAN / CSA C50
Complies with CAN / CSA C233.1-87
Complies with CAN / CSA C802.1-13

Features:

Non-PCB Insulating Fluid
Lifting Lugs Included
Corrosion Resistant Cover Band

Efficiency: 98.10%

Primary Lightning Arrestors: N/A

Primary Lightning Mounting Provision: Mounting Provisions for Installing Lightning Arrestor on H1 and H2 Primary Terminals

Primary Lightning Arrestors Voltage Rating: N/A

Primary Lightning Arrestors MCOV Rating: N/A

Secondary Connection Type: Live Bushing Lug

Secondary Connections: Fully Insulated Wall-Mounted Bushings

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

Terminals: Tin Plated Primary and Secondary - Accepts Copper or Aluminum Connections

Grounding Provisions: (1) Lug w/ Grounding Strap, Tank Grounding Lug

Transformer Protection: N/A

Load Break Switch: N/A

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 Capacity*: 33.73 Gallons

Fluid Weight*: 430 lbs

Liquid Level Indicator: Internal In-Tank Oil Level Line

Temperature Indicator: N/A

Pressure/Vacuum Indicator: N/A

Pressure Relief Device: Included, Automatic Action

Fault Indicator: N/A

Oil Level Marking: Internal

Fill Valve: N/A (Tank Filled via Removable Lid)

Drain Valve: 1/2" NPT Port w/ Removable Bolt

Winding Material: Copper

Ambient Temperature Rating: 40°C

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

Sound Level: 55 dBA

Elevation Level: N/A

Core Material: Grain Oriented Steel

Tank Material: Coated Steel

Housing Material: Coated Steel w/ Corrosion Resistant Cover Band, Removable Top Cover

Hardware Material: Stainless Steel Hardware

Paint Type: Weatherproof and UV Resistant Epoxy Coating and Undercoating

Finish Color: Munsell™ 5BG 7.0/0.4 Light Grey (ANSI #70)

Mounting: Double Hanger Bracket

Mounting: Pole Mount via Hangar Brackets

Lifting Lugs: Included

Dimensions*: 40.4"-W x 35.6"-D x 59.5"-H

Tank Diameter*: 24" OD

Dry Weight*: 1157 lbs

Total Weight (Liquid Filled)*: 1830 lbs

*Please note that numbers are approximate and subject to change

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

Load Losses Based on 85°C Reference Temp.
No Load Loss (in watts): +/- 455W
Full Load Loss (in watts): +/- 2288W
Total Load Loss (in watts): +/- 1833W

Note: Losses offered are typical only, not guaranteed

Labeling:
Externally Stencilled (Painted) KVA Rating
Externally Stencilled (Painted) Voltage Rating
External Non-PCB Label
External Barcode Label
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

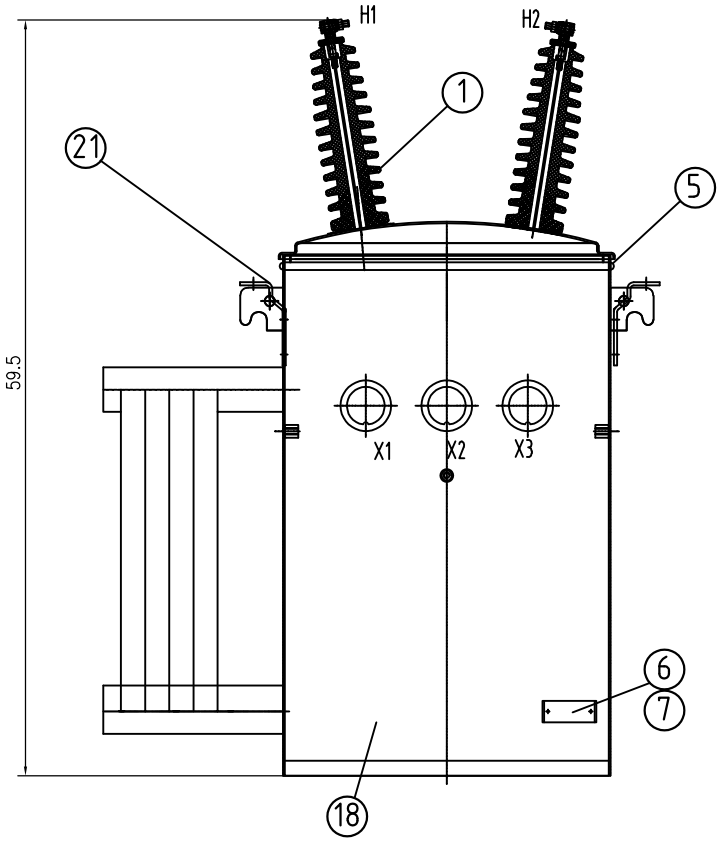
Shipping:
Shipped on pallet on open flatbed
Palletized on Wooden Pallet w/ Skid Pockets
Pallet Skid Facing Outward Sides of Truck
Note: For low quantity purchases, enclosed truck can be requested
Note: Crated shipping in lieu of palletizing can be done upon request for an additional fee

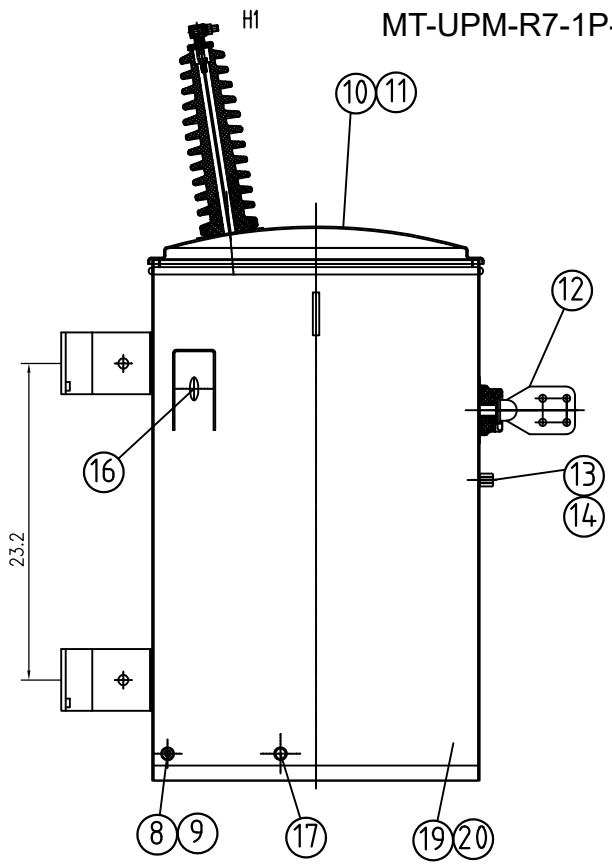
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Contact us for special requirements
Toll Free: 1-800-369-6671
Intl: 1-903-270-1187
Fax: 1-903-498-3364
E-mail: sales@larsonelectronics.com

The MT-UPM-R7-1P-DMA-167KVA-SLZ-BB-A6-BM-CZ-Z-M1 Pole Mount Distribution Transformer from Larson Electronics is powerful and designed with the environment in mind. Suitable for both indoor and outdoor applications, the conventional type transformer provides increased reliability and protection against critical equipment failures.
PLEASE NOTE: ANY FREE SHIPPING OFFERS DO NOT APPLY TO POWER DISTRIBUTION PANELS, TRANSFORMERS, OR SUBSTATIONS*
Transformer Features: With a transformer rating of 167 kVA, the MT-UPM-R7-1P-DMA-167KVA-SLZ-BB-A6-BM-CZ-Z-M1 pole mount distribution transformer is a single phase unit with a primary voltage of 34500V Delta. It also provides a secondary voltage of 120/240V 60Hz. Featuring robust construction, this unit's cores are manufactured with grain oriented steel. The conventional type transformer contains dual bushings on the primary side and three bushings on the secondary side. Efficiency at 100% load is 98.95 percent. The MT-UPM-R7-1P-

DMA-167KVA-SLZ-BB-A6-BM-CZ-Z-M1 is a grounded wye connection transformer and therefore must be connected phase-to-ground on a grounded wye system. This unit boasts a low cost of ownership and is highly energy efficient. Lower heat emissions mean less cooling is needed as well. The unit also features mineral oil insulation fluid (oil immersed) and copper windings.
Mount: The MT-UPM-R7-1P-DMA-167KVA-SLZ-BB-A6-BM-CZ-Z-M1 is compatible with pole mounting applications.
Applications: General purposes.
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.

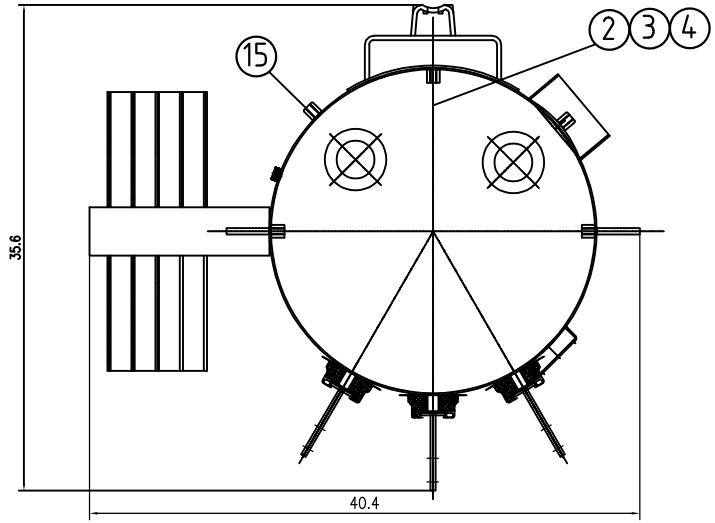
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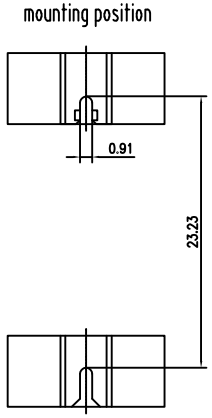


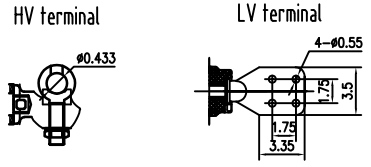


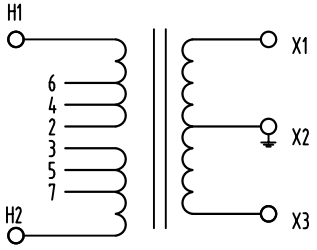
Approx.weight LBS

Untanked	Oil	Total
1157	430	1830









No.	Code	Name	QTY	Material	Unit Weight	Total Weight	Remark
22		painting	1	Munsell 5BG light grey			
21		arrester bracket	2				
20		tank assembly	1				
19		insulation oil	1			195	
18		tank	1				
17		oil drain valve	1				
16		tap changer	1				
15		pressure relief valve	1				
14		washer 12	5				galvenized
13		bolt M12×25	1				galvenized
12		LV bushing	3				4-hole
11		sealing gasket	1				
10		cover	1				
9		washer 12	2	stainless steel			
8		bolt M12×30	1	stainless steel			
7		screw M4X6	2				
6		nameplate	1	stainless steel			
5		hold down gear	1				
4		ground strap	1	0.3 copper belt			INNER TANK
3		washer 12	2	stainless steel			black coated
2		bolt M12×20	2	stainless steel			black coated
1		HV bushing	2				

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

Pole Mount TR

34500V, Primary
120/240V,167kVA

pattern mark	mass	scale
page		0 page

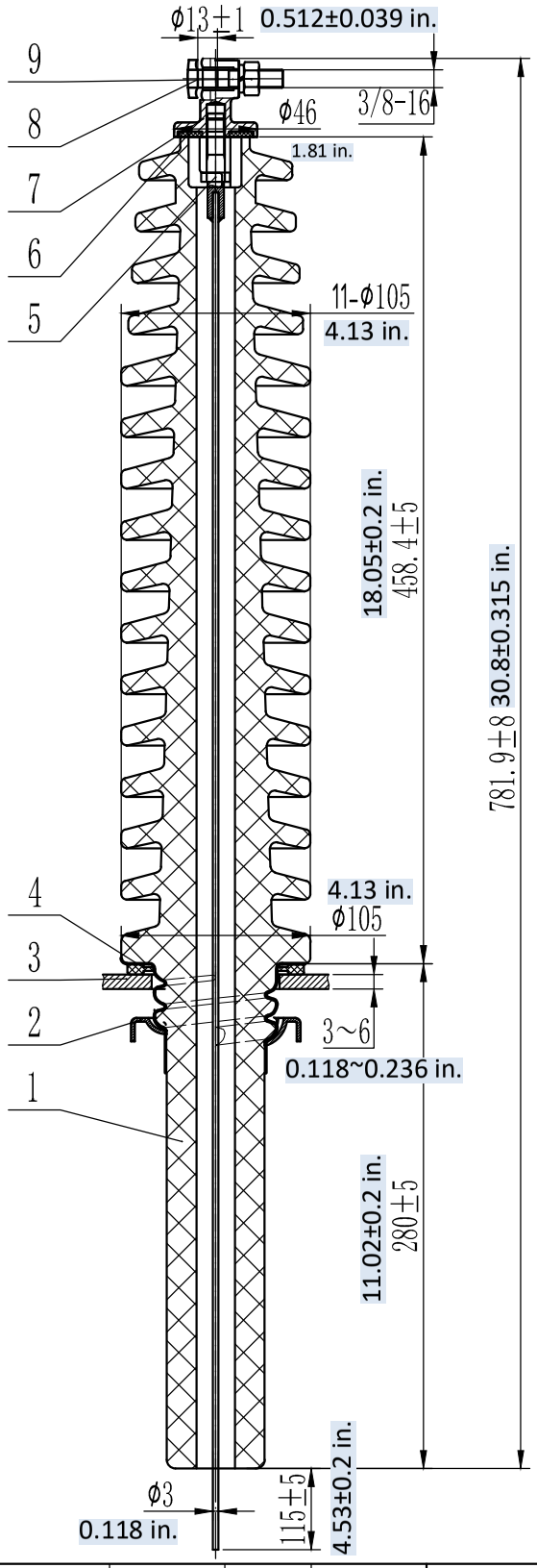
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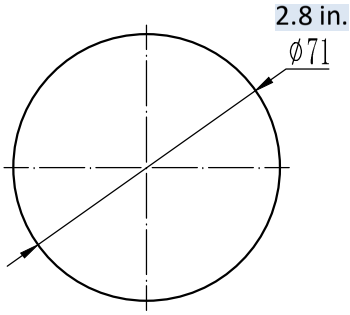
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Signature
Date

Remark: dimensions here are in inches.Only for approval/preliminary design..

No.	Code(Model)	Name	QTY	Material
1		ANSI-38/55 porcelain bushing	1	HV porcelain
2		ANSI large turn buckle	1	carbon steel
3		tank cover		
4		Rectangular seal ring	1	acrylic ester
5		Φ3×870 conducting rod	1	copper
6		Rectangular seal ring	1	acrylic ester
7		315A ANSI fasten terminal	1	brass
8		315A fasten rod	1	brass
9		3/8 hexagon nut	1	SS
10		10 spring washer	1	SS

technical specification			
power frequency withstand voltage	95kV/1min	lightning impulse	250kV
creepage distance	≥1140mm	cantilever tolerance	1000N





Porcelain Bushing

1:4


NON-PCBs
X1
X2
X3




X3
X2
X1


H1
H2

Frequently Asked Questions (FAQ)