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MT-UPM-R7-1P-GNY-75KVA-SZ-BB-A6-BM-CZ-Z-M1

75 KVA Overhead Distribution Transformer, Pole Mount, 23000Y/13280 Grounded Wye Pri., 120/240V Sec., Mineral Oil, Copper, ONAN, Tap Changer

Product ID: 301788



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-GNY-75KVA-SZ-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: 75 KVA
Primary Voltage: 23000GrdY/13280
Primary Voltage Switch: N/A
Primary Voltage Class: 25 kV Class
Primary Phasor: Grounded Wye
Primary BIL: 125 kV
Secondary Voltage: 120/240V (L-N-L)
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
Forced Air (Fans): None
Cooling Class: ONAN; Self-Cooled
Tap Changer: 5-Position Tap Changer w/ External Operating Handle
Tap Qty: (2) FCAN Above, (2) FCBN Below
Tap %: 2.5%
Tap Changer Switch Location: Side of Tank Body
Impedance: 1.0-4.5% Typical
Primary Connection Type: Live Bushing Lug
Primary Termination: Porcelain High Voltage Bushing

Ratings

Meets/Exceeds DOE 2016 Efficiency Ratings
Complies with ANSI / IEEE #C57.12.00
Complies with ANSI / IEEE #C57.12.20
Complies with ANSI / IEEE #C57.12.28
Complies with ANSI / IEEE #C57.12.31
Complies with ANSI / IEEE C57.12.70
Complies with ANSI / IEEE C57.12.80
Complies with ASTM D3487
Non-PCB Insulating Fluid
Lifting Lugs Included

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): +/- 247W
Full Load Loss (in watts): +/- 845W
Total Load Loss (in watts): +/- 1,092W

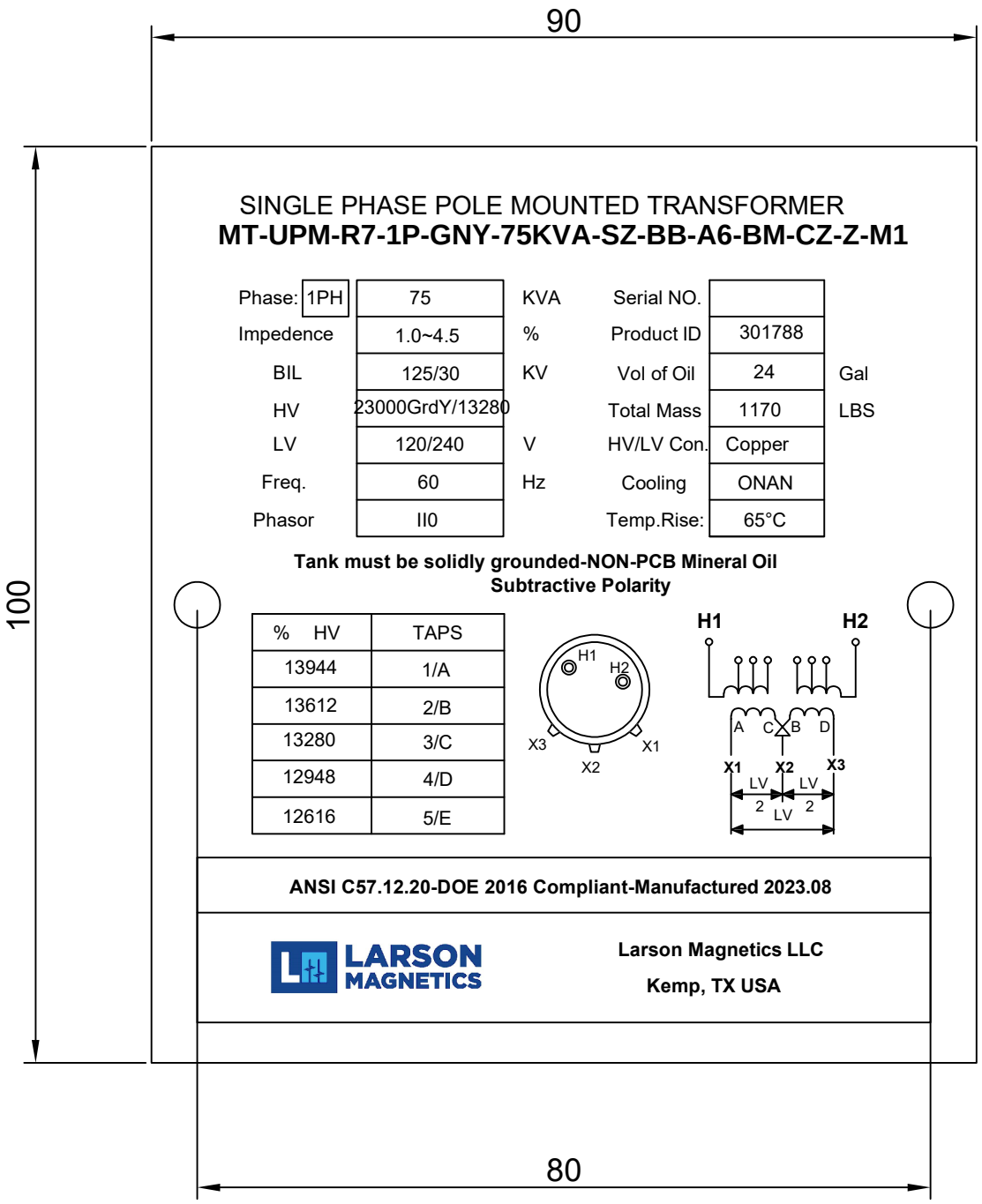
Note: Losses offered are typical only, not guaranteed

Primary Connection Qty: (2)
Primary Lightning Arrestors: N/A
Primary Lightning Mounting Provision: Mounting Provisions for Installing Lightning Arrestor on H1 & 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: Live Bushing Lugs
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 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*: 21.51 Gallons
Fluid Weight*: 194 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
Sound Level: 51 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: White
Mounting: Double Hanger Bracket
Mounting: Pole Mount via Hangar Brackets
Lifting Lugs: Included
Dimensions*: 26.77"-W x 28.35"-D x 47.24"-H
Tank Diameter*: 21.66" OD
Dry Weight*: 396.83 lb
Total Weight (Liquid Filled)*: 875 lb
*Please note that numbers are approximate and subject to change

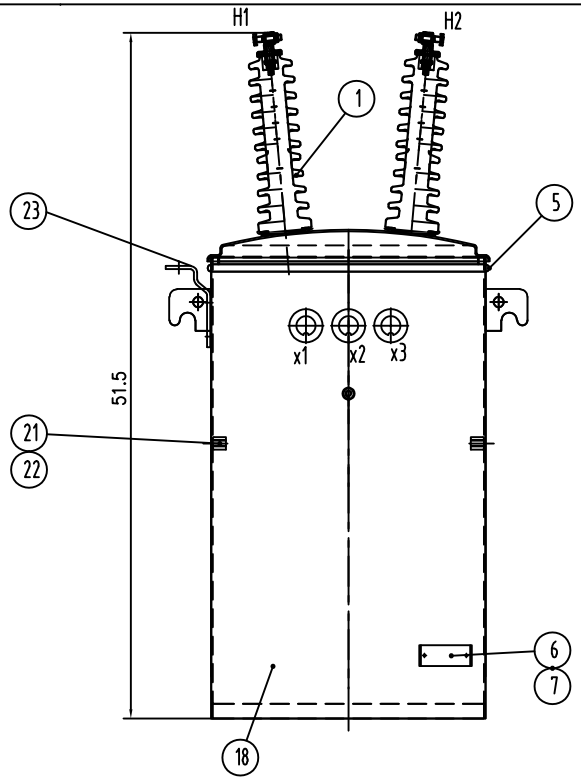
Special Orders - Special Requirements
Contact us for special requirements
Toll Free: 1-800-369-6671
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E-mail: sales@larsonelectronics.com

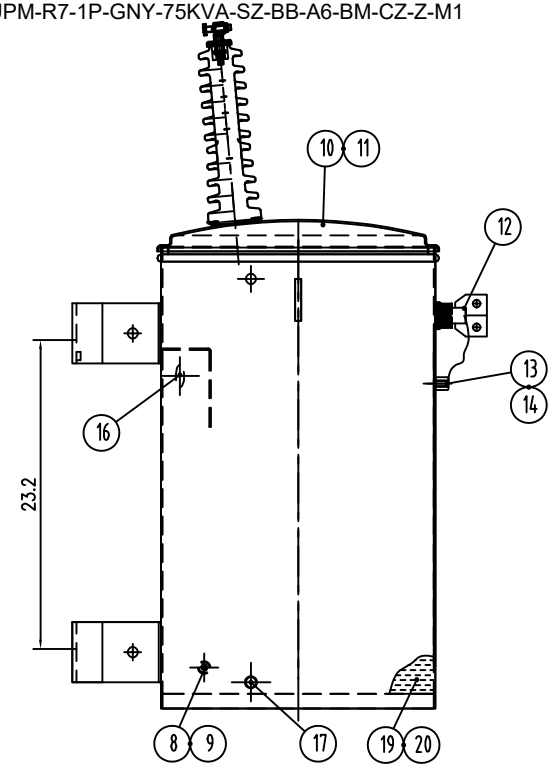
The MT-UPM-R7-1P-GNY-75KVA-SZ-BB-A6-BM-CZ-Z-M1 Overhead Distribution Pole Mounted Transformer from Larson Electronics offers powerful, reliable and efficient power distribution in outdoor and public locations. The low operating costs, low heat emissions and low cost of ownership makes this transformer ideal for a wide range of applications and businesses. This power distribution system is designed for overhead, pole mount installations and use.
PLEASE NOTE: ANY FREE SHIPPING OFFERS DO NOT APPLY TO POWER DISTRIBUTION PANELS, TRANSFORMERS, OR SUBSTATIONS*
Transformer Features: With a transformer rating of 75 kVA, the industrial transformer features a primary voltage of 23000Y/13280 Grounded Wye and a secondary voltage of single-phase 120/240V (L-L-N). This transformer connects to a three phase electrical grid system to provide single phase low voltage power for indoor distribution. This pole mount transformer features porcelain high-voltage, dual bushings on the primary side and three bushings on the secondary side. Equipped with Copper windings and a grain oriented steel core, this overhead distribution transformer consists of one coil and two core loops. Tin plated

terminals on the primary and secondary side accepts copper or aluminum connections.
The MT-UPM-R7-1P-GNY-75KVA-SZ-BB-A6-BM-CZ-Z-M1 is air cooled and does not have fans or mounting provision for fans. This unit features a 65°C temperature rise for reduced heat waste, increased reliability and longer life. 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-UPM-R7-1P-GNY-75KVA-SZ-BB-A6-BM-CZ-Z-M1 features mineral oil insulation fluid. Internal marking is available for proper oil level monitoring. We offer transformers with FR-3 oil fluid, if needed.
Gauges: There are no gauges on this transformer. We can add liquid level, temperature and pressure/vacuum gauges at an additional cost. Standard liquid level, temperature and pressure/vacuum gauges are analog, manual reading types.
Pressure Relief Device: An automatic pressure relief device is included with this transformer.
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 is not equipped with lightning arresters. Mounting provisions for installing customer provided lightning arrestor on the H1 and H2 primary terminal are included for installing arresters in-field.
Valves: The MT-UPM-R7-1P-GNY-75KVA-SZ-BB-A6-BM-CZ-Z-M1 is not equipped with fill or dtrain valves. The transformer can be filled via removing the top lid. A drain port w/ bolt plug is equipped.
Protection Fuses: This transformer does not contain fuses or circuit breakers. 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 and outdoor applications. Equipped with hangar brackets and lifting lugs, this overhead power distribution system can be mounted on poles.
Benefits: The MT-UPM-R7-1P-GNY-75KVA-SZ-BB-A6-BM-CZ-Z-M1 heavy-duty 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.
We offer completely self protected (CSP) pole mount overhead transformers at an additional cost.
Applications: General purposes, industrial sites, electrical rooms, public locations, 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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100
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SINGLE PHASE POLE MOUNTED TRANSFORMER
MT-UPM-R7-1P-GNY-75KVA-SZ-BB-A6-BM-CZ-Z-M1
Phase: 1PH
75 KVA
Impedence 1.0~4.5 %
BIL 125/30 KV
HV 23000GrdY/13280
LV 120/240 V
Freq. 60 Hz
Phasor II0
Serial NO.
Product ID 301788
Vol of Oil 24 Gal
Total Mass 1170 LBS
HV/LV Con. Copper
Cooling ONAN
Temp.Rise: 65°C
Tank must be solidly grounded-NON-PCB Mineral Oil
Subtractive Polarity
% HV TAPS
13944 1/A
13612 2/B
13280 3/C
12948 4/D
12616 5/E
H1
H2
X3
X1
X2
H1
H2
A
C
B
D
X1
X2
X3
LV
2
LV
2
LV
ANSI C57.12.20-DOE 2016 Compliant-Manufactured 2023.08
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Larson Magnetics LLC
Kemp, TX USA

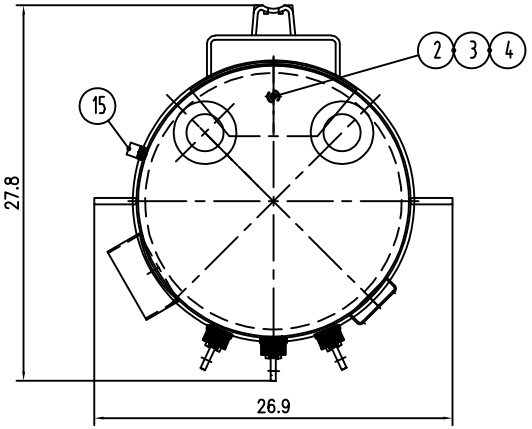
MT-UPM-R7-1P-GNY-75KVA-SZ-BB-A6-BM-CZ-Z-M1



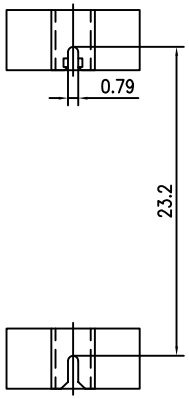


Approx. weight LBS

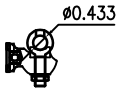
Untanked	Oil	Total
529	265	948



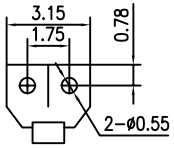
mounting position



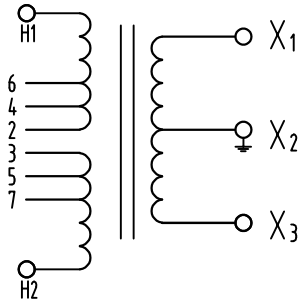
HV terminal



LV terminal



wiring diagram



NO.	Code	Name	QTY	Material	Unit Weight	Total Weight	Remark
23		Arrester bracket	2				
22		Washer 12	2				black coated
21		Bolt M12×35	2				black coated
20		Tank assembly	1				
19		Insulation oil	(1)				
18		Tank	1				
17		Oil drain valve	1				
16		Tap changer	1				
15		Pressure relief valve	1				
14		Washer 12	1				galvenized
13		Bolt M12×25	1				galvenized
12		LV bushing	3				
11		Sealing gasket	1				
10		Cover	1				
9		Washer 12	2				galvenized
8		Bolt M12×30	1				galvenized
7		ScrewM4X6	2				
6		Nameplate	1				
5		Hold down gear	1				
4		Ground strap	2	0.3 copper belt			INNER TANK
3		Washer 12	2				black coated
2		Bolt M12×20	2				black coated
1		HV bushing	2				

Mark	Revise	Revision	Signature	Date
Designed		Standard		
Checked		Examined		
Audited		Approved		
Crafted		Date		

Pole Mount TR

23000GrdY/13280V
120/240V, 75KVA

pattern mark	mass	scale
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WARNING

Frequently Asked Questions (FAQ)