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MT-PMUT-R7-1P-GMT-100KVA-SLZ-BB-Z6-BM-CS-ZL6-M1

100 KVA Submersible Distribution Transformer, Vault Mount, 12000Y/6930 Grounded Wye Primary, 120/240V Secondary, Mineral Oil/ONAN, Copper, 304 Stainless Steel, W/O Tap Changer

Product ID: 312935



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-PMUT-R7-1P-GMT-100KVA-SLZ-BB-Z6-BM-CS-ZL6-M1 Submersible Vault Distribution Transformer

Transformer Type: Submersible Vault Distribution Transformer
Transformer Configuration: Underground Vault Installation, Suitable for Temporary Submersion
Transformer Feed: Loop Feed
Transformer Polarity Type: -
Phase: Single Phase
Capacity: 100 KVA
Primary Voltage: 12000Y/6930
Primary Voltage Switch: N/A
Primary Voltage Class: 15 kV Class
Primary Phasor: Grounded Wye
Primary BIL: 95 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: N/A
Tap Qty: N/A
Tap %: N/A
Tap Changer Switch Location: N/A
Impedance: 1.5-6.0% Typical, 2.5% Max. Target

Ratings

Meets/Exceeds DOE 2016 Efficiency Ratings
Complies with ANSI / IEEE #C57.12.00
Complies with ANSI / IEEE C57.12.80
Complies with ANSI / IEEE #C57.12.23
Complies with ANSI / IEEE #C57.12.31
Complies with ANSI / IEEE #C57.12.32
Complies with ANSI / IEEE C57.12.70
Complies with ASTM D3487
Lifting Lugs Included
Non-PCB Insulating Fluid

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): +/- 273W
Full Load Loss (in watts): +/- 1,105W
Total Load Loss (in watts): +/- 1,378W

Note: Losses offered are typical only, not guaranteed

Factory Tests:
Winding Resistance Test

Primary Connection Type: Universal Bushing, Well Type, Accepts Load Break Bushing Inserts Of Elastimold Type
Primary Bushing Rating: 15 kV Class, 95 BIL, 200A, Load Break, IEEE 386 Color Red
Primary Termination: Externally Clamped Universal Well Bushings w/ Removable Studs, 200A Load Break Elbows w/ Inserts
Primary Connection Qty: (2) Primary Connections for Use w/ Elbow Connectors
Primary Neutral Connection: Primary HO Neutral Internally Bonded to Tank
Primary Parking Stand Qty: (2) Welded Brackets for Installing Accessory Parking Stand Bushings
Primary Surge Arrestors: N/A
Primary Surge Arrestor Voltage Rating: N/A
Primary Surge Arrestor MCOV Rating: N/A
Primary Over Current Protection (OCP): Included, (2) Current Limiting Fuses, Clip Type, 12A, Cooper P/N: 3563012M11M
Primary Over Current Protection Method: Fused, Oil-Immersed
Primary Over Current Protection Holder: Included, Fuse Holder
Secondary Connection Type: Live Bushing Lug
Secondary Connections: Lead Wire Cables, 500 MCM Copper Wire
Secondary Connection Qty: (3)
Secondary Neutral Connection: NEMA 4-Hole Tinned Copper Spade, Insulated From the Transformer Tank
Terminals: Tin Plated Primary and Secondary - Accepts Copper or Aluminum Connections
Grounding Provisions: Included, Stainless Steel Grounding Pads
Load Break Switch: Included, (3) 2-Position Load Break Switch. The Handle is Interlocked With The Fuse Holder Cap
Load Break Switch Rating: 300A RMS Load Break Capability (@ 0.6 PF), 12 kA Short-time Current Rating Asymmetrical, 12 kA Closing and Holding Current Rating Asymmetrical
Load Break Switch: HV Side
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*: 61.11 Gallons
Fluid Weight*: 606.26 lbs
Liquid Level Indicator: Oil Level Gauge, Tomco #LG 35
Temperature Indicator: N/A
Pressure/Vacuum Indicator: Included
Pressure Relief Device: Included, Automatic Action
Fault Indicator: N/A
Oil Level Marking: Internal
Fill Valve: 1/2" NPT Port w/ Removable Bolt
Drain Valve: 1/2" NPT Port w/ Removable Bolt
Winding Material: Copper
Ambient Temperature Rating: 40°C
Sound Level: 55 dBA, Complies to NEMA TR-1
Elevation Level: N/A
Core Material: Grain Oriented Steel
Tank Material: 304 Stainless Steel
Housing Material: 304 Stainless Steel Steel w/ Corrosion Resistant Cover Band, Removable Top Cover
Hardware Material: 304 Stainless Steel Hardware
Tank Support Rails: Included, (2) Attached to the Bottom of the Transformer Tank
Paint Type: Weatherproof and UV Resistant Epoxy Coating and Undercoating
Finish Color: ANSI 70 Light Grey
Mounting: Floor Mount
Lifting Lugs: Included
Dimensions*: 30"-W x 40"-D x 36"-H
Dry Weight*: 533.01 lbs
Total Weight (Liquid Filled)*: 1,064.8 lb
*Please note that numbers are approximate and subject to change

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

Special Orders - Special Requirements
Contact us for special requirements
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The MT-PMUT-R7-1P-GMT-100KVA-SLZ-BB-Z6-BM-CS-ZL6-M1 from Larson Electronics is a Submersible Vault Distribution Transformer that 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 submersible vault power distribution system is

designed for underground installation in concrete vaults where flooding may happen and the transformer may be temporarily submerged.

PLEASE NOTE: ANY FREE SHIPPING OFFERS DO NOT APPLY TO POWER DISTRIBUTION PANELS, TRANSFORMERS, OR SUBSTATIONS

Transformer Features: With a transformer rating of 100 kVA, this submersible industrial transformer features a primary voltage of 12000Y/6930 Grounded Wye and a secondary voltage of single-phase 120/240V (L-N-L). 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 load break bushings on the primary side and two 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-PMUT-R7-1P-GMT-100KVA-SLZ-BB-Z6-BM-CS-ZL6-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 submersible design makes this unit suitable for use in concrete vaults where flooding may occur or in other areas where the transformer may be temporarily submerged such as underground.

Insulation Fluid: The MT-PMUT-R7-1P-GMT-100KVA-SLZ-BB-Z6-BM-CS-ZL6-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 equipped with high voltage elbow surge arrestor.

Valves: The MT-PMUT-R7-1P-GMT-100KVA-SLZ-BB-Z6-BM-CS-ZL6-M1 is not equipped with fill or drain valves. The transformer can be filled via removing the top lid. A drain port w/ bolt plug is equipped.

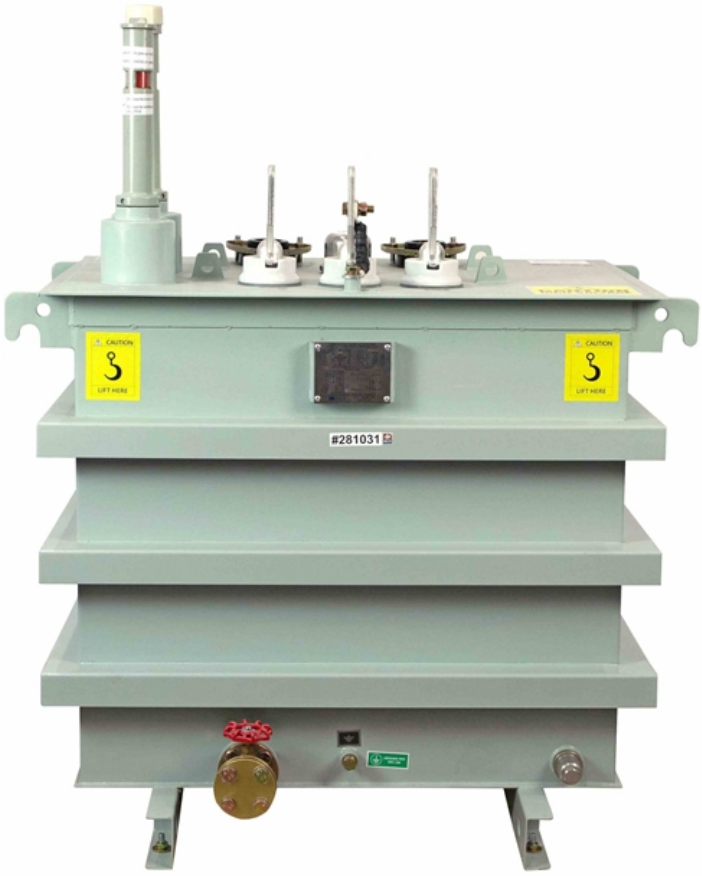
Protection Fuses: This transformer contains fuses. For units without protection fuses, upstream protection is provided. We recommend provisions for protection fuses when possible, as blown fuses may require more frequent oil changes.

Mount: The heavy-duty enclosure makes the unit suitable for underground applications such as concrete vaults where flooding may occur. This submersible vault distribution transformer can be floor mounted.

Benefits: The MT-PMUT-R7-1P-GMT-100KVA-SLZ-BB-Z6-BM-CS-ZL6-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.

Applications: Underground installation applications, such as concrete vaults, where the transformer may be temporarily submerged due to flooding.

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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Frequently Asked Questions (FAQ)