Larson Electronics LLC
9419 E US HWY 175, Kemp, TX 75143
Phone: 800.369.6671

www.LarsonElectronics.com
Email: sales@LarsonElectronics.com
Fax: 903.765.7664

MT-PMUT-R7-1P-GMT-100KVA-SLZ-BB-A6-BB-CZ-2B4-M1

100 KVA Submersible Distribution Transformer, Vault Mount, 12000GrdY/6930 Grounded Wye Pri., 240/120V Sec., Biodegradable Oil, Copper, KNAN, Tap Changer

Product ID: 326530

Please see last page for supporting documentation for this product (certificates, CAD files & drawings, IES files, wiring diagrams, etc).



Image: MT-PMUT-R7-1P-GMT-100KVA-SLZ-BB-A6-BB-CZ-2B4-M1

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-A6-BB-CZ-2B4-M1 Submersible Vault Distribution Transformer

Transformer Type: Submersible Vault Distribution Transformer
Transformer Configuration: Underground Vault Installation, Suitable for Temporary Submersion
Transformer Polarity Type: Subtractive
Phase: Single Phase
Capacity: 100 KVA
Primary Voltage: 12000GrdY/6930
Primary Voltage Switch: N/A
Primary Voltage Class: 15 kV Class
Primary Phasor: Grounded Wye
Primary BIL: 125 kV
Secondary Voltage: 240/120V (L-N)
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: KNAN; Self-Cooled

Ratings

Meets/Exceeds DOE 2016 Efficiency Ratings
Complies with ANSI / IEEE C57.12.00
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 ANSI / IEEE C57.12.80
Complies with ANSI / IEEE C57.147
Complies with ASTM D3487

Non-PCB Insulating Fluid
Lifting Lugs Included

Efficiency: 99.20%

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: Middle of Tank Body, Left of Mounting Provisions

Impedance: 2.0% Typical

Primary Connection Type: Load Break Bushing

Primary Bushing Rating: 15 kV Class, 125 kV BIL, 200A, Load Break, IEEE 386 Color Red

Primary Termination: Externally Clamped Well Bushings w/ Removable Studs, 200A Load Break Elbows w/ Inserts

Primary Connection Qty: (4) 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: (1) High Voltage Elbow Surge Arrestors, Included

Primary Surge Arrestor Voltage Rating: 9 kV Class Elbow Arrestor

Primary Surge Arrestor MCOV Rating: 7.65 kVrms

Secondary Connection Type: Live Bushing Lug

Secondary Connections: Lead Wire Cables, 4/0 AWG Copper Wire, 14" Length

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

Polarity: Subtractive

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

Transformer Protection: Bayonet Fuse

Load Break Switch: (1) 4-Position Load Break Switch

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*: 61.11 Gallons

Fluid Weight*: 606.26 lb

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: 55 dBA

Elevation Level: N/A

Core Material: Grain Oriented Steel

Tank Material: Coated Steel

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

Hardware Material: Coated Steel Hardware

Paint Type: Weatherproof and UV Resistant Epoxy Coating and Undercoating

Finish Color: ANSI 70 Light Grey

Mounting: Floor Mount

Lifting Lugs: Included

Dimensions*: N/A

Dry Weight*: 533.01 lb

Total Weight (Liquid Filled)*: 1,064.8 lb

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*

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

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*Please note that numbers are approximate and subject to change

The MT-PMUT-R7-1P-GMT-100KVA-SZ-BB-A6-BB-CZ-2B4-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 240/120V (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 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-SZ-BB-A6-BB-CZ-2B4-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-SZ-BB-A6-BB-CZ-2B4-M1 features biodegradable 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-SZ-BB-A6-BB-CZ-2B4-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 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 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-SZ-BB-A6-BB-CZ-2B4-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)

There are no Faqs

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Export Control Classification Number (ECCN): EAR99

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- **HigResPic2**(https://www.larsonelectronics.com/images/product/HigResPic2/326530.JPG)
- **Video1**(https://www.youtube.com/watch?v=GPRqYY_mJNI)
- **Video2**(https://www.youtube.com/watch?v=oZDa7R7XEZ0)
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