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MT-SSVT-R7-1P-GXL-50KVA-SN-AZ-A6-BM-CZ-Z-M1

50 KVA Station Service Voltage Transformer, 161000Y/92000 Grounded Wye Primary, 250V/125 Secondary, Mineral Oil, Copper, Tap Changer

Product ID: 305326

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



Image: MT-SSVT-R7-1P-GXL-50KVA-SN-AZ-A6-BM-CZ-Z-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-SSVT-R7-1P-GXL-50KVA-SN-AZ-A6-BM-CZ-Z-M1 Station Service Voltage Transformer

Transformer Type: Station Service Voltage Transformer, Conventional Type
Transformer Configuration: Liquid Filled
Transformer Polarity Type: Subtractive
Phase: Single Phase
Capacity: 50 KVA
Primary Voltage: 161000Y/92000V
Primary Phasor: Grounded Wye
Primary Voltage Class: 170 KV
Primary BIL: 750 kV
Secondary Voltage: 250V/125 (L-N-L)
Secondary Voltage Class: 1.2 kV Class
Secondary Phasor: Dual Winding Single Phase
Secondary BIL: 30 KV
Turns Ratio: 0.5%
Marked Ratio: 736/368:1
Metering Winding: N/A
Metering Voltage Class: N/A
Metering BIL: N/A

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.

Accuracy Class: N/A
Accuracy Range: N/A
Frequency: 60 Hz
Temperature Rise: 65°C
Insulation Rating: Class E Insulation - 120°C, 248°F
Internal ARC Protection Class: Class I
Internal ARC Current 30 KA
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: 10%
Primary Connection Type: Brought out through weather shields
Primary Winding Termination: Porcelain High Voltage Bushing (Approved by Entergy), 4-Hole NEMA Pad Terminal
Primary Connection Qty: (1)
Primary Winding Neutral Termination: Included, 5 kV bushing and grounded externally to the tank with a removable copper strap
Secondary Connection Type: Brought out through bushings
Secondary Connections: Live Bushing Lugs, multi-strand copper and without splices
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
Secondary Conduit Entry: Included, (2) 1.5 inch knockouts to allow conduit entry at the bottom
Terminals: Tin Plated Primary and Secondary - Accepts Copper or Aluminum Connections
Secondary Junction Box: Included, With provisions for two 1-1/2 inch conduit connections, one on each side of the box
Grounding Provisions: Included, two-hole NEMA standard ground pad for tank grounding
Primary Protection: Included, one outdoor window type current transformer, rated 600-5A with C100 accuracy, supplied for primary line to ground fault detection and protection. This CT is installed by Entergy on the SSVT support structure
Secondary Protection: Included, one outdoor bar type current transformer, rated 100-5A with C50 accuracy, supplied and mounted on H0 bushing for secondary ground fault detection and protection
Min. Creepage Distance: 161"
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 - Type II, Non-PCB
Fluid Capacity*: 22.98 Gallons
Fluid Weight*: 207.23 lb
Liquid Level Indicator: Included
Temperature Indicator: Included
Pressure/Vacuum Indicator: Included
Pressure Relief Device: Included, Automatic Action
Sudden Pressure Relay: Included
Fill Valve: 1/2" NPT Port w/ Removable Bolt
Drain Valve: 1/2" IPS Port w/ Sampling Plug
Winding Material: Copper
Ambient Temperature Rating: -10°C to 50°C
Seismic Rating: Complies with IEEE 693-2018
Sound Level: 51 dBA

Load Losses Based on 85°C Reference Temp.
No Load Loss (in watts): +/- 273W
Full Load Loss (in watts): +/- 1,105W

Note: *Losses offered are typical only, not guaranteed*

Factory Tests:
Induced voltage test, dry and wet
Lightning Impulse test
Switching impulse test
Mechanical test
External RIV
Temperature rise test
Short time mechanical and thermal rating test
Internal arc classification test

Elevation Level: 3300ft (1000 meters) Above Sea Level
Core Material: Grain Oriented Steel
Tank Material: Coated Steel
Housing Material: Coated Steel w/ Corrosion Resistant Cover Band, Removable Top Cover
Hardware Material: 304 Stainless Steel
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*: 30.71"-W x 31.89"-D x 47.24"-H
Tank Diameter*: 24" OD
Dry Weight*: 485.01 lb
Total Weight (Liquid Filled)*: 968 lb
*Please note that numbers are approximate and subject to change

Special Orders - Special Requirements
Contact us for special requirements
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The MT-SSVT-R7-1P-GXL-50KVA-SN-AZ-A6-BM-CZ-Z-M1 Station Service Voltage 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 50 kVA, the industrial transformer features a primary voltage of 161000Y/92000 Grounded Wye and a secondary voltage of single-phase 250V/125 (L-L-N). This transformer connects to a three phase electrical grid system to provide single phase low voltage power for indoor distribution. This voltage transformer features porcelain high-voltage, single bushings on the primary side and three bushings on the secondary side. Equipped with Copper windings and a grain oriented steel core, this voltage transformer consists of one coil and two core loops

The MT-SSVT-R7-1P-GXL-50KVA-SN-AZ-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-SSVT-R7-1P-GXL-50KVA-SN-AZ-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 liquid level, temperature and pressure/vacuum gauges. 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 is a rapid rise relay 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.

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

Benefits: The MT-SSVT-R7-1P-GXL-50KVA-SN-AZ-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.

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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Frequently Asked Questions (FAQ)

There are no Faqs

Export Control Classification Number (ECCN): EAR99

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Links (Click on the below items to view):

- **HigResPic1**(https://www.larsonelectronics.com/images/product/HigResPic1/305326.JPG)
- **Video1**(https://www.youtube.com/watch?v=rrNaoWova7o)
- **Video2**(https://www.youtube.com/watch?v=oZDa7R7XEZ0)
- **ISO 9001 Certification**(http://larsonelectronics.com/images/pdfdocs/ISO9001.PDF)
- **Business Certificate**(https://www.larsonelectronics.com/images/pdfdocs/w9.PDF)
- **Shipping Time Map**(https://www.larsonelectronics.com/images/product/ShippingTimeMap/ShippingTimeMap.pdf)