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

www.LarsonElectronics.com
Email: sales@LarsonElectronics.com
Fax: 903.498.3364

## MT-SSVT-R7-1P-GXK-167KVA-SLW-BZ-Z6-BB-CZ-1ZZ-M1

# 167 KVA Station Service Voltage Transformer, 138000Y/79670 Grounded Wye Primary, 125/250V Secondary, KNAN, Copper, Grey

**Product ID: 317241**

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



Image: MT-SSVT-R7-1P-GXK-167KVA-SLW-BZ-Z6-BB-CZ-1ZZ-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-GXK-167KVA-SLW-BZ-Z6-BB-CZ-1ZZ-M1 Station Service Voltage Transformer**

**Transformer Type:** Station Service Voltage Transformer
**Transformer Configuration:** Liquid Filled
**Transformer Polarity Type:** Subtractive
**Phase:** Single Phase
**Capacity:** 167 KVA
**Primary Voltage:** 138000Y/79670
**Primary Phasor:** Grounded Wye
**Primary Voltage Class:** 145 KV
**Maximum Continuous Overvoltage (MCOV):** 115%
**Maximum Momentary Overvoltage (MMOV):** 125% for 60 Sec.
**Rated Power Frequency Withstand Voltage:** 275 KV rms
**Primary BIL:** 650 kV
**Secondary Voltage:** 125/250V Center-Tapped
**Secondary Phasor:** Dual Windings, Single Phase
**Secondary Voltage Class:** 1.2 kV Class
**Secondary BIL:** 30 KV
**Frequency:** 60 Hz
**Temperature Rise:** 65°C
**Insulation Rating:** Class E Insulation - 120°C, 248°F

**Ratings**

Meets/Exceeds DOE 2016 Efficiency Ratings
Complies with ANSI / IEEE #C57.13.00
Complies with ANSI / IEEE #C57.13.30
Complies with ANSI / IEEE #C57.13.50
Complies with ANSI / IEEE #C57.12.00
Complies with ANSI / IEEE C57.12.70
Complies with ANSI / IEEE C57.12.80
Complies with ANSI / IEEE C57.12.90
Complies with NEMA Standards
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):** +/- 273W
**Full Load Loss (in watts):** +/- 1,105W

**Cooling Class:** KNAN; Self-Cooled
**Tap Changer:** N/A
**Tap Qty:** N/A
**Tap %:** N/A
**Tap Changer Switch Location:** N/A
**Impedance:** 4.0-7.0% Typical
**Minimum Creepage Distance (line-to-ground voltage):** 147"
**Minimum Strike Distance:** 49"
**Primary Connection Type:** Live Bushing Lug
**Primary Termination:** Polymer High Voltage Bushing, NEMA 4 Hole (Aluminum Alloy designation No. 356 ) Pad (suitable for connection to either copper or aluminum fittings)
**Primary Connection Qty:** (2)
**Secondary Connection Type:** Live Bushing Lugs
**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:** (2) NEMA 2-hole, Suitable for use with No. 4/0 AWG copper grounding cable
**Transformer Protection:** N/A
**Load Break Switch:** N/A
**Anti-Condensation Heater:** Included, In the Secondary Terminal Box
**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*:** 22.98 Gallons
**Fluid Weight*:** 207.23 lbs
**Oil level indicator:** Included, Magnetic Oil Level Gauge
**Temperature Indicator:** N/A
**Pressure/Vacuum Indicator:** N/A
**Pressure Relief Device:** Included, Automatic Action
**Fault Indicator:** N/A
**Fill Valve:** 3/4" NPT Port w/ Removable Bolt
**Drain Valve:** 3/4" NPT Port w/ Sampling Port and device
**Winding Material:** Copper
**Service Condition:** Outdoor
**Ambient Temperature Rating:** -30°C to +40°C
**Sound Level:** 51 dBA
**Wind Speed Rating:** 100 mph
**Elevation Level:** 3300ft (1000 meters) Above Sea Level
**Core Material:** Grain Oriented Silicon Steel
**Tank Material:** Coated Steel
**Housing Material:** Coated Steel w/ Corrosion Resistant Cover Band, Sealed Tank
**Hardware Material:** Stainless Steel Hardware
**Paint Type:** Weatherproof and UV Resistant Epoxy Coating and Undercoating
**Finish Color:** Sky Grey (ANSI #70)
**Mount:** Vertical Structure mounting
**Lifting Lugs:** Included
**Dimensions*:** 30.71"-W x 31.89"-D x 47.24"-H
**Tank Diameter*:** 24" OD
**Dry Weight*:** 485.01 lbs
**Total Weight (Liquid Filled)*:** 968 lbs
*Please note that numbers are approximate and subject to change

***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:** 1-903-498-3364
**E-mail:** sales@larsonelectronics.com

**The MT-SSVT-R7-1P-GXK-167KVA-SLW-BZ-Z6-BB-CZ-1ZZ-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 make 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 167 kVA, the industrial transformer features a primary voltage of 138000Y/79670 Grounded Wye and secondary voltage of single-phase 125/250V. This transformer connects to a three phase electrical grid system to provide single phase low voltage power for outdoor distribution. This voltage transformer features polymer 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 voltage transformer consists of one coil and two core loops

The MT-SSVT-R7-1P-GXK-167KVA-SLW-BZ-Z6-BB-CZ-1ZZ-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-GXK-167KVA-SLW-BZ-Z6-BB-CZ-1ZZ-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 is an oil level gauge 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.

**Protection Fuses:** This transformer does not contain fuses or circuit breakers. 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 outdoor applications

**Benefits:** The MT-SSVT-R7-1P-GXK-167KVA-SLW-BZ-Z6-BB-CZ-1ZZ-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

Links (Click on the below items to view):

- **HigResPic1**( https://www.larsonelectronics.com/images/product/HigResPic1/317241.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 )
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