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## MT-SSVT-R106-1P-GXF-200KVA-SLZ-AZ-A6-BM-CS-1ZZ-M1

# 200 KVA Station Service Voltage Transformer, 115000Y/60375 Grounded Wye Primary, 120/240V Secondary, Oil-filled, Copper, Tap Changer, Pad Mount

**Product ID: 335610**



Image: MT-SSVT-R106-1P-GXF-200KVA-SLZ-AZ-A6-BM-CS-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-R106-1P-GXF-200KVA-SLZ-AZ-A6-BM-CS-1ZZ-M1 Station Service Voltage Transformer**

**Transformer Type:** Station Service Voltage Transformer
**Transformer Configuration:** Liquid Filled
**Transformer Polarity Type:** Subtractive
**Phase:** Single Phase
**Capacity:** 200 KVA
**Primary Voltage:** 115000Y/60375
**Primary Phasor:** Grounded Wye
**Primary Lightning Impulse Withstand Voltage, Full Wave (kV peak):** 550 KV
**Primary Lightning Impulse Withstand Voltage, Chopped Wave (kV peak):** 630 KV
**Primary Power Frequency Withstand Voltage (1-minute, dry L-G kV rms):** 230 KV
**Primary Power Frequency Withstand Voltage (10 seconds, wet, L-G kV rms):** 230 KV
**Secondary Voltage:** 120/240 V (L-N-L)
**Secondary Voltage Class:** 1.2 kV Class
**Secondary Phasor:** Dual Windings, Single Phase
**Secondary BIL:** 30 KV
**Secondary Windings to Ground and to Other Windings (1 minute kV rms):** 3.5 KV
**Frequency:** 60 Hz
**Temperature Rise:** 65°C
**Insulation Rating:** Class E Insulation - 120°C, 248°F
**Cooling Class:** ONAN; Self-Cooled

**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
Lifting Lugs Included

Complies with ASTM D3487

Non-PCB Insulating Fluid

**Efficiency:** 99.00%
*Based on transformer operating at 50% of nameplate base kVA.*
**Load Losses Based on 85°C Reference Temp.**

**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:** 4.0-7.0% Typical, < 6% Target
**Primary Connection Type:** Live Bushing Lug
**Primary Termination:** Porcelain High Voltage Bushing, ANSI 70 Light Grey, w/ NEMA 4-hole Terminal Pad
**Primary Connection Qty:** (1)
**Primary External Terminal Load:** 1.0 kN Horizontal (in any direction), 0.5 kN Vertical
**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
**Partial Discharge Test Level (L-G):** 185 KV
**Maximum partial discharge level at test voltage:** 10 pC
**Minimum Insulator Creepage Distance:** 114.96 inches
**Insulator Contamination Level (L-G):** 44 mm/kV
**RIV Test Voltage (L-G):** 71 KV rms
**Maximum RIV (@ Test Voltage):** 200 µV
**K-Factor Rating (Harmonic Mitigation):** K-1 (Standard)
**Grounding Conductor Clamp Size:** 4/0 AWG Cu
**Insulation Fluid:** Mineral Oil
**Fluid Capacity*:** 22.98 Gallons
**Fluid Weight*:** 207.23 lbs
**Temperature Indicator:** N/A
**Pressure/Vacuum Indicator:** N/A
**Pressure Relief Device:** Included, Automatic Action
**Fault Indicator:** N/A
**Fill Valve:** 1/2" NPT Port w/ Removable Bolt
**Drain Valve:** 1/2" NPT Port w/ Removable Bolt
**Winding Material:** Copper
**Ambient Temperature Rating:** -5°C to +40°C
**Sound Level:** 51 dBA
**Wind Load:** 160 mph (with an overload factor of 1.1)
**Seismic Qualification:** High, per the IEEE-693 std
**Elevation Level:** 3300ft (1000 meters) Above Sea Level
**Core Material:** Grain Oriented Steel
**Tank Material:** 304 Stainless Steel
**Housing Material:** 304 Stainless 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:** ANSI 70 Light Grey
**Mounting:** Pad Mounted
**Lifting Lugs:** Included
**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

**No Load Loss (in watts):** +/- 273W
**Full Load Loss (in watts):** +/- 1,105W

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

**Factory Tests:**

Turns Ratio Test
Resistance Test
Impedance Test
Lightning impulse voltage test on the primary winding
Radio influence voltage (RIV) test
Power frequency voltage withstand test – wet
Power frequency voltage withstand / partial discharge test – dry
Temperature rise test
Short-time mechanical and thermal rating test
Creepage distance measurement
Seismic test
Tests on insulating oil (DGA and water content analysis)

**Special Orders - Special Requirements**
Contact us for special requirements
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**The MT-SSVT-R106-1P-GXF-200KVA-SLZ-AZ-A6-BM-CS-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 pad 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 200 kVA, the industrial transformer features a primary voltage of 115000Y/60375 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 voltage transformer features porcelain high-voltage, single bushing 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-R106-1P-GXF-200KVA-SLZ-AZ-A6-BM-CS-1ZZ-M1 is air cooled and does not have fans or mounting provisions 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-R106-1P-GXF-200KVA-SLZ-AZ-A6-BM-CS-1ZZ-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.

**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-R106-1P-GXF-200KVA-SLZ-AZ-A6-BM-CS-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