Larson Electronics LLC
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MT-PSTH-GZ-3P-GMA-1.794MVA-HNS-Z6-BM-CZ-1ZZ-M1

1.794 MVA Hermetically Sealed Substation Grounding Zigzag Transformer - 34500Y/19900 Zigzag, ONAN, Light Grey - NEMA 4

Product ID: 341969

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



Image: MT-PSTH-GZ-3P-GMA-1.794MVA-HNS-Z6-BM-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-PSTH-GZ-3P-GMA-1.794MVA-HNS-Z6-BM-CZ-1ZZ-M1 Substation Grounding Zigzag Transformer

Transformer Type: Substation Power Transformer, Hermetically Sealed Type, Grounding Zigzag Transformer

Transformer Configuration: Liquid Filled Pad Mounted

Phase: Three Phase

Transformer Feed Type: Radial Feed

Capacity: 1.794 MVA (1,794 KVA)

Rated Voltage: 34500Y/19920

Line Voltage Class: 35 kV

Neutral Voltage Class: 25 kV

Line BIL: 200 kV

Neutral BIL: 110 kV

Phasor: Zig-zag

Vector Group: Zn

Frequency: 60 Hz

Temperature Rise: 65°C

Forced Air (Fans): N/A

Radiator: Included, Removable Cold Rolled Steel

Tap Changer: N/A

Tap Qty: N/A

Ratings

Listed for United States and Canada

Tap %: N/A
Zero Sequence Impedance: 59.8 Ohms
Short Time Ground Current Rating: 1000 A / 10 Sec
Connection Type: Live Front
Termination Arrangement: Side Mounted Porcelain Bushings, Enclosed in ATC with Provisions for Bottom Entry Conduit
Connection: NEMA 4-Hole Pad Terminals
Connection Qty: (4) Primary Connections
Line Bushing Rating: 35 kV Class, 200 kV BIL
Neutral Bushing Rating: 110 kV BIL
Surge Arrestors: N/A
Surge Arrestor Voltage Rating: N/A
Surge Arrestor MCOV Rating: N/A
Overcurrent Protection (OCP): N/A
Overcurrent Protection Method: N/A
Overcurrent Protection Holder: N/A
Line Bushings Current Transformer: Included, (1) Per Bushing 2000:5 MR, 2.5L400 Accuracy Class, (1) Per Bushing 1200:5 MR, 2.5L400 Accuracy Class
Neutral Bushing Current Transformer: Included, (1) 1200:5 MR BCT, 2.5L400 Accuracy Class
Grounding Provisions: Included
Insulation Fluid: Mineral Oil Insulating Fluid, Type II, Non-PCB Fluid
Fluid Capacity: TBD
Cooling Class: ONAN
Liquid Preservation System: Included, Sealed Tank Per IEEE C57.12.10
Liquid Level Gauge: Included, Magnetic Type, QUALITROL 032 Series
Liquid Temperature Gauge: Included, QUALITROL, 104/TR6000
Pressure/Vacuum Gauge: Included, QUALITROL #70-35C, ±10 PSI, w/ Bleeder
Fault Pressure Device: None
Pressure Relief Device: Included, QUALITROL 213 Series, w/ Model SLD-603 Series Directional Shield
Transformer Temperature Monitor: Included, SEL 2414
Fill Valve: Included
Drain Valve w/ Sampler Port: Included, (2) 2-inch globe-type
Rapid Rise Relay: Included, 125V Rated
Load Break Switch: N/A
Winding Material: Copper
No Load Loss: TBD
Full Load Loss: TBD
Ambient Temperature Rating: -
Sound Level: 64 dBA, Complies with NEMA TR-1
Enclosure Rating: NEMA 4
Jacking Provisions: Included
Lifting Lugs: Included
Paint Type: Munsell™ 5BG 7.0/0.4 Light Grey (ANSI #70)
Mounting: Pad Mounted
Conduit Opening: N/A
Dimensions: 120.47"-W x 99.63"-D x 166.23"-H
Weight: 35,781 lbs

Special Orders - Special Requirements
Contact us for special requirements
Toll Free: 1-800-369-6671
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The MT-PSTH-GZ-3P-GMA-1.794MVA-HNS-Z6-BM-CZ-1ZZ-M1 Hermetically Sealed Substation Zig Zag Grounding Transformer from Larson Electronics offers powerful, reliable, and efficient power distribution in outdoor 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 transformer ensures extra space for storing

oil and is equipped with breathers to facilitate airflow. The conservator transformer should be installed on supporting structures.

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

Transformer Features: The industrial transformer features a rated voltage of three-phase 34500Y/19920 Grounding Zigzag. This system is rated for 1.794 MVA (1,794 KVA). We offer systems with loop or radial feed, as well as dead front or live front primary connections.

The system features copper windings for high strength and thermal/electrical conductivity. This transformer consists of a rectangular coil and a five-legged wound core design with three coils and four core loops (this is for three-phase transformers only; single-phase units have one coil and two core loops).

The MT-PSTH-GZ-3P-GMA-1.794MVA-HNS-Z6-BM-CZ-1ZZ-M1 doesn't have fans or mounting provisions for fans.

Temperature Rise: This unit features 65°C temperature rise for reduced heat waste, increased reliability and longer life. At 65°C temperature rise, the transformer offers 1.794 MVA (1,794 KVA). The transformer meets standard efficiency requirements. 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-PSTH-GZ-3P-GMA-1.794MVA-HNS-Z6-BM-CZ-1ZZ-M1 features mineral oil fluid (ONAN). We offer transformers with biodegradable or FR-3 fluids, if needed.

Biodegradable Fluid: Biodegradable cooling fluid (vegetable oil) has a higher heat capacity compared to mineral oil, making the liquid safer to use and more reliable during operations. Vegetable oil has a higher flash point and fire point than mineral oil, hydrocarbon oil, silicone oil and synthetic ester. This cooling fluid is also non-toxic and can tolerate higher breakdown voltages than mineral oil. When operating at high temperatures, biodegradable cooling liquid sustains up to 120% loan conditions, which helps preserve the transformer's lifespan and performance.

Gauges: The following gauges are included with the system: liquid level, temperature and pressure/vacuum gauges. Standard liquid level, temperature and pressure/vacuum gauges are analog, manual reading types.

Fault Pressure Devices: There are no fault pressure devices on the unit. Fault pressure devices are used to detect high rates of pressure rise within the tank.

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 doesn't come with surge arresters. Surge arresters are designed for over-voltage and transient voltage protection, the components prevent damage caused by lightning, internal switching or voltage surges. We can offer models without high elbow surge arresters that have mounting provisions for customer-provided surge arresters.

Load Breaker Switch: The transformer is not equipped with load breaker switches.

Valves: The MT-PSTH-GZ-3P-GMA-1.794MVA-HNS-Z6-BM-CZ-1ZZ-M1 is equipped with a pressure relief valve, fill valve and drain valve with a sampler port.

Protection Fuses: This transformer does not have bayonet protection fuses on the primary side. 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: This substation transformer should be installed on supporting structures, such as the roof of the transformer main tank.

Benefits: The MT-PSTH-GZ-3P-GMA-1.794MVA-HNS-Z6-BM-CZ-1ZZ-M1 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: Grounding transformer purposes.

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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Warranty: 24 Months.

Export Control Classification Number (ECCN): EAR99

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- **HigResPic1**(https://www.larsonelectronics.com/images/product/HigResPic1/341969.JPG)
- **HigResPic2**(https://www.larsonelectronics.com/images/product/HigResPic2/341969.JPG)
- **HigResPic3**(https://www.larsonelectronics.com/images/product/HigResPic3/341969.JPG)
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- **HigResPic5**(https://www.larsonelectronics.com/images/product/HigResPic5/341969.JPG)
- **Video1**(https://www.youtube.com/watch?v=4-JEyYeYcn8)
- **ISO 9001 Certification**(http://larsonelectronics.com/images/pdfdocs/ISO9001.PDF)
- **Business Certificate**(https://www.larsonelectronics.com/images/pdfdocs/w9.PDF)
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