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-PSTH-R7-3P-DRU.VP-2.5MVA-YJ-HT-LNT-X5-BM-AZ-1ZZ-M1

2.5 MVA Hermetically Sealed Substation Transformer - 15000V x 20000V Delta Primary, 415Y/240 Wye-N Secondary - ONAN - Aluminum - W/ Wheeled Cart

Product ID: 310309



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-R7-3P-DRU.VP-2.5MVA-YJ-HT-LNT-X5-BM-AZ-1ZZ-M1 3PH Outdoor Power Transformer

Transformer Type: Substation Transformer, Hermetically Sealed
Transformer Configuration: Liquid Filled Substation
Transformer Feed Type: Radial Feed
Phase: Three Phase
Capacity: 2.5 MVA (2500 KVA)
Vector Group: Dyn11
Primary Voltage: 15000V x 20000V
Primary Voltage Class: 25 kV Class
Primary Phasor: Delta x Delta
Primary BIL: 125 kV
Secondary Voltage: 415Y/240
Secondary Voltage Class: 1.2 kV
Secondary Phasor: Wye-N
Secondary BIL: 30 kV
Frequency: 50 Hz
Temperature Rise: 65°C
Cooling Class: ONAN
Forced Air (Fans): N/A
Tap Changer: Included, (2) [3-position Tap Changer, Manual Off Load Changer]
Tap Qty: (1) FCAN Above Taps, (1) FCBN Below Taps
Tap %: 2.5% for 20000V & 3.33% for 15000V

Ratings

Meets/Exceeds IEC 60076 Ratings
Non-PCB Insulating Fluid
Tamper Proof Housing
Class A Insulation

No Load Loss: 1994W
Full Load Loss: 24072W
Note: Losses offered are typical only, not guaranteed

Tap Changer Switch Location: High Voltage (HV) Front Compartment

Impedance: 6.48%

Primary Connection Type: Dead Front

Primary Termination: Lockable Bushings

Primary Connection Qty: (3)

Primary Connection Rating: 200A, 25 kV

Primary Surge Arrestors: N/A

Primary Surge Arrestor Voltage Rating: N/A

Primary Surge Arrestor MCOV Rating: N/A

Primary Over Current Protection (OCP): N/A

Primary Over Current Protection Method: N/A

Primary Over Current Protection Holder: N/A

Secondary Connection Type: Live Font

Secondary Connections: NEMA 4-Hole Spade Terminals Enclosed in ATC

Secondary Connection Qty: (4)

Secondary Over Current Protection (OCP): N/A

Grounding Provisions: (1) Grounding lug, accepts #2 copper

Metering Current Transformer (CT): N/A

Metering Panel: N/A

Control Panel: Buchholz Relay (alarm and trip), Pressure Relief Device (alarm and trip), Oil Level Indicator (alarm and trip), Dehydrating Breather, Oil Temp (alarm and trip), Coil Winding Temp (alarm and trip)

Load Break Switch: N/A

Load Break Switch Qty: N/A

Load Break Switch Location: N/A

Efficiency Standard(s): Meets ANSI/IEEE Standards

K-Factor Rating (Harmonic Mitigation): K-1 (Standard)

Pulse Drive Rating: N/A

Insulation Fluid: Mineral Oil Fluid - Non-PCB Fluid

Fluid Capacity: N/A

Liquid Level Indicator: Analog Dial Gauge

Temperature Indicator: Analog Dial Gauge

Pressure/Vacuum Indicator: Analog Dial Gauge

Pressure Relief Device: Included, Automatic Action

Fill Valve: Removable Bolt

Fill Valve Location: Front Compartment

Drain Valve: Included, w/ Sampler, Ball Type

Drain Valve Location: Front Compartment

Winding Material: Aluminum

Ambient Temperature Rating: 40°C

Sound Level: Complies to NEMA TR-1

Elevation Rating: 3300ft (1000 meters) Above Sea Level

Core Material: Grain Oriented Silicon Steel

Tank Material: Coated Steel

Cabinet Material: Coated Steel

Protection Rating: NEMA 3

Base Platform Material: Coated Steel

Lifting Lugs: Included, (2)

Housing Type: Compartmental Cabinet, HV Compartment Left, LV Compartment Right

Paint Type: Weatherproof and UV Resistant Epoxy Coating and Undercoating

Finish Color: Grey

Mounting: Mounted On a Wheeled Cart, w/ (4) Wheels, 32.28"-W, 35.43"-D Center to Center

Conduit Opening: N/A

Dimensions: (87"-W, 38.6"-D, 82.24"-H) ± 0.6"

Weight: 10,626 lbs

*Please note that numbers are approximate and subject to change

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-PSTH-R7-3P-DRU.VP-2.5MVA-YJ-HT-LNT-X5-BM-AZ-1ZZ-M1 Conservator Substation 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 makes 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 air flow. 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 dual primary voltages of three-phase 15000V x 20000V Delta and a secondary voltage of three-phase 415Y/240. This system is rated for 2.5 MVA (2,500 KVA). This transformer features a 3-position tap changer with two, +/- 2.5% taps above and two, +/- 2.5% taps below to allow small changes for voltage. We offer systems with loop or radial feed, as well as dead front or live front primary connections.

The distribution transformer is equipped with a rigid tank with a level indicator and a rubber bag inside the unit. An accessible IP44 rated weatherproof junction box with glands for single core cables from LV connection is available.

The system features aluminum windings for high strength and thermal/electrical conductivity. This transformer consists of rectangular coil and 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-R7-3P-DRU.VP-2.5MVA-YJ-HT-LNT-X5-BM-AZ-1ZZ-M1 does not have fans for forced air cooling. This non-sealed system features breathers for cooling when operating temperatures increase.

Temperature Rise: This unit features 65°C temperature rise for reduced heat waste, increased reliability and longer life. The transformer meets standard ANSI/IEEE 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-R7-3P-DRU.VP-2.5MVA-YJ-HT-LNT-X5-BM-AZ-1ZZ-M1 features mineral fluid (ONAN). We offer transformers with biodegradable oil or FR-3 fluids, if needed.

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 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 does not come with surge arresters on the primary side. 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 doesn't contain a load breaker switch.

Valves: The MT-PSTH-R7-3P-DRU.VP-2.5MVA-YJ-HT-LNT-X5-BM-AZ-1ZZ-M1 is equipped with a pressure relief valve, fill valve and drain valve with sampler port.

Protection Fuses: This transformer does not have bayonet protection fuses on the primary side. 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: This hermetically sealed substation transformer is installed on a movable wheeled cart.

Benefits: The MT-PSTH-R7-3P-DRU.VP-2.5MVA-YJ-HT-LNT-X5-BM-AZ-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: General purposes, industrial sites, electrical rooms, underground vaults, manufacturing facilities, steel plants, offshore, commercial, military, processing plants, electric power distribution, utilities 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.

Frequently Asked Questions (FAQ)