Larson Electronics LLC
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MT-DOE16-3P-120.277Y-500KVA-480Y.277-N3R-SS

500 kVA 3PH DOE Transformer, 120/277Y Wye Primary, 480Y/277 Wye-N Secondary, N3R, Ventilated, 60 Hz, Stainless Steel

Product ID: 318851

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



Image: MT-DOE16-3P-120.277Y-500KVA-480Y.277-N3R-SS

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-DOE16-3P-120.277Y-500KVA-480Y.277-N3R-SS DOE Efficiency Isolation Transformer

Transformer Type: Isolation Transformer
Transformer Configuration: Dry Type
Phase: Three Phase
Frequency: 60 Hz
Primary Voltage: 120/277V AC
Primary Connection: Wye
Capacity: 500 KVA
Secondary Voltage: 480Y/277V AC
Secondary Connection: Wye-Neutral
Knockouts: -
FCAN (Above) Taps: 2
FCAN (Below) Taps: 4
Tap %: 2.5
Impedance: 2.5-6.5% typical
Efficiency @ 35% Load: ~98%
Winding Material: Aluminum
Primary Termination (Std): Terminal Lugs
Secondary Termination (Std): Terminal Lugs
Termination Access: Front Access Cover
Mounting: Floor

Approvals/Ratings

NRTL listed for United States
NRTL listed for Canada
NEMA 3R Indoor/Outdoor Steel Enclosure
Meets or Exceeds NEMA ST-20 Standards
DOE Efficiency Isolation Transformer
Distribution Type Transformer
Built to UL-50 Standards
Seismic Qualified for Earthquake Loads
RoHS
CE Certified

Cooling: Air/Dry
Insulation: 220°C
Temperature Rise: 150°C
Sound Level: Meets NEMA ST-20 Standards
Enclosure Material: NEMA Type 3R Heavy Duty Ventilated - Stainless Steel
Finish: ANSI 61 Grey
Dimensions: 41.5"L x 45.6"W x 57.8"H
Weight: 2480 lbs
Shipping Method: Pallet Freight - LTL
Shipping Weight: 2630 lbs
Shipping Dimensions: 48"L x 56"W x 2480"H

Special Orders - Special Requirements
Contact us for special requirements
Toll Free: 1-800-369-6671
Intl: 1-903-270-1187
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E-mail: sales@larsonelectronics.com

The MT-DOE16-3P-120.277Y-500KVA-480Y.277-N3R-SS Three Phase 120/277Y to 480Y/277 500 KVA DOE Efficiency Transformer from Larson Electronics is powerful, reliable and designed with the environment in mind. Suitable for both indoor and outdoor applications, the MT-DOE16-3P-120.277Y-500KVA-480Y.277-N3R-SS provides increased reliability and protection against critical equipment failures. This 500 KVA isolation is designed for distribution loads and potential seismic activity. The lower operating costs, lower heat emissions and lower cost of ownership make this transformer ideal for a wide range of applications and businesses.

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

Transformer Features: The MT-DOE16-3P-120.277Y-500KVA-480Y.277-N3R-SS DOE Efficiency transformer is a three phase transformer with a 500 KVA capacity rating. This isolation transformer is configured with an input voltage of 120/277Y Delta 3-Phase AC on the primary side and an output voltage of 480Y/277 Wye-Neutral 3-Phase AC on the secondary side. Featuring robust construction, this unit's cores are manufactured with non-aging, cold-rolled silicon steel laminations using state of the art technology.

This unit boasts a low cost of ownership and is highly energy efficient. Lower heat emissions mean less cooling is needed as well. The standard NEMA Type 3R enclosure makes the unit suitable for both indoor and outdoor applications and is designed to be floor mounted. Wall mount brackets or additional mounting accessories can be purchased separately. This 500 KVA distribution transformer features 220°C insulation with a 150°C temperature rise.

Benefits: The MT-DOE16-3P-120.277Y-500KVA-480Y.277-N3R-SS 120/277Y to 480Y/277 general purpose transformer offers many benefits to the consumer. Precision cut aluminum transformer winding material help to improve performance. The close tolerances used during manufacturing also eliminates burrs which hinder performance. Each core is specially coated to prevent the ingress of moisture and are electrically balanced to minimize axial forces during short circuit situations.

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 turn into cost savings for owners in the form of lower energy bills and decreased cost of ownership. Integrated floor and wall mounting brackets make installation fast and easy and the offset outward facing floor installation holes allow for easy power tool access.

The MT-DOE series of transformers from Larson Electronics meet or exceed efficiency standards for United States and Canada. This results is overall lower cost of ownership throughout the life of the transformer.

Safety: The MT-DOE16-3P-120.277Y-500KVA-480Y.277-N3R-SS is an isolation transformer which means that it provides operators with an increased level of protection against electric shock and injury. An isolation transformer can also suppress electrical noise in sensitive devices and transfer power between two circuits which must not be

connected. The MT-DOE16-3P-120.277Y-500KVA-480Y.277-N3R-SS achieves these safety features by separating or "isolating" the powered device from the power source and insulation between the primary and secondary power sources.

Applications: Converting 120/277Y local grid power to 480Y/277 for on-site equipment. This 500 KVA power transformer is ideal for sensitive equipment such as CNC equipment, computers, medical devices, ovens, or laboratory instruments.

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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Export Control Classification Number (ECCN): EAR99

Links (Click on the below items to view):

- **Operations Manual**(https://www.larsonelectronics.com/images/product/Manual/318851.PDF)
- **HigResPic1**(https://www.larsonelectronics.com/images/product/HigResPic1/318851.JPG)
- **HigResPic2**(https://www.larsonelectronics.com/images/product/HigResPic2/318851.JPG)
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