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MT-DOE16-3P-690D-30KVA-480Y.277-208Y.120-N3R

30 kVA 3PH DOE Transformer, 690V Delta Primary, 480Y/277 Wye-N Secondary, 208Y/120 Wye-N Tertiary, N3R, Ventilated, 60 Hz

Product ID: 321341

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



Image: MT-DOE16-3P-690D-30KVA-480Y.277-208Y.120-N3R

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-690D-30KVA-480Y.277-208Y.120-N3R DOE Efficiency Isolation Transformer

Transformer Type: Isolation Transformer
Transformer Configuration: Dry Type
Phase: Three Phase
Frequency: 60 Hz
Primary Voltage: 690V AC
Primary Connection: Delta
Capacity: 30 KVA
Secondary Voltage: 480Y/277V AC
Secondary Connection: Wye-Neutral
Tertiary Voltage: 208Y/120V AC
Tertiary Connection: Wye-Neutral
Knockouts: Sides
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

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
UL Certified

Termination Access: Front Access Cover
Mounting: Floor
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 - Steel
Finish: ANSI 61 Grey
Dimensions: 24"-L x 20"-D x 30"-H
Weight: 485 lbs
Shipping Method: Pallet Freight - LTL
Shipping Weight: 390 lbs
Shipping Dimensions: 48"L x 40"W x 325"H

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

The MT-DOE16-3P-690D-30KVA-480Y.277-208Y.120-N3R Three Phase 690V to 480Y/277 to 208Y/120 30 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-690D-30KVA-480Y.277-208Y.120-N3R provides increased reliability and protection against critical equipment failures. This multi-voltage isolation transformer is designed for distribution loads and potential seismic activity. The lower operating costs, lower heat emissions, and reduced 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-690D-30KVA-480Y.277-208Y.120-N3R DOE Efficiency transformer is a three phase isolation transformer with a 30 KVA capacity on the primary, a 25 KVA capacity on the secondary, and a 2.5 KVA capacity on the tertiary. This transformer is configured with an input voltage of 690/398V Delta 3-Phase AC on the primary side, an output voltage of 480/277V Wye 3-Phase AC on the secondary side, and a tertiary output voltage of 208/120V Wye 3-Phase AC. 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 30 KVA distribution transformer features 220°C insulation with a 150°C temperature rise.

Benefits: The MT-DOE16-3P-690D-30KVA-480Y.277-208Y.120-N3R 690V to 480Y/277 to 208Y/120 general purpose transformer offers many benefits to the consumer. Precision-cut aluminum transformer winding material improves performance. The close tolerances used during manufacturing eliminate burrs that hinder performance. Each core is specially coated to prevent moisture ingress and is electrically balanced to minimize axial forces during short circuit events.

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-690D-30KVA-480Y.277-208Y.120-N3R 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-690D-30KVA-480Y.277-208Y.120-N3R 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 690V local grid power to 480Y/277 and 208Y/120 for on-site equipment. This transformer is ideal for CNC machines, IT systems, medical equipment, ovens, and laboratory instruments requiring clean and reliable power distribution.

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: 6 Months.

Export Control Classification Number (ECCN): EAR99

Links (Click on the below items to view):

- **Operations Manual**(https://www.larsonelectronics.com/images/product/Manual/321341.PDF)
- **HigResPic1**(https://www.larsonelectronics.com/images/product/HigResPic1/321341.JPG)
- **HigResPic2**(https://www.larsonelectronics.com/images/product/HigResPic2/321341.JPG)
- **HigResPic3**(https://www.larsonelectronics.com/images/product/HigResPic3/321341.JPG)
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