Larson Electronics LLC
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MT-DOE16-3P-208D-45KVA-400Y.231-N3R-CU

45 kVA 3PH DOE Transformer, 208V Delta Primary, 400Y/231 Wye-N Secondary, NEMA 3R, Ventilated, 50 Hz, Copper

Product ID: 320649

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



Image: MT-DOE16-3P-208D-45KVA-400Y.231-N3R-CU

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-208D-45KVA-400Y.231-N3R-CU DOE Efficiency Isolation Transformer

Transformer Type: Isolation Transformer
Transformer Configuration: Dry Type
Phase: Three Phase
Frequency: 50 Hz
Primary Voltage: 208V AC
Primary Connection: Delta
Capacity: 45 KVA
Secondary Voltage: 400Y/231V AC
Secondary Connection: Wye-Neutral
Knockouts: Sides
FCAN (Above) Taps: 2
FCAN (Below) Taps: 4
Tap %: 2.5
Impedance: 2.5-6.5% typical
Excitation Current: 3.26%
Efficiency @ 35% Load: ~98%
No Load Loss: 219W
Load Loss (@ 170°C): 2461W
Total Losses: 2780W
Winding Material: Copper

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

Primary Termination (Std): Terminal Lugs
Primary Connection/Phase: 1 x 250 MCM
Secondary Termination (Std): Terminal Lugs
Secondary Connection/Phase: 1 x #2 AWG-#14 AWG
Termination Access: Front Access Cover
Mounting: Floor
Cooling: Air/Dry
Insulation: 220°C
Temperature Rise: 150°C
Sound Level: 45 dBA
Enclosure Material: NEMA Type 3R Heavy Duty Ventilated - Steel
Finish: ANSI 61 Grey
Dimensions: 25-5/8"L x 30-3/8"W x 36-1/4"H
Weight: 343 lbs
Shipping Method: Pallet Freight - LTL
Shipping Weight: -
Shipping Dimensions: -

Special Orders - Special Requirements
Contact us for special requirements
Toll Free: 1-800-369-6671
Intl: 1-903-270-1187
Fax: 1-903-765-7664
E-mail: sales@larsonelectronics.com

The MT-DOE16-3P-208D-45KVA-400Y.231-N3R-CU Three Phase 208V to 400Y/231 45 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-208D-45KVA-400Y.231-N3R-CU provides increased reliability and protection against critical equipment failures. This 45 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-208D-45KVA-400Y.231-N3R-CU DOE Efficiency transformer is a three phase transformer with a 45 KVA capacity rating. This isolation transformer is configured with an input voltage of 208V Delta 3-Phase AC on the primary side and an output voltage of 400Y/231 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 45 KVA distribution transformer features 220°C insulation with a 150°C temperature rise.

Benefits: The MT-DOE16-3P-208D-45KVA-400Y.231-N3R-CU 208V to 400Y/231 general purpose transformer offers many benefits to the consumer. Precision cut copper transformer winding material helps to improve performance. The close tolerances used during manufacturing also eliminate burrs, which hinder performance. Each core is specially coated to prevent the ingress of moisture and is 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 turns 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-208D-45KVA-400Y.231-N3R-CU 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-208D-45KVA-400Y.231-N3R-CU 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 208V local grid power to 400Y/231 for on-site equipment. This 45 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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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/320649.PDF)
- **HigResPic1**(https://www.larsonelectronics.com/images/product/HigResPic1/320649.JPG)
- **HigResPic2**(https://www.larsonelectronics.com/images/product/HigResPic2/320649.JPG)
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