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## MT-DOE16-3P-480D-45KVA-208Y.120-N3R-M5

# 45 kVA 3PH DOE Transformer, 480V Delta Primary, 208Y/120 Wye-N Secondary, NEMA 3R, Ventilated, 60 Hz, Floor/Wall Mount

**Product ID: 331593**



Image: MT-DOE16-3P-480D-45KVA-208Y.120-N3R-M5

**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-480D-45KVA-208Y.120-N3R-M5 DOE Efficiency Isolation Transformer**

**Transformer Type:** Isolation Transformer
**Transformer Configuration:** Dry Type
**Phase:** Three Phase
**Frequency:** 60 Hz
**Primary Voltage:** 480V AC
**Primary BIL:** 10 kV
**Primary Connection:** Delta
**Capacity:** 45 KVA
**Secondary Voltage:** 208Y/120V AC
**Secondary BIL:** 10 kV
**Secondary Connection:** Wye-Neutral

**Knockouts:** -

**FCAN (Above) Taps:** 2
**FCAN (Below) Taps:** 4
**Tap %:** 2.5
**Impedance (@ 170°C):** 4.2%
**Winding Material:** Aluminum
**Primary Termination (Std):** Terminal Lugs, 1 of 2-14 AWG
**Secondary Line Termination (Std):** Terminal Lugs, 1 of 300 MCM-6 AWG

**Secondary Neutral Termination (Std):** Terminal Lugs, 1 of 300 MCM-6 AWG

**Grounding Termination (Std):** Terminal Lugs, (4) 2/0-14 AWG Lugs

**Termination Access:** Front Access Cover
**Cooling:** ANN

**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
CSA Certified
UL Listed
Efficiency Meets DOE 10 CFR PART 431:2016-01 (DOE 2016)

**Insulation:** 220°C
**Temperature Rise:** 150°C
**Sound Level:** 45 dBA, Meets NEMA ST-20 Standards
**Seismic Qualifications:** OSP-0136-10/ IBC 2018/ASCE 7-16 (SDS <=2.0g, Z/h=1.0, Ip=1.5)
**Mounting:** Floor/Wall
**Enclosure Material:** NEMA Type 3R Heavy Duty Ventilated - Steel
**Finish:** Polyester Powder Coat
**Color:** ANSI 61 Grey
**Dimensions:** 20-3/4"L x 23-7/8"W x 30"H
**Weight:** 390 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
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**The MT-DOE16-3P-480D-45KVA-208Y.120-N3R-M5 Three Phase 480V to 208Y/120 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-480D-45KVA-208Y.120-N3R-M5 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-480D-45KVA-208Y.120-N3R-M5 DOE Efficiency transformer is a three phase transformer with a 45 KVA capacity rating. This isolation transformer is configured with an input voltage of 480V Delta 3-Phase AC on the primary side and an output voltage of 208Y/120 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-480D-45KVA-208Y.120-N3R-M5 480V to 208Y/120 general purpose transformer offers many benefits to the consumer. Precision cut aluminum 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 meets or exceeds 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-480D-45KVA-208Y.120-N3R-M5 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-480D-45KVA-208Y.120-N3R-M5 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 480V local grid power to 208Y/120 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