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## MT-DOE16-3P-480D-45KVA-208Y.120-N1-CU-M12

# 45 kVA Distribution Transformer - 480V Delta Primary - 208Y/120 Wye-N Secondary - NEMA 1 - Copper Winding - 150 DegC Temp Rise

**Product ID: 336321**



Image: MT-DOE16-3P-480D-45KVA-208Y.120-N1-CU-M12

**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-N1-CU-M12 DOE Efficiency Isolation Transformer**

**Transformer Type:** Isolation Transformer
**Transformer Configuration:** Dry Type
**Phase:** Three Phase
**Frequency:** 60 Hz
**Primary Voltage:** 480V AC
**Primary Connection:** Delta
**Capacity:** 45 KVA
**Secondary Voltage:** 208Y/120V AC
**Secondary Connection:** Wye-Neutral
**Knockouts:** -
**FCAN (Above) Taps:** 2
**FCAN (Below) Taps:** 4
**Tap %:** 2.5
**Impedance:** 2.5-6.5% typical, 4.34% Target

**Efficiency:** Exceeds DOE 2016 minimum efficiency by 25–50% in loss reduction.

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

**Electrostatic Shield:** N/A
**Winding Material:** Copper
**Primary Termination (Std):** Terminal Lugs
**Secondary Termination (Std):** Terminal Lugs
**Mounting:** Floor
**Cooling:** Air/Dry

**Approvals/Features**

NRTL listed for United States
NRTL listed for Canada
NEMA 1 Indoor Steel Enclosure
Meets or Exceeds NEMA ST-20 Standards
Seismic Qualified for Earthquake Loads
Distribution Type Transformer
Built to UL-50 Standards
CE Certified
RoHS
32-year pro rated warranty
Service life beyond 30 years
ISO 17025 Certified
ISO 14001 Certified
UL Listed
Lockable hinged doors and 360 degree Rotatable IR Ports to reduce arc flash risk
Integrated metering (capacity utilization, load profiles, power quality, energy use)
Thermal sensors (170°C and 200°C alarm points)
Very Low Inrush (VLI) option
Surge protection device (SPD) integration
Nonlinear Load Test with Certificate (NLT)

**Insulation:** 220°C
**Temperature Rise:** 150°C
**Sound Level:** 42 dBA, Meets NEMA ST-20 Standards
**Seismic Bracing:** 2.28g
**Feeder Entry Point:** Right Bottom Front
**Secondary Entry Point:** Right Bottom Front
**Enclosure Material:** NEMA Type 1 Heavy Duty Ventilated - Steel
**Finish:** ANSI 61 Grey
**Dimensions:** 19.37"L x 24.39"W x 25.5"H
**Weight:** 140 lbs
**Shipping Method:** Pallet Freight - LTL
**Shipping Weight:** -
**Shipping Dimensions:** -

**Special Orders - Special Requirements**
Contact us for special requirements
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**The MT-DOE16-3P-480D-45KVA-208Y.120-N1-CU-M12 45 KVA 3 Phase Energy Efficient Distribution 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-N1-CU-M12 provides increased reliability and protection against critical equipment failures. 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:** With a transformer rating of 45 kVA, the MT-DOE16-3P-480D-45KVA-208Y.120-N1-CU-M12 distribution transformer is a three phase unit with a primary voltage of 480 V Delta. It also provides a secondary voltage of 208Y/120 V Wye-N. 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 1 enclosure makes the unit suitable for indoor applications and it can be floor mounted. The unit also features 220°C insulation with a 150°C temperature rise.

**Benefits:** The MT-DOE16-3P-480D-45KVA-208Y.120-N1-CU-M12 distribution 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 distribution 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 mounting brackets make installation fast and easy and the offset outward facing installation holes allow for easy power tool access.

**Safety:** The MT-DOE16-3P-480D-45KVA-208Y.120-N1-CU-M12 is a distribution transformer which means that it provides operators with an increased level of protection against electric shock. A distribution 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-N1-CU-M12 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:** General purposes.

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