

MT-DOE16-3P-480D-75KVA-400Y.231-N2

**75 kVA 3PH DOE Transformer, 480V Delta Primary, 400Y/231 Wye-N Secondary, N2, Dry Type -
Ventilated, 60 Hz**

Product ID: 305765



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-75KVA-400Y.231-N2 DOE Efficiency Isolation Dry Type Transformer

Transformer Type: DOE Efficiency - Dry Type
Transformer Configuration: Dry Type - Ventilated
Phase: Three Phase
Capacity: 75 KVA
Vector Group: Dyn11
Primary Voltage: 480V
Primary Voltage Switch: N/A
Primary Voltage Class: 1.2 kV Class
Primary Phasor: Delta
Accessible Neutral: Included
Neutral Grounding: Solid
Primary BIL: 30 KV
Secondary Voltage: 400Y/231V AC
Secondary Voltage Class: 1.2 kV Class
Secondary Phasor: Wye-N
Accessible Neutral: Included
Neutral Grounding: Solid
Secondary BIL: 30 KV
Frequency: 60 Hz
Winding Temperature Rise: 150°C
Insulation: 220°C
Cooling Class: AA
Forced Air (Fans): None
Tap Changer: 5-position De-Energized Tap Changer
Tap Qty: (2) FCAN Above Taps, (2) FCBN Below Taps
Tap %: 2.5%
Impedance: 2.5-6.5% typical

Ratings

Meets/Exceeds DOE 2016 Efficiency Ratings
Meets/Exceeds CSA Efficiency Ratings
Complies with ANSI / IEEE C57.12.29
Complies with ANSI / IEEE C57.12.34
Complies with ANSI / IEEE C57.12.35
Complies with ANSI / IEEE C57.12.70
Complies with ANSI / IEEE C57.12.110
Complies with ANSI / IEEE C57.12.131
Complies with ANSI / IEEE C62.11
Complies with CSA C802-3
Complies with CSA C802.1
Complies with ANSI / IEEE C62.22
Complies with ANSI / IEEE 386
Complies with ANSI / IEEE C2
Complies with ANSI / IEEE C37.47
Complies with CSA C227.4
Complies with CSA C227.5
Complies with ANSI Z535.4
Complies with ASTM D3487
Complies with ASTM D6871
Complies with NEMA 260-1996
Complies with 10 CFR Part 431
Complies with CSA C2.1-06
Complies with CSA C50
Complies with CSA C88
Complies with CSA C88.1
Complies with CSA C88-16

Primary Termination (Std): Terminal Lugs
Secondary Termination (Std): Terminal Lugs
Termination Access: Front Access Cover
Efficiency Standard(s): Meets DOE 2016 Standards, Meets CSA Standards Meets ANSI/IEEE Standards
K-Factor Rating (Harmonic Mitigation): K-1 (Standard)
Pulse Drive Rating: N/A
Winding Material: Copper
Location Of Equipment: Indoor/Outdoor
Service: Severe
Hours Of Operation: 8760 h/year
Seismic Zone: Zone 3 RNE
Average Relative humidity: 70%
Average Barometric Pressure: 8.7 PSI
Isoceraunic Level: 60
Average Wind Speed: 52.82 mi/h
Freezing Level: 0.3 m below ground level
Ambient Temperature Rating: 40°C
Ambient Operating Temperature Range: - 3°C ~ +40°C
Sound Level: 50 dBA
Elevation (Altitude): 14,763 ft (4500 meters) Above Sea Level
Core Material: Grain Oriented Silicone Steel
Cabinet Material: Coated Steel
Base Platform Material: Coated Steel

Nameplate: Stainless steel, Spanish, Complies to IEEE C57.12.34 std

Portability: Lifting lugs, provisions for jacking under base, w/ base construction suitable for using rollers or skidding

Housing Type: Compartmental Air-Filled Cabinet w/ Locking Doors, HV Compartment Left, LV Compartment Right, Steel Barrier Separation, HV Door Spring-Loaded Release Pin in LV Compartment

Enclosure Rating: NEMA 2 Weatherproof Wiring Cabinet, Sealed Tank

Seismic Rating: Yes

Paint Type: Weatherproof and UV Resistant Epoxy Coating and Undercoating

Finish Color: ANSI #61, Light Grey

Mounting: Pad Mounted, Freestanding

Conduit Opening: Bottom Feed Underground Entry/Exit

Dimensions: 22.37"L x 28.15"W x 29.41"H

Weight: 600 lbs

*Please note that numbers are approximate and subject to change

UL Approved

Complies with ANSI / IEEE C57.12.00

Complies with ANSI / IEEE C57 12.28

Factory Tests:

Winding Resistance Test

Insulation Resistance Test

Voltage Ratio Error Test

Short-circuit Impedance Test

No-load Loss (Wattage) Test

Load Loss (Wattage) Test

Induced Voltage Withstand Test

Separate Source Voltage Withstand Test

Pressure Integrity Test

Polarity Test

Phase shift test (Connection group)

Impulse test

Overloads:

200% for half an hour

150% for one hour

125% for four hours

50% constant

Special Orders - Special Requirements

Contact us for special requirements

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E-mail: sales@larsonelectronics.com

The MT-DOE16-3P-480D-75KVA-400Y.231-N2 Three Phase 480V to 400Y/231 75 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-75KVA-400Y.231-N2 provides increased reliability and protection against critical equipment failures. This 75 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-75KVA-400Y.231-N2 DOE Efficiency transformer is a three phase transformer with a 75 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 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 2 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 75 KVA distribution transformer features 220°C insulation with a 150°C temperature rise.

Benefits: The MT-DOE16-3P-480D-75KVA-400Y.231-N2 480V to 400Y/231 general purpose transformer offers many benefits to the consumer. Precision cut copper 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 in overall lower cost of ownership throughout the life of the transformer.

Safety: The MT-DOE16-3P-480D-75KVA-400Y.231-N2 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-75KVA-400Y.231-N2 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 400Y/231 for on-site equipment. This 75 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.









Frequently Asked Questions (FAQ)