Larson Electronics LLC
9419 E US HWY 175, Kemp, TX 75143
Phone: 800.369.6671

www.LarsonElectronics.com
Email: sales@LarsonElectronics.com
Fax: 903.498.3364

MT-ISX-3P-400D-45KVA-230Y.133-GD1-4502-82

45 kVA 3PH DOE Transformer, 400V Delta Primary, 230Y/133 Wye-N Secondary, N12, Ventilated, 60 Hz

Product ID: 291216



Image: MT-ISX-3P-400D-45KVA-230Y.133-GD1-4502-82

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-ISX-3P-400D-45KVA-230Y.133-GD1-4502-82 DOE Efficiency Isolation Transformer

Transformer Type: Isolation Transformer
Transformer Configuration: Dry Type
Phase: Three Phase
Frequency: 50/60 Hz +/- 3%
Primary Voltage: 400 V AC
Primary Connection: Delta
Capacity: 45 KVA
Secondary Voltage: 230Y/133 V AC
Secondary Connection: Wye-Neutral
Protection: 80A Circuit Breaker on Primary Side w/ Shunt Trip and Auxiliary Switch (see description below)
Primary FCAN: 2 x 2.5%
Primary FCBN: 2 x 2.5%
Impedance: 1.7-2.5% (Typical)
Efficiency @ 35% Load: ~98%
Winding Material: Aluminum
Primary Termination (Std): Terminal Lugs
Secondary Termination (Std): Terminal Lugs
Termination Access: Front Access Cover
Mounting: Floor
Cooling: Air/Dry
Insulation: 220°C
Temperature Rise: 150°C
Sound Level: ≤ 60 dBA @ 1 Meter Under Zero to Full Load
Enclosure Material: NEMA Type 12 Heavy Duty Ventilated - Steel

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

Finish: ANSI 61 Grey
Dimensions: 30-9/16"-H (77.63 cm) x 20-11/16"-W (52.55 cm) x 17-13/16"-D (45.24 cm), (*Please note that dimensions are approximate and subject to change*)
Weight: 410 lbs
Shipping Method: Pallet Freight - LTL
Shipping Weight: 475 lbs
Shipping Dimensions: 48"-L x 40"-W x 40"-H

Special Orders - Special Requirements

Contact us for special requirements

Toll Free: 1-800-369-6671
Intl: 1-903-270-1187
Fax: 1-903-498-3364
E-mail: sales@larsonelectronics.com

The MT-ISX-3P-400D-45KVA-230Y.133-GD1-4502-82 from Larson Electronics is a Three Phase 400 V to 230Y/133 45 KVA DOE Efficiency Isolation Transformer that is powerful, reliable, and designed with the environment in mind. Suitable for indoor applications, the MT-ISX-3P-400D-45KVA-230Y.133-GD1-4502-82 provides increased reliability and protection against critical equipment failures. This 45 KVA isolation transformer 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-ISX-3P-400D-45KVA-230Y.133-GD1-4502-82 DOE Efficiency isolation transformer is a three phase transformer with a 45 KVA capacity rating. This isolation transformer is configured with an input voltage of 400 V Delta 3-Phase AC that can operate at +/- 5% of the rated input voltage. It also provides an output voltage of 230Y/133 V Wye-Neutral 3-Phase AC on the secondary side. There is a 80-amp circuit breaker on the primary 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 12 enclosure makes the unit suitable for indoor 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-ISX-3P-400D-45KVA-230Y.133-GD1-4502-82 400 V to 230Y/133 general purpose transformer offers many benefits to the consumer. Precision cut aluminum 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. A double-barrel compression lug (sized per NEC) is included with this unit for ground cables. The compression lug is mounted to existing core and coil frame bolts.

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.

NEMA Rating: The MT-ISX-3P-400D-45KVA-230Y.133-GD1-4502-82 is equipped with a NEMA 12 rated enclosure. A NEMA 12 rated enclosure provides protection from accidental contact, falling dirt, light dripping or splashing from non-corrosive liquids, and settling airborne particles such as dust.

Protection: The MT-ISX-3P-400D-45KVA-230Y.133-GD1-4502-82 features a 80-amp circuit breaker on the primary side. This 3-pole circuit breaker has a 24 V AC shunt trip and auxiliary switch. The switch features one normally open and one normally closed contact. The circuit breaker, shunt trip, and auxiliary switch are all mounted on the right side of the transformer and wired to the primary termnials. A double-barrel grounded neutral lug, sized per NEC, will be provided for grounding purposes. Cable from the circuit breaker lug to the transformer neutral (Xo) will be provided, terminated and sized per NEC. Termination points will be provided for the input voltages, output voltages, shield, and case.

Safety: The MT-ISX-3P-400D-45KVA-230Y.133-GD1-4502-82 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-ISX-3P-400D-45KVA-230Y.133-GD1-4502-82 achieves these safety features by separating or "isolating" the powered device from the power source and insulation between the primary and secondary power sources.

Overload Capacity: When normally operating at 90% of its rated load, the permissible daily overloads above rating are:

- 160% - ½ hour
- 140% - 1 hour
- 125% - 2 hours
- 110% - 4 hours
- 105% - 8 hours

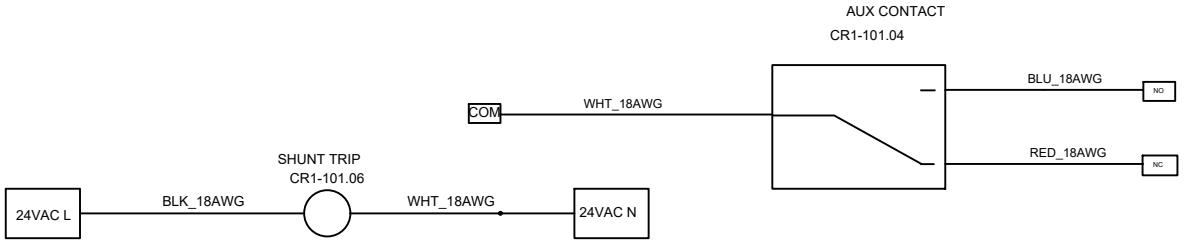
Applications: Converting 400 V local grid power to 230Y/133 for on-site equipment. This 45 KVA power transformer is ideal for sensitive equipment such as CNC equipment, computers, medical devices, ovens, or laboratory instruments.

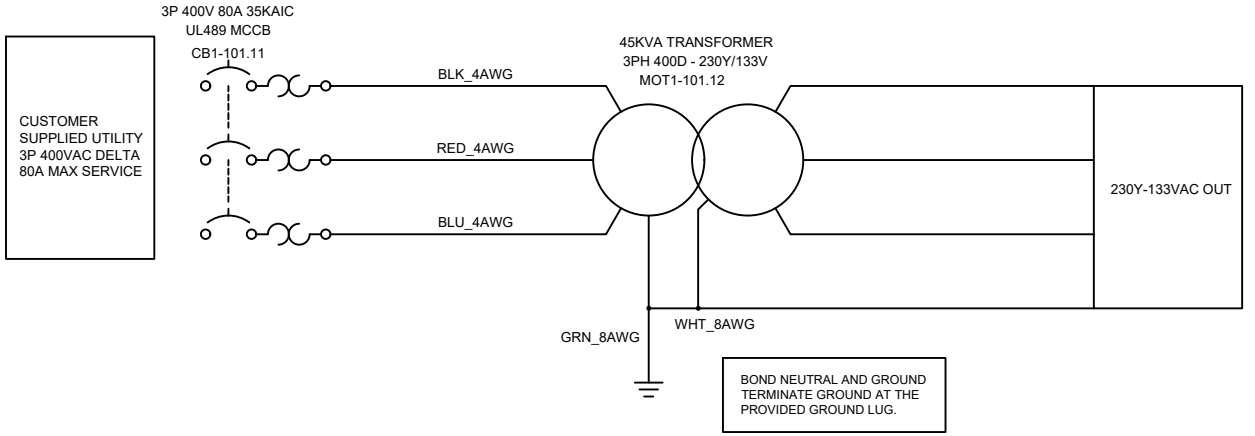
Larson Electronics is a manufacturer and as such can build stationary and portable transformer systems to your specifications. Although we carry several models of power distribution transformer systems, we can deliver custom ordered units almost as quickly as our prebuilt units. If this model does not meet your needs, please contact us at 1-800-369-6671 or sales@larsonelectronics.com to discuss your specific requirements.

REV	DESCRIPTION	DATE
A	PRODUCTION RELEASE	9/4/2024

MT-ISX-3P-400D-45KVA-230Y.133-GD1-4502-82

LARSON ELECTRONICS®





TAGS	QTY	CATALOG	DESCRIPTION
CB1-101.11	1	UNV00015181	DIN RAIL BREAKER 80A,3P,480V.
CR1-101.06	1	UNV00020565	SHUNT TRIPS 24V AC/DC.
CR1-101.04	1	UNV00020590	AUX.CONTACT NO/NC SPDT
MOT1-101.12	1	UNV00020085	45KVA ,3PH,400D PRI,-230Y/133 SEC.

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Frequently Asked Questions (FAQ)

There are no Faqs