

Summary

Single-phase buck-boost transformer. Steps down 473V to 450V at 15 amps continuous output. 6.75 kVA capacity. NEMA 3R enclosed, cETLus listed, wall mount.

Product Description

This unit corrects a 473V building supply to 450V at the point of use, permanently, without modifying the building's electrical service. Designed for equipment rated 450V that is installed on a 473V system experiencing overvoltage.

Wired as an autotransformer, the unit handles only the difference between input and output and not the full load. This is why a 15-amp buck-boost transformer is significantly smaller and lighter than a 15-amp isolation transformer. The encapsulated core construction eliminates audible hum and provides stable thermal performance under continuous duty.

Features a removable wiring compartment door, removable knockout plate, and six NPT knockouts for flexible conduit entry. Surface mounting bracket for easy wall mount installations.



TX-BB-473V-450V-15A — NEMA 3R Encapsulated, cETLus Listed

Specifications

Phase	Single Phase (1-PH), AC	Transformer Type	Buck/Boost
Capacity	6.75 kVA	Configuration	Encapsulated Autotransformer
Primary Voltage	473V	Primary Termination	Lead Wires & Terminal Lugs
Primary Amperage	14.30A	Secondary Termination	Lead Wires & Terminal Lugs
Secondary Voltage	450V	Termination Access	(6) ½" NPT Hubs
Secondary Amperage	15A	Winding Material	Aluminum
Maximum Primary OCP	20A	Enclosure Material	Steel
Frequency	50/60 Hz	Finish Color	ANSI 70 Light Grey
Insulation	180°C	Weight	14 lbs
Temperature Rise	115°C	Dimensions	4.65 x 3.86 x 9.25

Ratings & Certifications

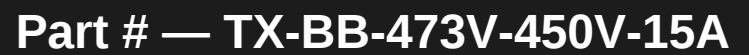
- Listed for United States
- NEMA 3R Indoor/Outdoor Enclosure
- Built to UL-50 Standards
- CE Certified
- Listed for Canada
- Epoxy Resin Encapsulated
- RoHS Compliant



Common Applications

- HVAC & Minisplit
- Loads CNC Machines
- Pump Stations
- Packaging Machines
- Commercial Kitchen Equipment
- Motor Loads
- EV Chargers
- Server Racks & IT Equipment
- Refrigeration & Walk-in
- Coolers Fans & Blowers
- Conveyor Systems
- Overhead Doors

Important: Buck-boost transformers applied as autotransformers do not provide circuit isolation and do not create a neutral. Contact us if your application requires isolation or neutral creation.



Technical drawing of the Bottom (Underside) Plate, showing three views: Top, Front, and Bottom.

Top View:

- Overall dimensions: 4.77" (width) x 5.32" (height) and 4.65" (width) x 9.25" (height).
- Top features: Two 1/2" NPT knockouts, 3.15" apart, with 1.97" spacing between them. 0.82" offset from the top edge.
- Ground hole: Ø 0.2", 3.01" from the left edge, 1.18" from the bottom edge.
- Bottom features: 1.63" wide slot, 0.08" deep, 1.95" wide, 0.86" from the bottom edge.

Front View:

- Overall dimensions: 10.97" (width) x 3.94" (height) and 3.86" (width) x 9.25" (height).
- Knockout: (1) 1/2" NPT Knockout Per Side, 1.89" from the left edge, 1.57" from the bottom edge.
- Screw: M3, 0.39" from the bottom edge, 0.08" from the knockout.
- Other dimensions: 4.17" from the top edge, 2.05" from the bottom edge.

Bottom View:

- Overall dimensions: 4.65" (width) x 3.86" (height) and 2.09" (width) x 1.98" (height).
- Knockouts: (4) 1/2" NPT knockouts, 2.32" apart, 1.16" from the left edge.

Connection Guide

1. Connect **X4** and **X3** together
2. Connect **X2** and **X1** together
3. Connect High Voltage **L1** to **X4**, **X3**
4. Connect Low Voltage **L1** to **X1**, **X2**, **H4**
5. Connect **H3** and **H2** together
6. Connect High & Low Voltage **L2** to **H1**

DIAGRAM C2





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Base Knockouts — (4) ¾" NPT



Side View



Rear View — Surface Mount Bracket



Wiring Compartment — Terminal Leads



Interior — Epoxy Resin Encapsulated Core