

Summary

Single-phase buck-boost transformer. Steps up 480V to 528V at 7.29 amps continuous output. 3.85 kVA capacity. NEMA 3R enclosed, cETLus listed, wall mount.

Product Description

This unit corrects a 480V building supply to 528V at the point of use, permanently, without modifying the building's electrical service. Designed for equipment rated 528V that is installed on a 480V system.

Wired as an autotransformer, the unit handles only the difference between input and output and not the full load. This is why a 7.29-amp buck-boost transformer is significantly smaller and lighter than a 7.29-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-480V-528V-7A — NEMA 3R Encapsulated, cETLus Listed

Specifications

Phase	Single Phase (1-PH), AC	Transformer Type	Buck/Boost
Capacity	3.85 kVA	Configuration	Encapsulated Autotransformer
Primary Voltage	480V	Primary Termination	Lead Wires & Terminal Lugs
Primary Amperage	8.02A	Secondary Termination	Lead Wires & Terminal Lugs
Secondary Voltage	528V	Termination Access	(6) ½" NPT Hubs
Secondary Amperage	7.29A	Winding Material	Aluminum
Maximum Primary OCP	15A	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 edge features: Two 1/2" NPT knockouts, spaced 3.15" apart, with a center-to-center distance of 1.97". The distance from the top edge to the center of the knockouts is 0.82".
- Right edge features: A ground hole (Ø 0.2") located 3.01" from the right edge and 1.18" from the bottom edge. The distance from the bottom edge to the center of the ground hole is 0.08".
- Bottom edge features: A 1/2" NPT knockout located 1.63" from the bottom edge and 1.95" from the right edge. The distance from the right edge to the center of the knockout is 0.86".

Front View:

- Overall dimensions: 10.97" (width) x 3.94" (height) and 9.25" (width) x 3.86" (height).
- Front edge features: A 1/2" NPT knockout located 1.89" from the front edge and 1.57" from the bottom edge. The distance from the bottom edge to the center of the knockout is 0.08".
- Right edge features: A 1/2" NPT knockout located 4.17" from the right edge and 0.39" from the bottom edge. The distance from the bottom edge to the center of the knockout is 0.08".
- Bottom edge features: A 1/2" NPT knockout located 2.05" from the bottom edge and 3.86" from the right edge. The distance from the right edge to the center of the knockout is 0.39".

Bottom View:

- Overall dimensions: 4.65" (width) x 3.86" (height) and 2.09" (width) x 0.98" (height).
- Four 1/2" NPT knockouts are arranged in a 2x2 grid, with a center-to-center distance of 2.32" between the top two knockouts and 1.16" between the bottom two knockouts. The distance from the right edge to the center of the rightmost knockouts is 0.98".

Connection Guide

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

DIAGRAM D2





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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