

Summary

Single-phase buck-boost transformer. Steps down 255V to 240V at 70 amps continuous output. 16.8 kVA capacity. NEMA 3R enclosed, cETLus listed, wall mount.

Product Description

This unit corrects a 255V building supply to 240V at the point of use, permanently, without modifying the building's electrical service. Designed for equipment rated 240V that is installed on a 255V 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 70-amp buck-boost transformer is significantly smaller and lighter than a 70-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-255V-240V-70A — NEMA 3R Encapsulated, cETLus Listed

Specifications

Phase	Single Phase (1-PH), AC	Transformer Type	Buck/Boost
Capacity	16.8 kVA	Configuration	Encapsulated Autotransformer
Primary Voltage	255V	Primary Termination	Lead Wires & Terminal Lugs
Primary Amperage	65.90A	Secondary Termination	Lead Wires & Terminal Lugs
Secondary Voltage	240V	Termination Access	(6) ¾" NPT Hubs
Secondary Amperage	70A	Winding Material	Aluminum
Maximum Primary OCP	90A	Enclosure Material	Steel
Frequency	50/60 Hz	Finish Color	ANSI 70 Light Grey
Insulation	180°C	Weight	34 lbs
Temperature Rise	115°C	Dimensions	5.43"-W x 4.49"-D x 10.87"-H

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 of a 1000W, 12VDC power supply. The drawing includes three views: a top view, a side view, and a bottom view.

Top View: Shows the plate dimensions of 5.43" by 10.87". It features three mounting holes (1.12" diameter) spaced 2.95" apart, and a ground hole (0.2" diameter) with a 1.18" diameter. The plate thickness is 0.25".

Side View: Shows the plate thickness of 0.25" and the location of the (1) 3/4" NPT Knockout Per Side. The knockout is located 1.97" from the side edge and 1.57" from the bottom edge. The plate is 10.87" long and 4.25" wide.

Bottom View: Shows the (4) 3/4" NPT Knockouts arranged in a 2x2 grid. The plate dimensions are 5.43" by 4.45". The knockout locations are defined by dimensions: 1.1" from the left edge, 3.23" from the right edge, 2.52" from the top edge, and 0.95" from the bottom 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





TX-BB-255V-240V-70A — NEMA 3R Encapsulated, cETLus Listed



Base Knockouts — (4) ¾" NPT



Side View



Rear View — Surface Mount Bracket



Wiring Compartment — Terminal Leads



Interior — Epoxy Resin Encapsulated Core