

Summary

Single-phase buck-boost transformer. Steps up 106V to 120V at 93.7 amps continuous output. 11.2 kVA capacity. NEMA 3R enclosed, cETLus listed, wall mount.

Product Description

This unit corrects a 106V building supply to 120V at the point of use, permanently, without modifying the building's electrical service. Designed for equipment rated 120V that is installed on a 106V system.

Wired as an autotransformer, the unit handles only the difference between input and output and not the full load. This is why a 93.7-amp buck-boost transformer is significantly smaller and lighter than a 93.7-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-106V-120V-94A — NEMA 3R Encapsulated, cETLus Listed

Specifications

Phase	Single Phase (1-PH), AC	Transformer Type	Buck/Boost
Capacity	11.2 kVA	Configuration	Encapsulated Autotransformer
Primary Voltage	106V	Primary Termination	Lead Wires & Terminal Lugs
Primary Amperage	106.00A	Secondary Termination	Lead Wires & Terminal Lugs
Secondary Voltage	120V	Termination Access	(6) ¾" NPT Hubs
Secondary Amperage	93.7A	Winding Material	Aluminum
Maximum Primary OCP	150A	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 x 4.49 x 10.87

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 device, showing top and side views with dimensions and features.

Top View Dimensions:

- Overall width: 5.43"
- Overall height: 4.45"
- Distance from left edge to first knockout: 1.1"
- Distance between knockouts: 3.23"
- Distance from right edge to last knockout: 0.95"
- Distance from bottom edge to knockout row: 2.52"

Side View Dimensions:

- Overall height: 10.87"
- Distance from top edge to knockout row: 13"
- Distance from knockout row to bottom edge: 4.25"
- Distance from left edge to knockout: 1.97"
- Distance from knockout to right edge: 1.57"
- Distance from knockout to right edge (bottom): 2.32"
- Distance from knockout to right edge (bottom): 0.08"
- Distance from knockout to right edge (bottom): 0.39"
- Distance from knockout to right edge (bottom): 4.49"

Features:

- (1) 3/4" NPT Knockout Per Side
- (4) 3/4" NPT Knockouts
- Ground hole Ø 0.2"
- 1.18"
- 1.63"
- 1.95"
- 0.08"
- 0.86"
- 5.43"
- 6.93"
- 10.87"
- 5.43"
- 2.95"
- 1.23"
- 1.12"
- 1.12"
- M3

Connection Guide

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

DIAGRAM A2





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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