

Summary

Single-phase buck-boost transformer. Steps up 208V to 218V at 34.4 amps continuous output. 7.5 kVA capacity. NEMA 3R enclosed, cETLus listed, wall mount.

Product Description

This unit corrects a 208V building supply to 218V at the point of use, permanently, without modifying the building's electrical service. Designed for equipment rated 218V that is installed on a 208V system.

Wired as an autotransformer, the unit handles only the difference between input and output and not the full load. This is why a 34.4-amp buck-boost transformer is significantly smaller and lighter than a 34.4-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-208V-218V-7.5KVA — NEMA 3R Encapsulated, cETLus Listed

Specifications

Phase	Single Phase (1-PH), AC	Transformer Type	Buck/Boost
Capacity	7.5 kVA	Configuration	Encapsulated Autotransformer
Primary Voltage	208V	Primary Termination	Lead Wires & Terminal Lugs
Primary Amperage	36.06A	Secondary Termination	Lead Wires & Terminal Lugs
Secondary Voltage	218V	Termination Access	(6) ½" NPT Hubs
Secondary Amperage	34.4A	Winding Material	Aluminum
Maximum Primary OCP	50A	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"-W x 3.86"-D x 9.25"-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, showing three views: Top, Front, and Bottom.

Top View:

- Overall dimensions: 4.77" (width) x 5.32" (height).
- Two circular features (knockouts) with a diameter of 0.82".
- Distance between the centers of the two knockouts: 1.97".
- Ground hole with a diameter of 0.2".
- Other dimensions: 3.01", 1.18", 0.08", 1.63", 1.95", 0.86", 4.65".

Front View:

- Overall dimensions: 10.97" (height) x 3.86" (width).
- Knockout dimension: (1) 1/2" NPT Knockout Per Side.
- Ground hole with a diameter of 0.2".
- Other dimensions: 1.89", 1.57", 0.08", 0.39", 2.05", 3.94", 4.17", 9.25".

Bottom View:

- Overall dimensions: 4.65" (width) x 3.86" (height).
- Four circular features (knockouts) with a diameter of 0.82".
- Distance between the centers of the two knockouts in the top row: 2.32".
- Distance between the centers of the two knockouts in the bottom row: 2.09".
- Other dimensions: 1.16", 0.98".

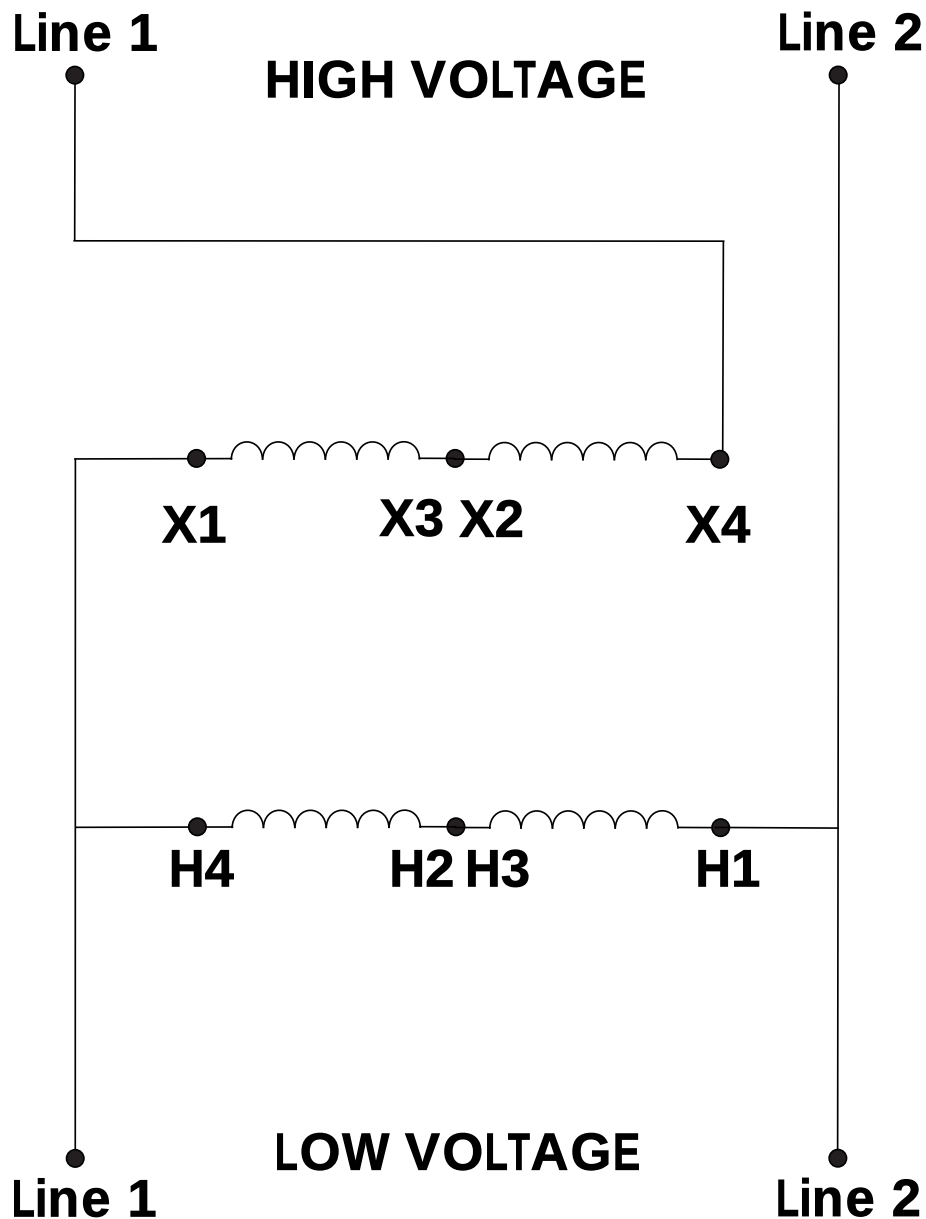
(4) 1/2" NPT Knockouts

Bottom (Underside) Plate

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