Part # — TX-BB-214V-204V-50KVA

Buck-Boost Transformer Specification Sheet

Available at XFMR Direct

Summary

Single-phase buck-boost transformer. Steps down 214V to 204V at 245.33 amps continuous output. 50 kVA capacity. NEMA 3R enclosed, cETLus listed, wall mount.

Product Description

This unit corrects a 214V building supply to 204V at the point of use, permanently, without modifying the building's electrical service. Designed for equipment rated 204V that is installed on a 214V 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 245.33-amp buck-boost transformer is significantly smaller and lighter than a 245.33-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-214V-204V-50KVA — NEMA 3R Encapsulated, cETLus Listed

Specifications

Phase	Single Phase (1-PH), AC	**Transformer Type**	Buck/Boost
Capacity	50 kVA	**Configuration**	Encapsulated Autotransformer
Primary Voltage	214V	**Primary Termination**	Lead Wires & Terminal Lugs
Primary Amperage	233.65A	**Secondary Termination**	Lead Wires & Terminal Lugs
Secondary Voltage	204V	**Termination Access**	(6) 3/4" NPT Hubs
Secondary Amperage	245.33A	**Winding Material**	Aluminum
Maximum Primary OCP	300A	**Enclosure Material**	Steel
Frequency	50/60 Hz	**Finish Color**	ANSI 70 Light Grey
Insulation	180°C	**Weight**	68 lbs
Temperature Rise	115°C	**Dimensions**	7.68 x 6.38 x 12.2

Ratings & Certifications

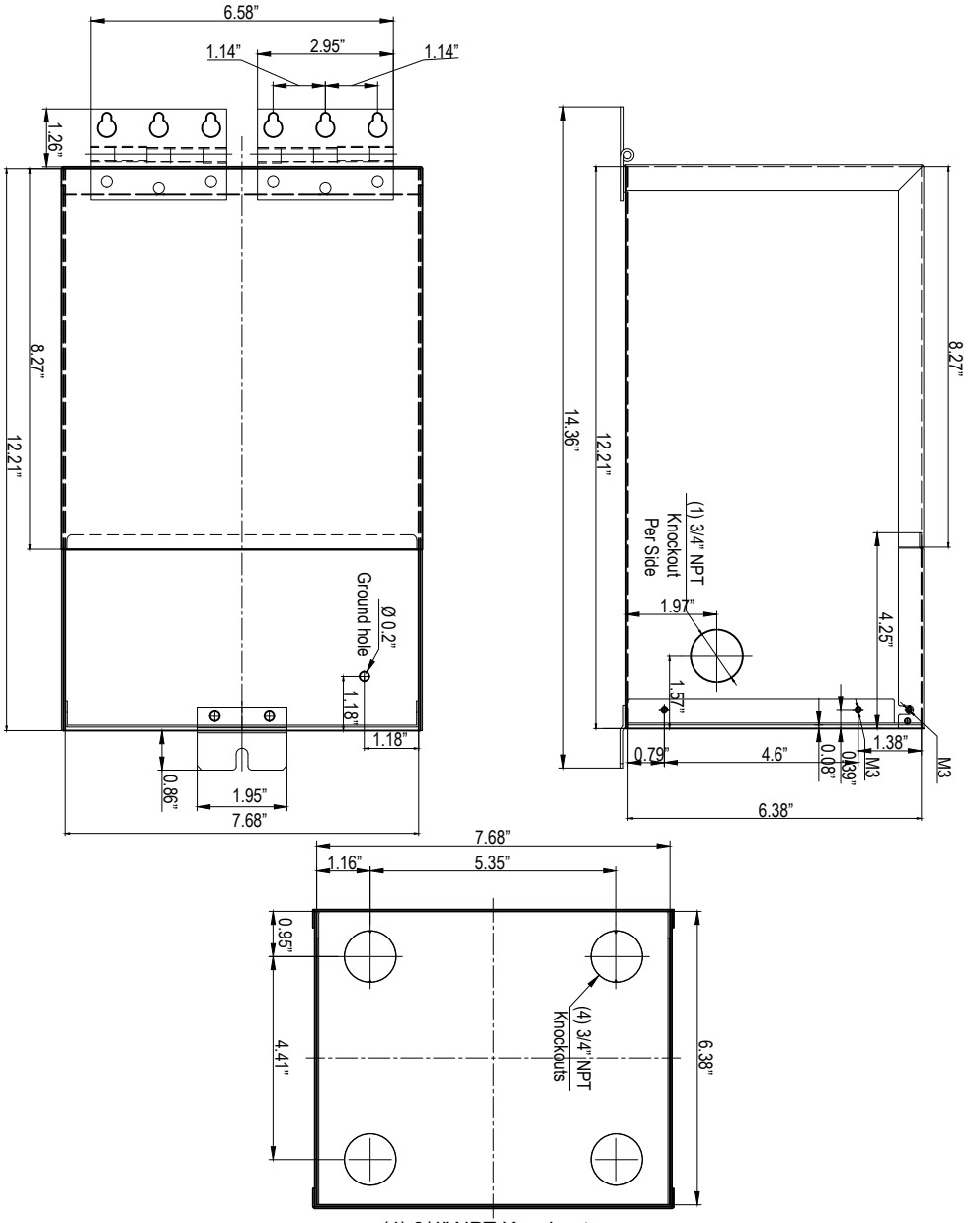
- Listed for United States
- NEMA 3R Indoor/Outdoor Enclosure
- Built to UL-50 Standards
- CE Certified
- Listed for Canada
- Epoxy Resin Encapsulated
- RoHS Compliant

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.

Dimensions

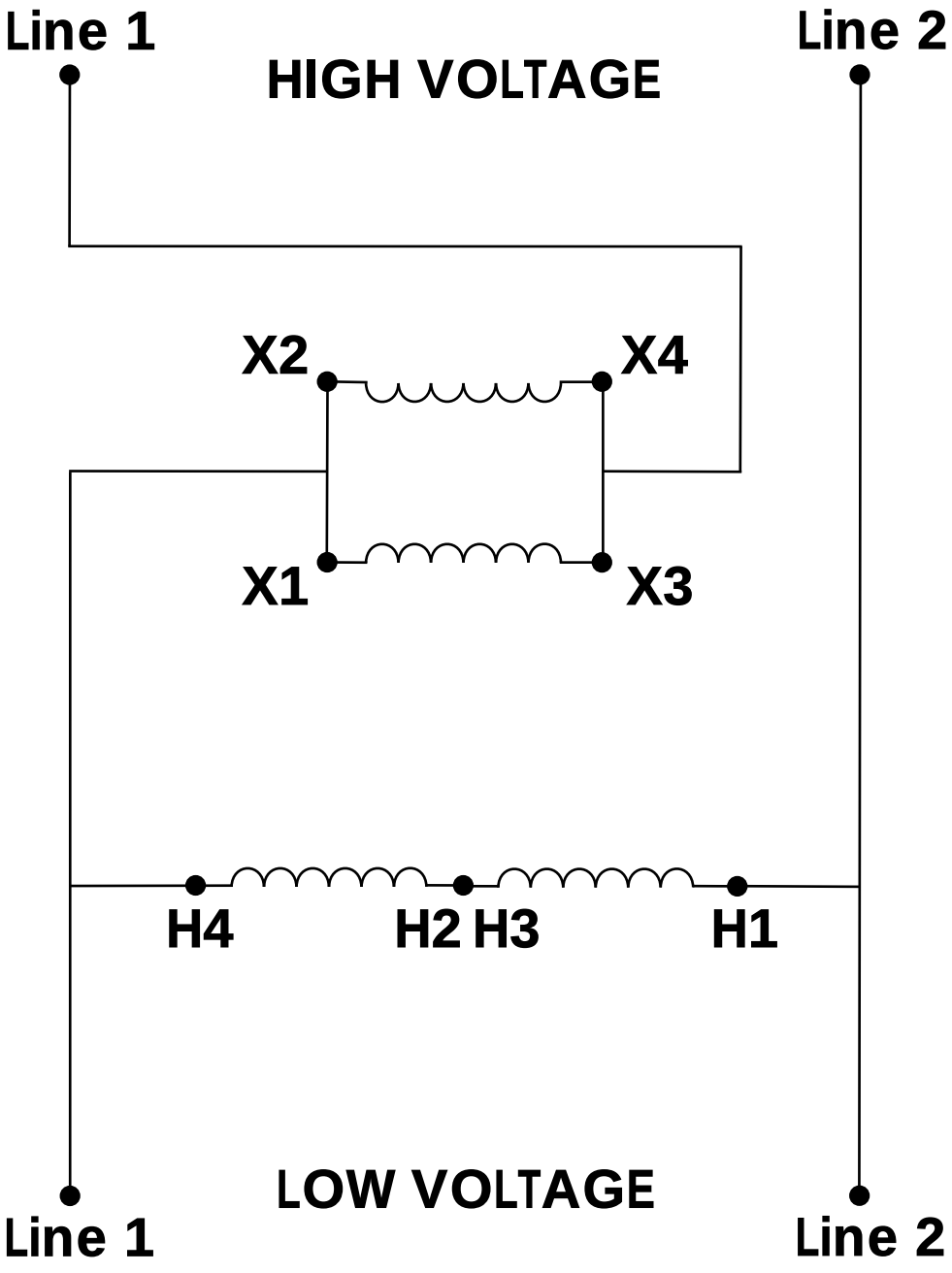


(4) 3/4” NPT Knockouts
Bottom (Underside) Plate

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-214V-204V-50KVA — 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