# Part # — TX-BB-208V-189V-7.5KVA

Buck-Boost Transformer Specification Sheet

**Available at XFMR Direct**



**Summary**

Single-phase buck-boost transformer. Steps down 208V to 189V at 39.67 amps continuous output. 7.5 kVA capacity. NEMA 3R enclosed, cETLus listed, wall mount.

## Product Description

This unit corrects a 208V building supply to 189V at the point of use, permanently, without modifying the building's electrical service. Designed for equipment rated 189V that is installed on a 208V 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 39.67-amp buck-boost transformer is significantly smaller and lighter than a 39.67-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-189V-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** | 189V | **Termination Access** | (6) 3/4" NPT Hubs |
| **Secondary Amperage** | 39.67A | **Winding Material** | Aluminum |
| **Maximum Primary OCP** | 50A | **Enclosure Material** | Steel |
| **Frequency** | 50/60 Hz | **Finish Color** | ANSI 70 Light Grey |
| **Insulation** | 180°C | **Weight** | 27 lbs |
| **Temperature Rise** | 115°C | **Dimensions** | 5.43 x 4.49 x 10.08 |

## Ratings & Certifications

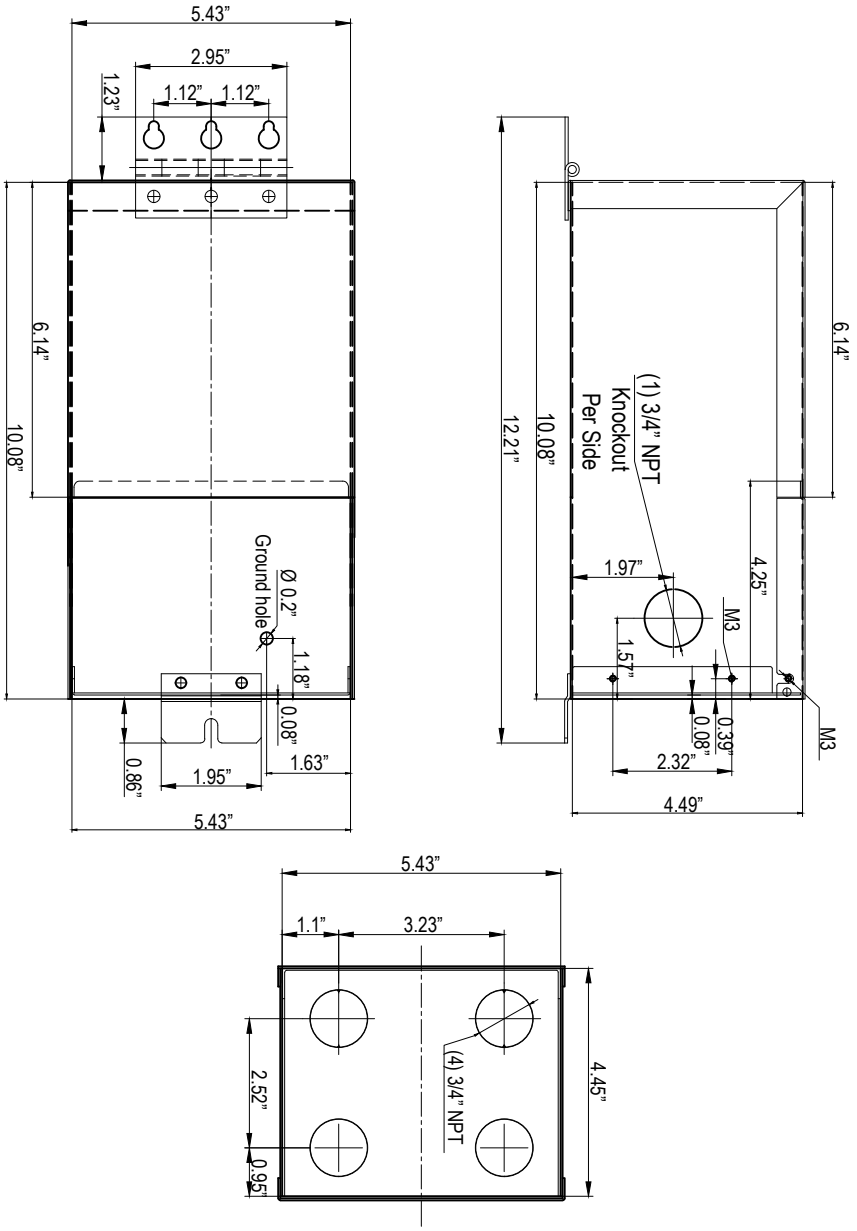
- Listed for United States
- NEMA 3R Indoor/Outdoor Enclosure
- Built to UL-50 Standards
- CE Certified
- Listed for Canada
- Epoxy Resin Encapsulated
- RoHS Compliant

## 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.

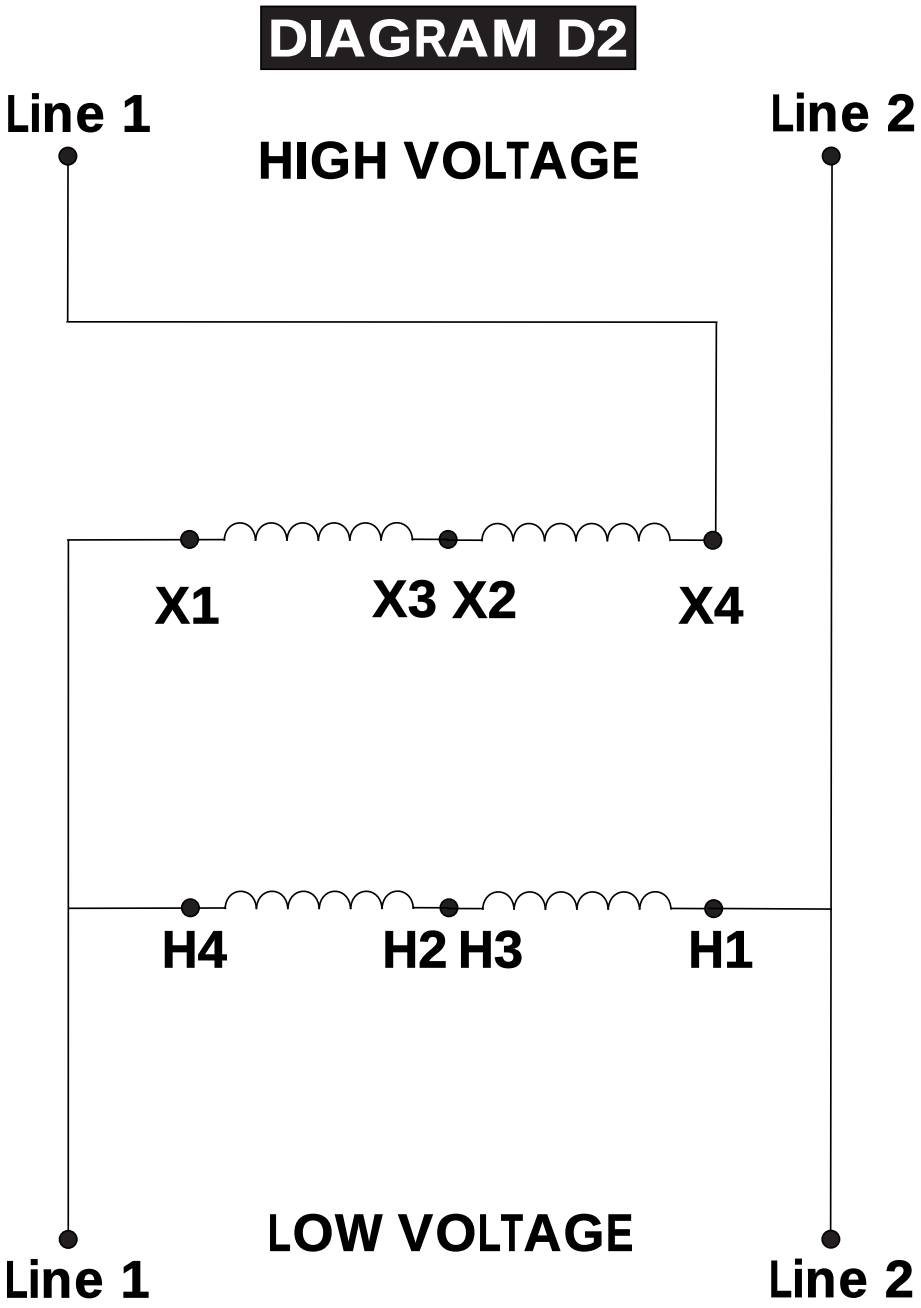
## Dimensions




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

## Connection Guide

1. Connect **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**






*TX-BB-208V-189V-7.5KVA — 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*