

Summary

Three-phase delta buck-boost transformer. Steps down 222V to 208V at 13.3 amps continuous output. 4.81 kVA capacity. NEMA 3R enclosed, cETLus listed, wall mount.

Product Description

This unit corrects a 222V three phase building supply to 208V delta at the point of use, permanently, without modifying the building's electrical service. Designed for equipment rated 208V that is installed on a 222V system experiencing overvoltage from the utility.

Configured as an open delta autotransformer, the unit handles only the difference between input and output and not the full load. This is why a 13.3-amp buck-boost transformer is significantly smaller and lighter than a 13.3-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-222D-208D-13A — NEMA 3R Encapsulated, cETLus Listed

Specifications

Phase	Three Phase Delta (3-PH), AC	Transformer Type	Buck/Boost
Capacity	4.81 kVA	Configuration	Encapsulated Autotransformer
Primary Voltage	222V	Primary Termination	Lead Wires & Terminal Lugs
Primary Amperage	12.50A	Secondary Termination	Lead Wires & Terminal Lugs
Secondary Voltage	208V	Termination Access	(6) ½" NPT Hubs
Secondary Amperage	13.3A	Winding Material	Aluminum
Maximum Primary OCP	15A	Enclosure Material	Steel
Frequency	50/60 Hz	Finish Color	ANSI 70 Light Grey
Insulation	180°C	Weight	22 lbs
Temperature Rise	115°C	Dimensions	9.25"-W x 5.75"-D x 7.25"-H

Ratings & Certifications

- Listed for United States
- NEMA 3R Indoor/Outdoor Enclosure
- Built to UL-5085 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

Three-phase open delta installation — (2) enclosures required.



Connection Guide

1. Connect **X4** and **X3** together for each transformer
2. Connect **X2** and **X1** together for each transformer
3. Connect High Voltage **PHASE A** to **X4**, **X3** on transformer A
4. Connect High Voltage **PHASE C** to **X4**, **X3** on transformer B
5. Connect Low Voltage **PHASE A** to **X1**, **X2**, **H4** on transformer A
6. Connect Low Voltage **PHASE C** to **X1**, **X2**, **H4** on transformer B
7. Connect **H2** and **H3** together for each transformer
8. Connect High & Low Voltage **PHASE B** to **H1**
9. Bridge **H1** connections between Transformer A & B

DIAGRAM H2

HIGH VOLTAGE



LOW VOLTAGE



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The image shows two identical grey metal autotransformers from Sanzo Sales. Each unit is a rectangular box with a hinged top and a hinged bottom. The top of each unit has two circular mounting holes. The front of each unit has a label with technical specifications and a warning label. The label on the left unit is for the TX-BB-222D-208D-13.3A model. The label on the right unit is for the TX-BB-222D-208D-13.3A model. The label on the right unit also includes a warning label.

Left Unit Label:

SANZO SALES

TX-BB-222D-208D-13.3A

Power	Single Phase	Configuration	Autotransformer
Input Voltage	208V	Max BCP	100A
Output Voltage	240V	Encapsulated	208D-13
Minimum Input	110V-120V	Insulation	100V
Max Input Range	240V-250V	Temp Rise	100V
Max Output Range	240V	Warranty	100V

Endorsement Type: 100V-13.3A for Input or Output Use
 Compliance to UL 516 - Conformance to UL 516, 11.20
 Stock # TX-BB-222D-208D-13.3A

Autotransformer

Right Unit Label:

SANZO SALES

TX-BB-222D-208D-13.3A

Power	Single Phase	Configuration	Autotransformer
Input Voltage	208V	Max BCP	100A
Output Voltage	240V	Encapsulated	208D-13
Minimum Input	110V-120V	Insulation	100V
Max Input Range	240V-250V	Temp Rise	100V
Max Output Range	240V	Warranty	100V

Endorsement Type: 100V-13.3A for Input or Output Use
 Compliance to UL 516 - Conformance to UL 516, 11.20
 Stock # TX-BB-222D-208D-13.3A

Autotransformer

Warning Label:

WARNING
 CONFORMANCE TO UL 516, 11.20
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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