

Summary

Three-phase delta buck-boost transformer. Steps down 489V to 466V at 15 amps continuous output. 12.11 kVA capacity. NEMA 3R enclosed, cETLus listed, wall mount.

Product Description

This unit corrects a 489V three phase building supply to 466V delta at the point of use, permanently, without modifying the building's electrical service. Designed for equipment rated 466V that is installed on a 489V 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 15-amp buck-boost transformer is significantly smaller and lighter than a 15-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-489D-466D-15A — NEMA 3R Encapsulated, cETLus Listed

Specifications

Phase	Three Phase Delta (3-PH), AC	Transformer Type	Buck/Boost
Capacity	12.11 kVA	Configuration	Encapsulated Autotransformer
Primary Voltage	489V	Primary Termination	Lead Wires & Terminal Lugs
Primary Amperage	14.30A	Secondary Termination	Lead Wires & Terminal Lugs
Secondary Voltage	466V	Termination Access	(6) ¾" NPT Hubs
Secondary Amperage	15A	Winding Material	Aluminum
Maximum Primary OCP	20A	Enclosure Material	Steel
Frequency	50/60 Hz	Finish Color	ANSI 70 Light Grey
Insulation	180°C	Weight	44 lbs
Temperature Rise	115°C	Dimensions	11.11"-W x 4.49"-D x 10.08"-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



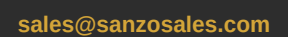
Common Applications

- 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.



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

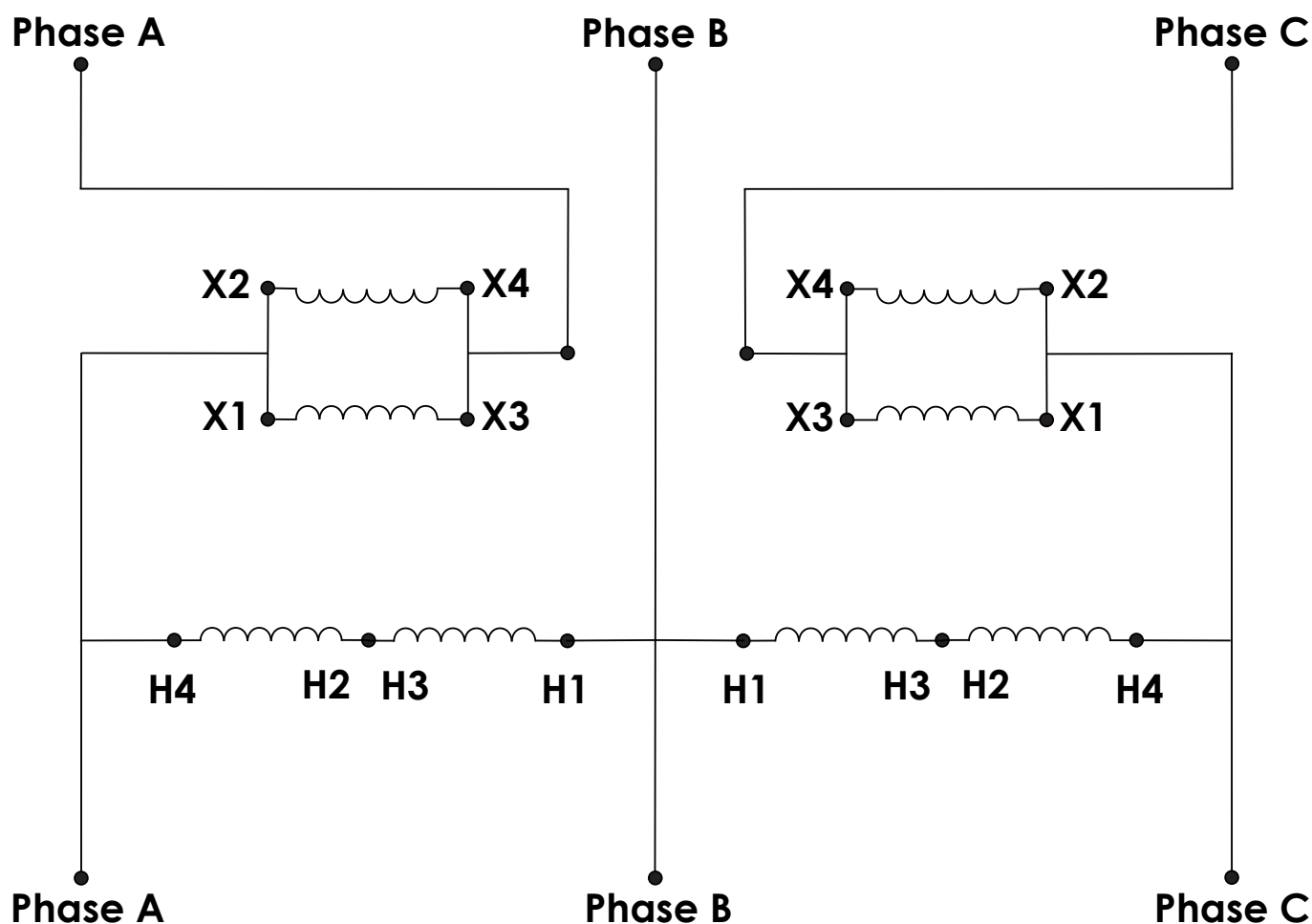


Connection Guide

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



sales@sanzosales.com

The image shows two identical gray metal autotransformers from Sanzo Sales. Each unit is rectangular with a hinged top cover and a label on the front. The label for the unit on the left reads:

SANZO SALES
TX-BB-489D-466D-15A

Phase:	Single Phase	Configuration:	Autotransformer
Input Voltage:	208V	Max. VA:	45A
Output Voltage:	208V	Temperature:	40°C
Isolation:	1:1	Max. Input:	15A
Max. Input:	15A	Max. Output:	15A
Max. Output:	15A		

Isolation: Type 1000V 50 Hz Isolation or Double Die
 Conforms to UL 156 Conforms to IEC 60076-1
 Size 4 1/2 x 11 x 11 1/2 in. 10 1/2 x 11 1/2 in.

Autotransformer

ETL
 LISTED
 1000V 50/60 Hz 15A 45A 1500VA
 1000V 50/60 Hz 15A 45A 1500VA

The unit on the right has a similar label with the following specifications:

SANZO SALES
TX-BB-489D-466D-15A

Phase:	Single Phase	Configuration:	Autotransformer
Input Voltage:	208V	Max. VA:	45A
Output Voltage:	208V	Temperature:	40°C
Isolation:	1:1	Max. Input:	15A
Max. Input:	15A	Max. Output:	15A
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Autotransformer

ETL
 LISTED
 1000V 50/60 Hz 15A 45A 1500VA
 1000V 50/60 Hz 15A 45A 1500VA

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Base Knockouts — (4) $\frac{3}{4}$ " NPT



Side View



Rear View — Surface Mount Bracket



Wiring Compartment — Terminal Leads



Interior — Epoxy Resin Encapsulated Core