

Summary

Three-phase wye buck-boost transformer. Steps up 208V to 270V at 20.8 amps continuous output. 9.73 kVA capacity. NEMA 3R enclosed, cETLus listed, wall mount.

Product Description

This unit corrects a 208V three phase building supply to 270V wye at the point of use, permanently, without modifying the building's electrical service. Designed for equipment rated 270V that is installed on a 208V system experiencing undervoltage from the utility.

Configured as a wye autotransformer, the unit handles only the difference between input and output and not the full load. This is why a 20.8-amp buck-boost transformer is significantly smaller and lighter than a 20.8-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-208Y-270Y.156-21A — NEMA 3R Encapsulated, cETLus Listed

Specifications

Phase	Three Phase Wye (3-PH), AC	Transformer Type	Buck/Boost
Capacity	9.73 kVA	Configuration	Encapsulated Autotransformer
Primary Voltage	208V	Primary Termination	Lead Wires & Terminal Lugs
Primary Amperage	27.00A	Secondary Termination	Lead Wires & Terminal Lugs
Secondary Voltage	270V	Termination Access	(6) 3/4" NPT Hubs
Secondary Amperage	20.8A	Winding Material	Aluminum
Maximum Primary OCP	40A	Enclosure Material	Steel
Frequency	50/60 Hz	Finish Color	ANSI 70 Light Grey
Insulation	180°C	Weight	66 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-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 wye installation — (3) enclosures required.



Connection Guide

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

DIAGRAM J2

HIGH VOLTAGE





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The image shows three identical Sanzo Sales autotransformers, model TX-BB-208Y-240Y-40A, arranged side-by-side. Each unit is a light gray, rectangular metal enclosure with a hinged top cover. The front of each unit features a white label with technical specifications and a logo. The label includes the Sanzo Sales logo, the model number, and a table of electrical ratings. The units are designed for industrial or commercial use, providing a 208V primary and 240V secondary output with a 40A capacity.

Label Information:

SANZO SALES
TX-BB-208Y-240Y-40A

Rating	Single Phase	Configuration	Approximate
Input Voltage	208V	208V	208V
Output Voltage	240V	240V	240V
Rated Power	9.6 kVA	9.6 kVA	9.6 kVA
Max Input Amps	46.2A	46.2A	46.2A
Max Output Amps	40A	40A	40A

Autotransformer

CONFORMS TO IEC 60076-1
 CONFORMS TO IEC 60076-2

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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