

Summary

Three-phase wye buck-boost transformer. Steps up 220V to 242V at 83.3 amps continuous output. 34.92 kVA capacity. NEMA 3R enclosed, cETLus listed, wall mount.

Product Description

This unit corrects a 220V three phase building supply to 242V wye at the point of use, permanently, without modifying the building's electrical service. Designed for equipment rated 242V that is installed on a 220V 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 83.3-amp buck-boost transformer is significantly smaller and lighter than a 83.3-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-220Y-242Y.140-83A — NEMA 3R Encapsulated, cETLus Listed

Specifications

Phase	Three Phase Wye (3-PH), AC	Transformer Type	Buck/Boost
Capacity	34.92 kVA	Configuration	Encapsulated Autotransformer
Primary Voltage	220V	Primary Termination	Lead Wires & Terminal Lugs
Primary Amperage	91.60A	Secondary Termination	Lead Wires & Terminal Lugs
Secondary Voltage	242V	Termination Access	(6) 3/4" NPT Hubs
Secondary Amperage	83.3A	Winding Material	Aluminum
Maximum Primary OCP	125A	Enclosure Material	Steel
Frequency	50/60 Hz	Finish Color	ANSI 70 Light Grey
Insulation	180°C	Weight	126 lbs
Temperature Rise	115°C	Dimensions	7.68 x 6.38 x 11.02

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



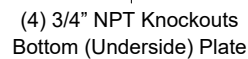
Common Applications

- 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 wye installation — (3) enclosures required.

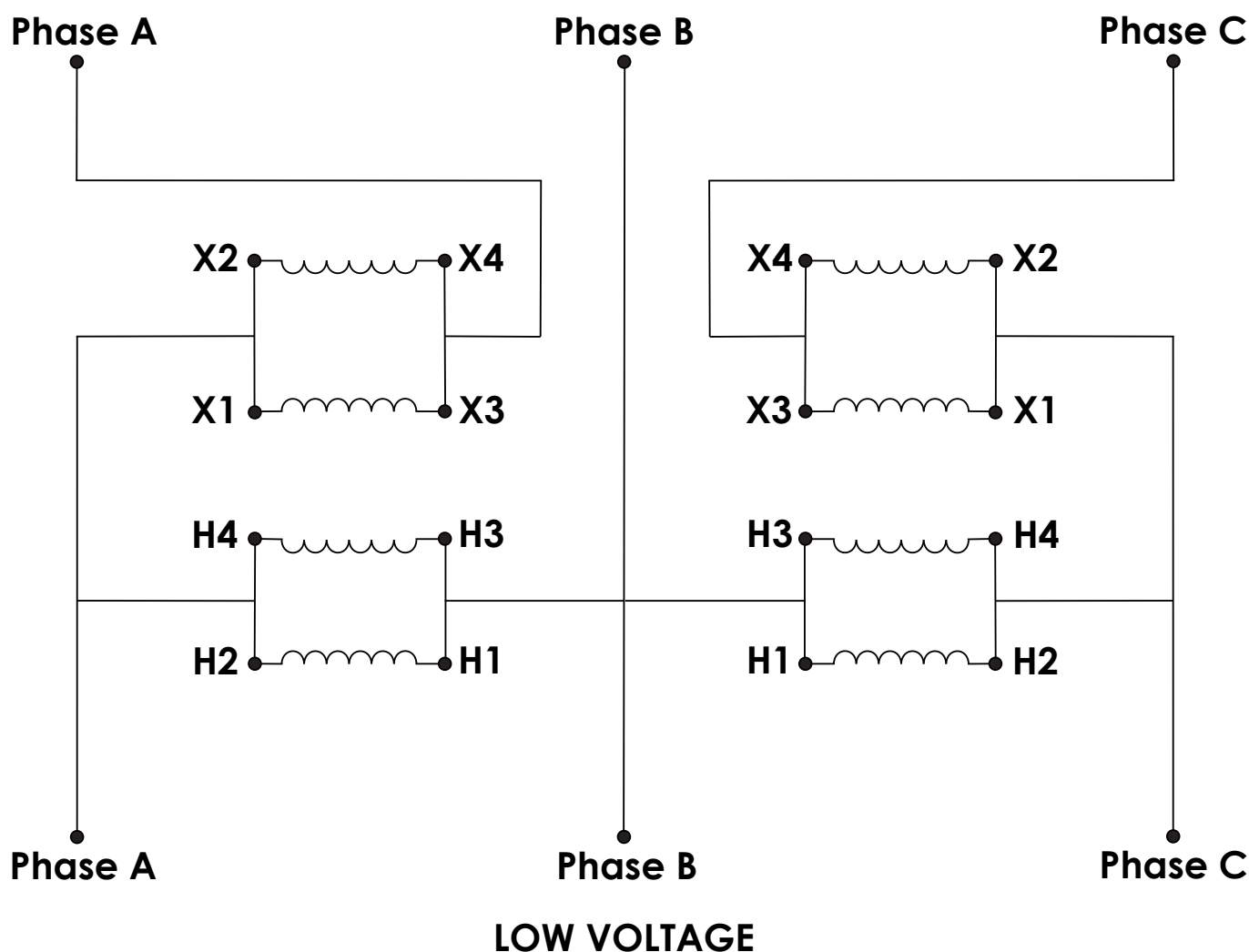


Connection Guide

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

DIAGRAM F2

HIGH VOLTAGE





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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