

Summary

500 kVA, three-phase general-purpose dry-type isolation transformer. 208V delta primary to 400Y/231 secondary. Aluminum windings, electrostatic shielding, ventilated NEMA 3R enclosure.

Product Description

The Sanzo Power TX-DV-500M-3-320305-AL is a 500 kVA three-phase dry-type isolation transformer that converts 208V delta power to 400Y/231 for commercial and industrial distribution. The grounded-wye secondary supplies 400V three-phase power for equipment loads and 231V line-to-neutral power through an accessible X0 neutral. The separate primary and secondary windings provide electrical isolation.

Vacuum-pressure-impregnated aluminum windings use a 220°C insulation system with 150°C temperature rise. Natural-convection cooling supports continuous distribution duty.

Front-access terminal lugs simplify field wiring. The bolt-together steel enclosure has replaceable panels, upper hooded vents and continuous mounting runners.



Specifications

Phase	Three Phase (3-PH), AC	Transformer Type	Isolation / Distribution
Capacity	500 kVA	Duty	Continuous, General Purpose
Primary Voltage	208V delta	Winding Material	Aluminum
Secondary Voltage	400Y/231	Insulation System	220°C
Primary Current	1387.9 A	Temperature Rise	150°C
Secondary Current	721.7 A	Cooling	AA / Natural Convection
Frequency	60 Hz	Impregnation	Vacuum Pressure Impregnated
Primary Taps	(2) 2.5% Above, (2) 2.5% Below	Electrostatic Shield	Full Interwinding Shield
Tap Rating	Full Capacity; De-energized	Primary Termination	Terminal Lugs
Primary Connection	Delta / H1, H2, H3	Secondary Termination	Terminal Lugs
Secondary Connection	Wye / X0 Neutral	Termination Access	Front Access Cover
DOE 2016 Minimum	99.14% at 35% Load	Enclosure	NEMA 3R, Ventilated Steel
Voltage Direction	Step-Up	Finish	ANSI 61 Grey Powder Coat
Dimensions L x W x H	51.18" x 47.24" x 64.96"	Unit Weight	2,425 lb

Ratings & Certifications

- cETLus - United States & Canada
- UL 1561 / CSA C22.2 No. 47
- DOE 2016 Efficiency
- NEMA 3R Indoor / Outdoor



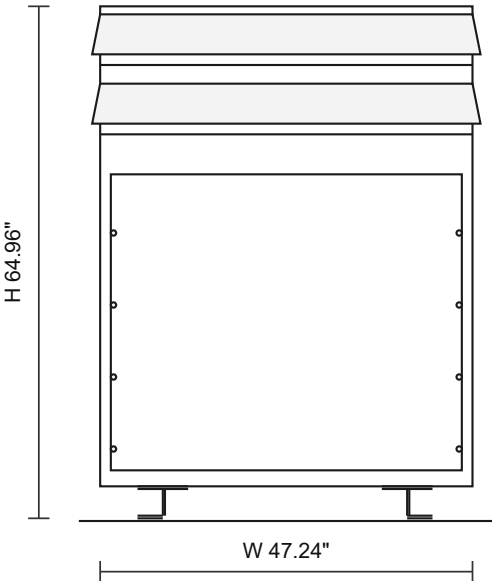
Common Applications

- Commercial Power Distribution
- Industrial Machinery
- HVAC / Mechanical Systems
- Pumps & Process Equipment

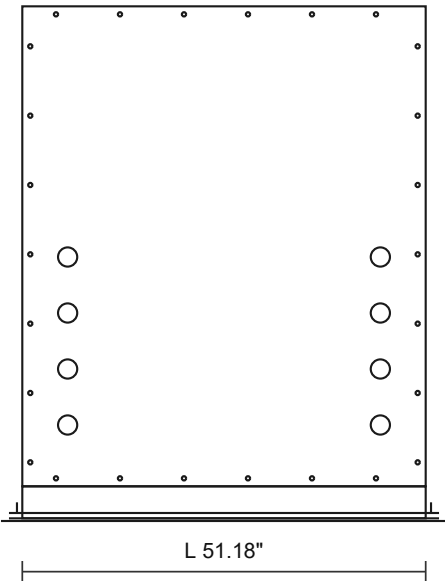
Installation: Use the connection diagram for tap selection and field wiring. De-energize before changing taps; maintain ventilation and service access.

Enclosure Outline

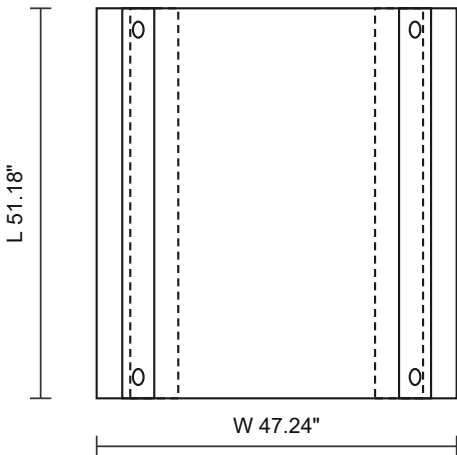
LENGTH (L) x WIDTH (W) x HEIGHT (H)



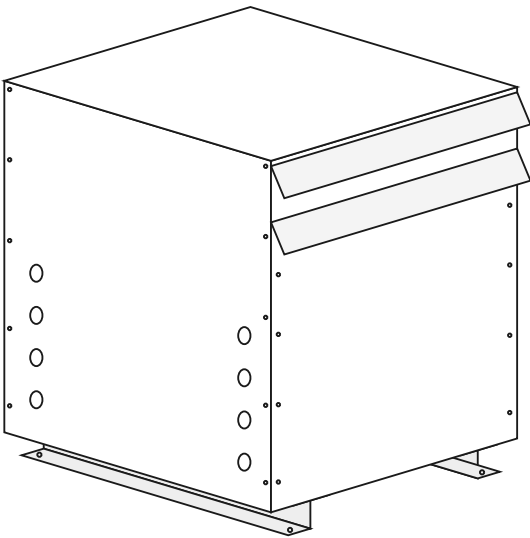
FRONT - UPPER VENTS



SIDE



BOTTOM (UNDERSIDE)



ISOMETRIC - UPRIGHT

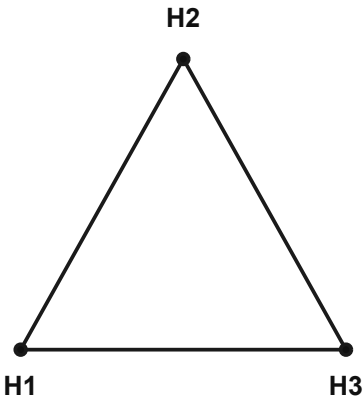
Continuous T-top / outward L-floor runners

Capacity	Length (L)	Width (W)	Height (H)
500 kVA	51.18"	47.24"	64.96"

Weight: 2,425 lb. Overall dimensions include mounting runners. Length runs front to rear.
Anchor spacing, lifting provisions and conduit openings by approved drawing. Dashed underside lines show upper mounting flange.

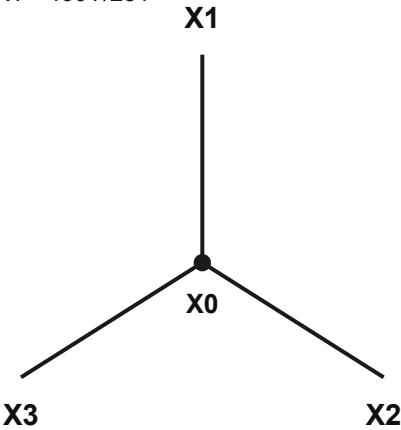
Winding & Connection Overview

PRIMARY - 208V delta



DELTA / H PRIMARY

SECONDARY - 400Y/231



WYE / X SECONDARY

H identifies the primary; X identifies the secondary. Purpose-built for the stated voltage direction. Electrostatic shield and enclosure bond to equipment ground. Diagrams show winding topology; final links and phase displacement follow the nameplate.

Tap setting	Primary input	Supply lines
+5%	218.4V	H1, H2, H3
+2.5%	213.2V	H1, H2, H3
Nominal	208V	H1, H2, H3
-2.5%	202.8V	H1, H2, H3
-5%	197.6V	H1, H2, H3

Secondary lines	Nominal voltage
X1, X2, X3	400V line-line
X1 / X2 / X3 to X0	230.9V line-neutral

Tap entries are voltage settings, not physical jumper numbers. De-energize before changing taps and set all three phases alike.

Nominal full-load current: primary 1387.9 A; secondary 721.7 A. For multiple voltages, current depends on the selected connection. Individual phase or half-winding loading must remain within the nameplate rating.

Use the approved manufacturer connection diagram for installation, grounding, overcurrent protection and terminal torque.

Construction & Installation Details

The continuous mounting runners use a T flange at the enclosure and an outward-only L flange at the floor. Replaceable bolt-on panels allow enclosure repairs without replacing the full housing.

Length (L)	51.18"
Width (W)	47.24"
Height (H)	64.96"
Mounting	Floor / Continuous Runners
Unit Weight	2,425 lb

Dimensions are L x W x H. Length runs front to rear. Overall height includes the mounting runners.



Electrical Connections

Primary Lines	H1, H2, H3; delta input
Secondary Lines	X1, X2, X3; 400Y/231
Neutral	X0 accessible; 231V line-to-neutral
Shield / Ground	Electrostatic shield bonded to enclosure equipment ground
Tap Operation	(2) 2.5% Above, (2) 2.5% Below; all phases set alike
Connection Access	Front-access cover; terminal lug connections

Service & Installation

Location	Indoor or outdoor; NEMA 3R enclosure
Cooling / Ventilation	Natural convection; keep upper vents unobstructed
Mounting Support	Level, structurally adequate floor or pad
Panel Replacement	Individual bolted panels are replaceable
Grounding	Provide equipment grounding and secondary bonding for the installation
Load Selection	Size for connected kVA, starting duty and phase loading

Primary and secondary windings are electrically isolated. This transformer is purpose-built for the listed voltage direction. Follow the unit nameplate for conductor sizes, terminal torque, overcurrent protection and installation clearances.