

## ■ Summary

30 kVA, three-phase general-purpose dry-type isolation transformer. 480V delta primary to 240V/120 delta, center tap secondary. Aluminum windings, electrostatic shielding, ventilated NEMA 3R enclosure.

## ■ Product Description

The Sanzo Power TX-DV-030M-3-325322-AL is a 30 kVA three-phase dry-type isolation transformer that converts 480V delta power to 240V/120 delta, center tap for commercial and industrial distribution. The 240V delta secondary serves three-phase equipment and provides a 120V center tap for compatible single-phase loads. The high leg is not a 120V supply. Primary and secondary windings are electrically isolated.

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

|                             |                                |                              |                             |
|-----------------------------|--------------------------------|------------------------------|-----------------------------|
| <b>Phase</b>                | Three Phase (3-PH), AC         | <b>Transformer Type</b>      | Isolation / Distribution    |
| <b>Capacity</b>             | 30 kVA                         | <b>Duty</b>                  | Continuous, General Purpose |
| <b>Primary Voltage</b>      | 480V delta                     | <b>Winding Material</b>      | Aluminum                    |
| <b>Secondary Voltage</b>    | 240V/120 delta, center tap     | <b>Insulation System</b>     | 220°C                       |
| <b>Primary Current</b>      | 36.1 A                         | <b>Temperature Rise</b>      | 150°C                       |
| <b>Secondary Current</b>    | 72.2 A                         | <b>Cooling</b>               | AA / Natural Convection     |
| <b>Frequency</b>            | 60 Hz                          | <b>Impregnation</b>          | Vacuum Pressure Impregnated |
| <b>Primary Taps</b>         | (2) 2.5% Above, (4) 2.5% Below | <b>Electrostatic Shield</b>  | Full Interwinding Shield    |
| <b>Tap Rating</b>           | Full Capacity; De-energized    | <b>Primary Termination</b>   | Terminal Lugs               |
| <b>Primary Connection</b>   | Delta / H1, H2, H3             | <b>Secondary Termination</b> | Terminal Lugs               |
| <b>Secondary Connection</b> | Delta / 120V Center Tap        | <b>Termination Access</b>    | Front Access Cover          |
| <b>DOE 2016 Minimum</b>     | 98.23% at 35% Load             | <b>Enclosure</b>             | NEMA 3R, Ventilated Steel   |
| <b>Voltage Direction</b>    | Step-Down                      | <b>Finish</b>                | ANSI 61 Grey Powder Coat    |
| <b>Dimensions L x W x H</b> | 23.03" x 22.64" x 24.61"       | <b>Unit Weight</b>           | 375 lb                      |

## ■ Ratings & Certifications

- cETLus - United States & Canada
- DOE 2016 Efficiency

- UL 1561 / CSA C22.2 No. 47
- NEMA 3R Indoor / Outdoor



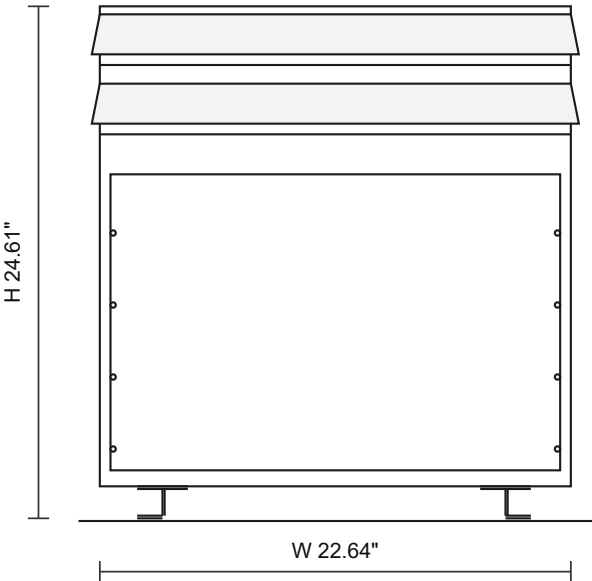
## ■ Common Applications

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

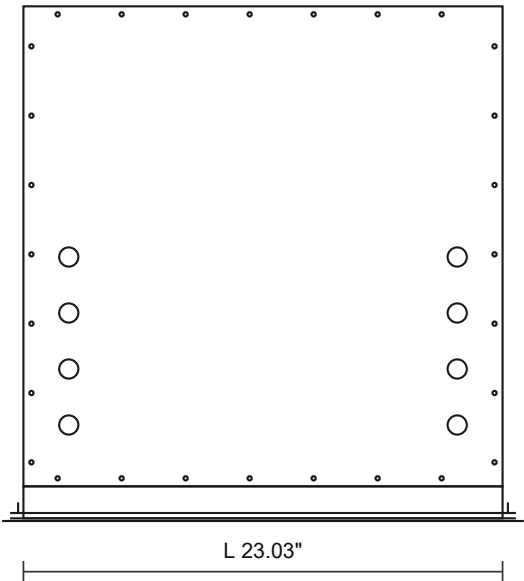
Installation: Use the connection diagram for tap selection and field wiring. De-energize before changing taps; maintain ventilation and service access.

# Enclosure Outline

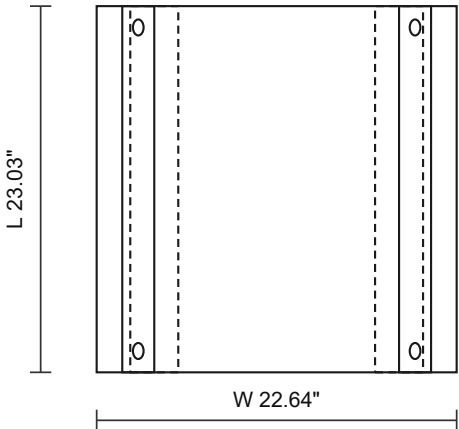
LENGTH (L) x WIDTH (W) x HEIGHT (H)



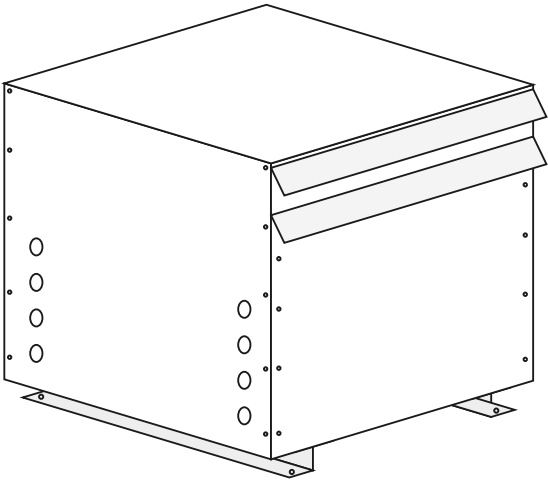
FRONT - UPPER VENTS



SIDE



BOTTOM (UNDERSIDE)



ISOMETRIC - UPRIGHT

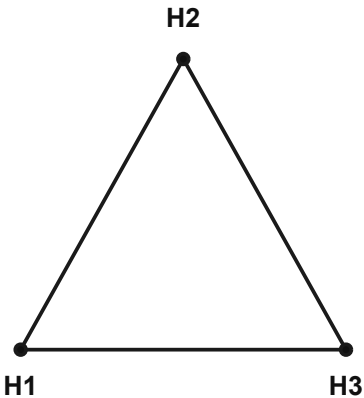
Continuous T-top / outward L-floor runners

| Capacity | Length (L) | Width (W) | Height (H) |
|----------|------------|-----------|------------|
| 30 kVA   | 23.03"     | 22.64"    | 24.61"     |

Weight: 375 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.

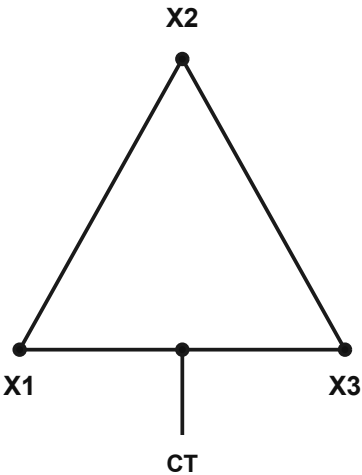
## Winding & Connection Overview

PRIMARY - 480V delta



DELTA / H PRIMARY

SECONDARY - 240V/120 delta, center tap



DELTA, CENTER TAP / 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%         | 504V          | H1, H2, H3   |
| +2.5%       | 492V          | H1, H2, H3   |
| Nominal     | 480V          | H1, H2, H3   |
| -2.5%       | 468V          | H1, H2, H3   |
| -5%         | 456V          | H1, H2, H3   |
| -7.5%       | 444V          | H1, H2, H3   |
| -10%        | 432V          | H1, H2, H3   |

| Secondary lines     | Nominal voltage              |
|---------------------|------------------------------|
| X1, X2, X3          | 240V line-line               |
| X1 or X3 to CT      | 120V                         |
| X2 to CT (high leg) | 207.8V                       |
| Neutral terminal    | CT; final label by nameplate |

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 36.1 A; secondary 72.2 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.

|                    |                            |
|--------------------|----------------------------|
| <b>Length (L)</b>  | 23.03"                     |
| <b>Width (W)</b>   | 22.64"                     |
| <b>Height (H)</b>  | 24.61"                     |
| <b>Mounting</b>    | Floor / Continuous Runners |
| <b>Unit Weight</b> | 375 lb                     |

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



## Electrical Connections

|                          |                                                           |
|--------------------------|-----------------------------------------------------------|
| <b>Primary Lines</b>     | H1, H2, H3; delta input                                   |
| <b>Secondary Lines</b>   | X1, X2, X3; 240V/120 delta, center tap                    |
| <b>Neutral</b>           | 120V center tap; high leg is not a 120V source            |
| <b>Shield / Ground</b>   | Electrostatic shield bonded to enclosure equipment ground |
| <b>Tap Operation</b>     | (2) 2.5% Above, (4) 2.5% Below; all phases set alike      |
| <b>Connection Access</b> | Front-access cover; terminal lug connections              |

## Service & Installation

|                              |                                                                        |
|------------------------------|------------------------------------------------------------------------|
| <b>Location</b>              | Indoor or outdoor; NEMA 3R enclosure                                   |
| <b>Cooling / Ventilation</b> | Natural convection; keep upper vents unobstructed                      |
| <b>Mounting Support</b>      | Level, structurally adequate floor or pad                              |
| <b>Panel Replacement</b>     | Individual bolted panels are replaceable                               |
| <b>Grounding</b>             | Provide equipment grounding and secondary bonding for the installation |
| <b>Load Selection</b>        | 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.