INSTRUMENT TRANSFORMERS

# VIY-60

## Indoor voltage transformer


The VIY-60 indoor voltage transformer is designed for service in metalclad switchgear and is used for relaying, metering, and control power applications.

**Product features**

- 5 kV, indoor
- 60 kV BIL, 60 Hertz
- Primary volts: 2400 - 4800
- Approximate weights:
  - Unfused (with no provision for fuse mounting), two bushings: 35 lbs (16 kg)
  - Unfused (with provision for fuse mounting), two bushings: 35 lbs (16 kg)
  - Unfused (with provision for fuse mounting), four bushings: 35 lbs (16 kg)
  - Fused (indicating), two bushings: 37 lbs (17 kg)
  - Fused (indicating), four bushings: 39 lbs (18 kg)
  - Fused (non-indicating), two bushings: 37 lbs (17 kg)
  - Fused (non-indicating), four bushings: 39 lbs (18 kg)

**Construction features**

The primary and secondary coils are wound using special winding and shielding techniques for improved voltage stress distribution. The coils are designed to withstand continuous operation at 1.1 times the line-to-line voltage level and the line-to-ground voltage level for Y burden units. For some line-to-ground voltage units, a short-time withstand voltage of 1.9 is available upon request.

**Fuse classifications**

This unit is provided with three fuse classifications: mounted fuse with hardware, unfused with hardware, or unfused without hardware. Optional fuse kits are offered to convert some unfused styles to fused styles. Consult your ABB sales representative concerning overvoltage conditions for designs above the standard rated voltage factor of 1.1.

**Terminals**

Compression-type primary terminals accommodate #8 through #2 wire. Secondary brass terminal inserts are 3/8” deep with a .190-32 tapped hole. Secondary terminals are .190-32 compression screws.
A compression type terminal that accommodates #14 through #4 wire is provided on fused units on the line end of each fuse.

**Baseplate**

The baseplate is constructed of corrosion-resistant aluminum and secured to the encapsulated base support.

**Mounting**

The VIY-60 can be mounted in upright, cantilever, or upside-down positions.

**Curves**
Type curves are available upon request.

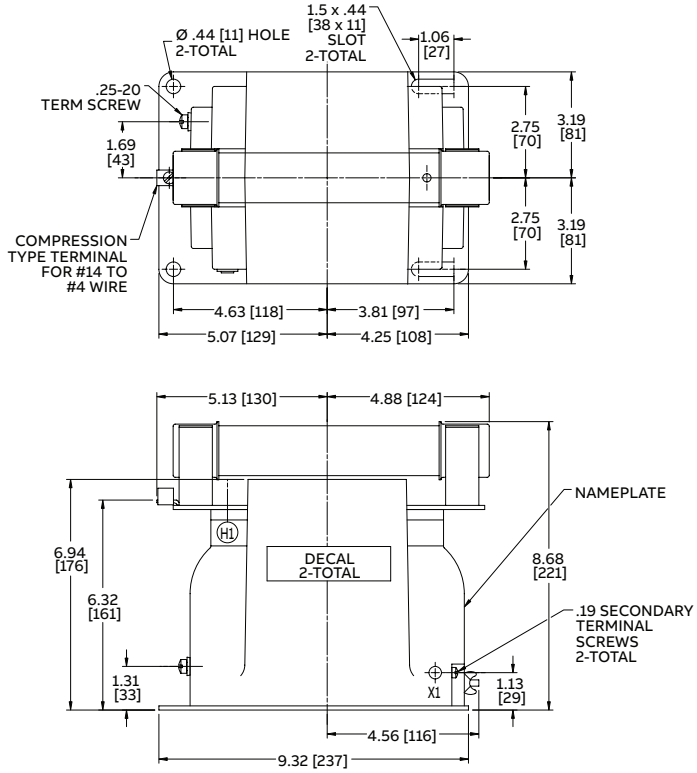
**Test reports**
Test reports are stored electronically and can be e-mailed in various formats at the time of shipment.

**Standards**
This unit meets or exceeds all requirements of IEEE C57.13-2016 and can be tested to other standards as requested.

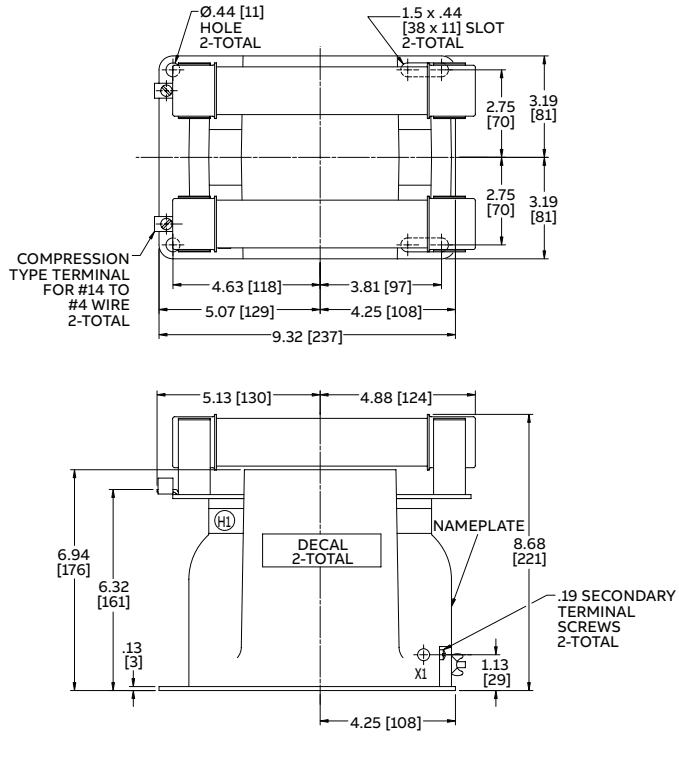
**UL Recognized Component**
The VIY-60 is a UL Recognized Component (file number E148620).

## Unit dimensions

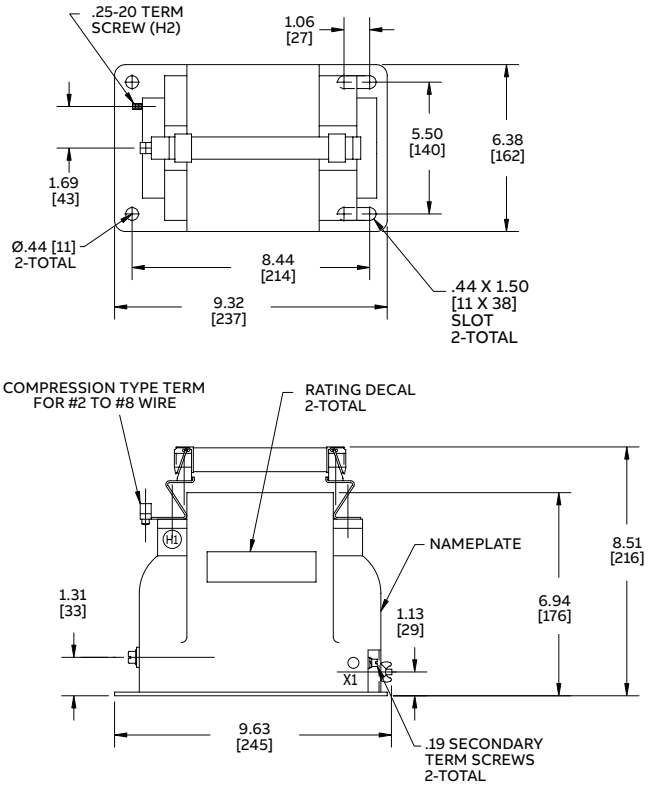
Note: metric dimensions are displayed in [mm].



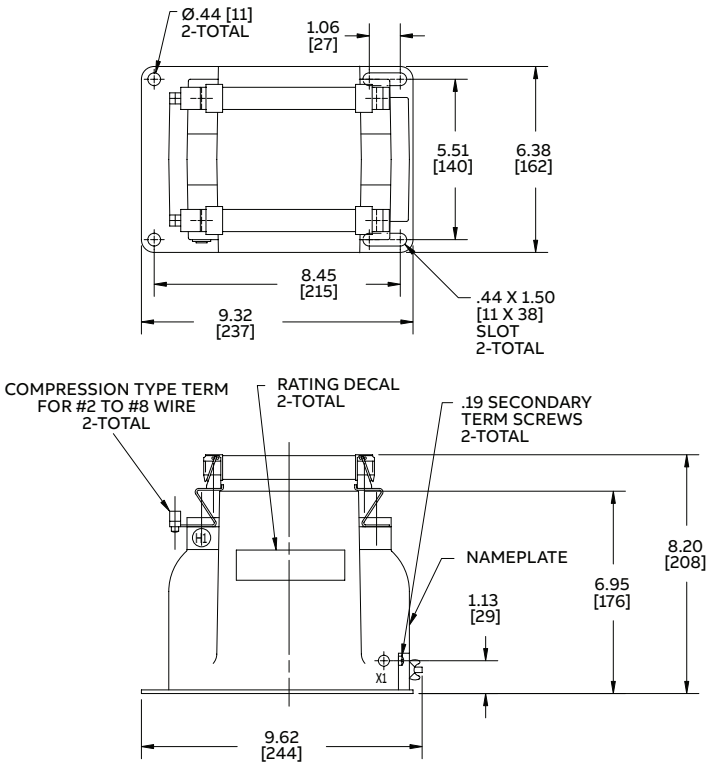

VIY-60, fused, indicating, one fuse (37 lbs)



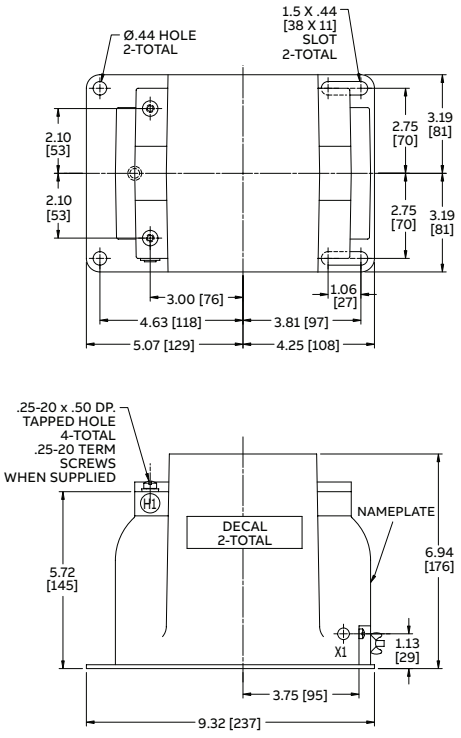

VIY-60, fused, indicating, two fuses (39 lbs)




VIY-60, fused, non-indicating, one fuse (37 lbs)




VIY-60, fused, non-indicating, two fuses (39 lbs)




VIY-60, unfused (35 lbs)

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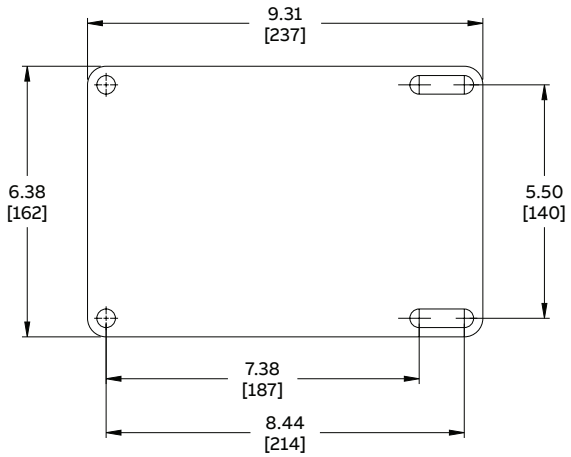
**Baseplate dimensions**



**Selection guide**

| Primary voltage | Secondary voltage | Winding ratio | IEEE metering accuracy | Rated voltage factor | Number of bushings | Number of fuses | Style number |
|---|---|---|---|---|---|---|---|
| Unfused (with no provision for fuse mounting) | | | | | | | |
| 2400/4160Y | 120 | 20:1 | 0.3Y | 1.1 | 2 | - | 7525A50G01 |
| 4200/4200Y | 120 | 35:1 | 0.3Y | 1.1 | 2 | - | 7525A50G02 |
| 4800/4800Y | 120 | 40:1 | 0.3Y | 1.1 | 2 | - | 7525A50G03 |
| Unfused (with provision for fuse mounting) | | | | | | | |
| 2400/4160Y | 120 | 20:1 | 0.3Y | 1.1 | 4 | - | 7525A54G01 |
| 4200/4200Y | 120 | 35:1 | 0.3Y | 1.1 | 4 | - | 7525A54G02 |
| 4800/4800Y | 120 | 40:1 | 0.3Y | 1.1 | 4 | - | 7525A54G03 |
| 2400/4160GY [2 3] | 120 | 20:1 | 0.3Y | 1.1 | 2 | - | 7525A55G01 |
| 4200/4200GY [1 2 3] | 120 | 35:1 | 0.3Y | 1.1 | 2 | - | 7525A55G02 |
| 4800/4800GY [1 2 3] | 120 | 40:1 | 0.3Y | 1.1 | 2 | - | 7525A55G03 |
| Fused (indicating) | | | | | | | |
| 2400/4160Y | 120 | 20:1 | 0.3Y | 1.1 | 4 | 2 [4] | 7525A51G01 |
| 4200/4200Y | 120 | 35:1 | 0.3Y | 1.1 | 4 | 2 [4] | 7525A51G02 |
| 4800/4800Y | 120 | 40:1 | 0.3Y | 1.1 | 4 | 2 [4] | 7525A51G03 |
| 3300/3300Y | 120 | 27.5:1 | 0.3Y | 1.1 | 4 | 2 [4] | 7525A51G12 |
| 3600/3600Y | 120 | 30:1 | 0.3Y | 1.1 | 4 | 2 [4] | 7525A51G08 |
| 4160/4160Y | 120 | 34.7:1 | 0.3Y | 1.1 | 4 | 2 [4] | 7525A51G32 |
| 2400/4160GY [3] | 120 | 20:1 | 0.3Y | 1.1 | 2 | 1 [4] | 7525A52G01 |
| 3300/3300GY [1 3] | 120 | 27.5:1 | 0.3Y | 1.1 | 2 | 1 [4] | 7525A52G15 |
| 4200/4200GY [1 3] | 120 | 35:1 | 0.3Y | 1.1 | 2 | 1 [4] | 7525A52G02 |
| 4800/4800GY [1 3] | 120 | 40:1 | 0.3Y | 1.1 | 2 | 1 [4] | 7525A52G03 |
| Fused (non-indicating) | | | | | | | |
| 2400/4160Y | 120 | 20:1 | 0.3Y | 1.1 | 4 | 2 [5] | 9628A12G01 |
| 4200/4200Y | 120 | 35:1 | 0.3Y | 1.1 | 4 | 2 [5] | 9628A12G02 |
| 4800/4800Y | 120 | 40:1 | 0.3Y | 1.1 | 4 | 2 [5] | 9628A12G03 |
| 2400/4160GY [3] | 120 | 20:1 | 0.3Y | 1.1 | 2 | 1 [5] | 9628A11G01 |
| 4200/4200GY [1 3] | 120 | 35:1 | 0.3Y | 1.1 | 2 | 1 [5] | 9628A11G02 |
| 4800/4800GY [1 3] | 120 | 40:1 | 0.3Y | 1.1 | 2 | 1 [5] | 9628A11G03 |

[1] Designed for line-to-line voltage; when connected line-to-ground, normal secondary voltage is 69.3 volts

[2] Switchgear style is similar to fused style except fuse, fuse clips, and secondary terminal cover are omitted

[3] One fully insulated primary terminal for line-to-ground connection only

[4] Fuse type CLE-PT, 1.0E, 5.5 kV (indicating), part # 50C5225G06

[5] Fuse type CLE-PT, 1.0E, 5.5 kV (non-indicating), part # 9626A33H03

Thermal rating: 1000 VA at 30°C; 700 VA at 55°C

Note: 50 Hz styles available

Additional styles available upon request. Contact your ABB sales representative or call +1-252-827-3212 for more information.

## Optional accessories

Fuse kits to convert unfused VIY-60 to fused style:

- Two fuses and hardware 7527A97G01
- One fuse and hardware 7527A97G02

Replacement fuses:

- Type CLE-PT, 1.0E, 5.5 kV (indicating) 50C5225G06
- Type CLE-PT, 1.0E, 5.5 kV (non-indicating) 9626A33H03

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