

# Types VOY-20 and VOY-20G Outdoor voltage transformers

## Product features

- 34.5 kV outdoor, 200 kV BIL, 60 Hertz
- VOY-20:
  - Strike: 15.25" (387 mm), creep: 38.00" (965 mm)
  - Weight: 125 lbs (57 kg)
- VOY-20G:
  - Strike: 11.25" (286 mm), creep: 33.60" (853 mm)
  - Weight: 120 lbs (54 kg)

## Application

The VOY-20 and VOY-20G outdoor voltage transformers are designed for solid state relaying and electronic metering where the burden of the device is negligible.

## Construction features

The layer wound and shielded high voltage winding is designed to withstand continuous operation at ratings higher than the line-to-ground voltage level when applied on a 34.5 kV, 200 kV BIL system. Refer to the Selection Guide for the rated voltage factor (RVF). Two cores placed through and around the windings are protectively cushioned and secured to a support frame.

For insulation and protection, the assembly is cast in hydrophobic cycloaliphatic epoxy (HCEP) using automatic pressure gelation. The HCEP material offers superior arc track, ozone, and ultraviolet-resistant properties while maintaining physical strength. The hydrophobic properties of HCEP ensure a high level of performance in wet or humid environments.

## Terminals

Electro-tin plated copper primary line terminals accommodate #10 to 250 MCM conductors. The H2 neutral terminal of the VOY-20G is insulated to withstand a 19 kV test level and can be disconnected from the external ground cable for power factor measurement.

Clamp-type secondary terminals accommodate #14 through #3 wire. A ground terminal is also provided for grounding the secondary circuit at the transformer.

## Junction box

The junction box has a 1" conduit hub on either end and a knock out for a 1" conduit fitting on the bottom. It can be easily detached, simplifying installation and change-out procedures.



## Baseplate

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

## Mounting

The VOY-20 and VOY-20G can be mounted in upright, cantilever, or upside-down positions. Stress relief devices should be used to support cable connections.

## Test reports

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

## Standards

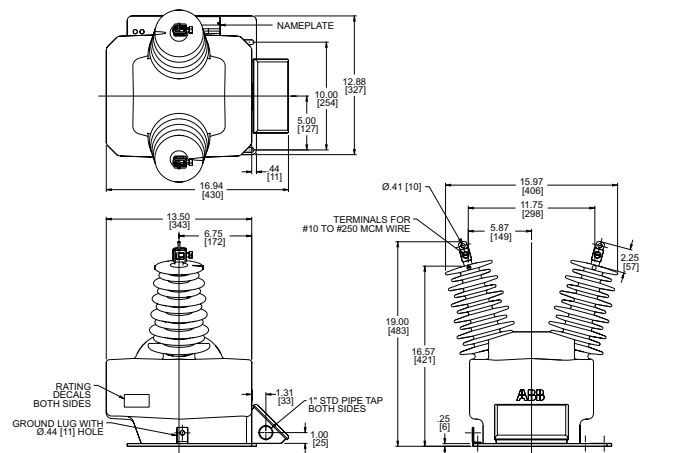
These units can be tested to all applicable IEEE, CSA, or IEC standards as requested.

## Selection guide

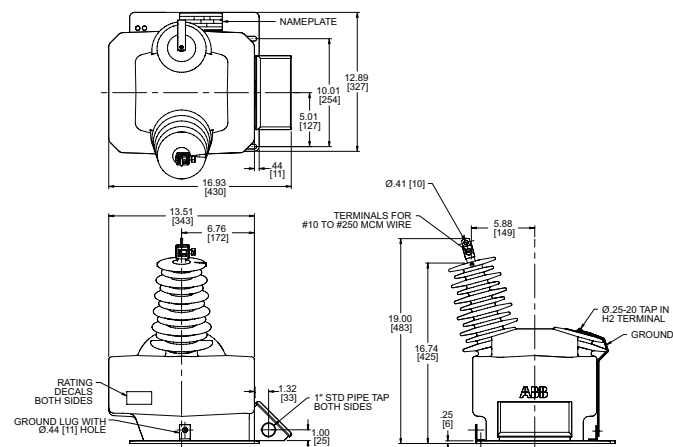
Primary voltage	Secondary voltage	Winding ratio	IEEE metering accuracy	Rated voltage factor	Thermal rating @ 30° C	Style number
<b>Type VOY-20</b>						
19920/34500Y	115 & 66.4	173.2 & 300:1	0.3 W, X, M, & Y	1.9	1000	E-7882A30G07
19920/34500Y	120	166:1	0.3 W, X, M, & Y	1.9	1000	E-7881A82G09
19800/34300Y	120	165:1	0.3 W, X, M, & Y	1.9	1000	E-7881A82G01
20125/34500Y	115	175:1	0.3 W, X, M, & Y	1.9	1000	E-7881A82G05
27600/27600Y	115	240:1	0.3 W, X, M, & Y	1.9	1000	E-7881A82G03
34500/34500Y	115	300:1	0.3 W, X, M, & Y	1.25	1000	E-7881A82G07
34500/34500Y	125.45	275:1	0.3 W, X, M, & Y	1.25	1000	E-7881A82G04
27600/27600Y	115/69	240/400:1	0.3 W, X, M, & Y	1.9	1000	E-923A107G01
34500/34500Y	115/69	300/500:1	0.3 W, X, M, & Y	1.25	1000	E-923A107G02
20125/34500Y	115/67.08	175/300:1	0.3 W, X, M, & Y	1.9	1000	E-923A107G03
<b>Type VOY-20G</b>						
14400/24940GY	120	120:1	0.3 W, X, M, & Y	1.9	1000	E-9629A74G02
19920/34500GY	120	166:1	0.3 W, X, M, & Y	1.9	1000	E-9629A74G14
20125/34500GY	115	175:1	0.3 W, X, M, & Y	1.9	1000	E-9629A74G01
20125/34500GY	115/67.08	175/300:1	0.3 W, X, M, & Y	1.9	1000	E-7526A55G01
20125/34500GY	115 & 67.08	175 & 300:1	0.3 W, X, M, & Y	1.9	1000	E-7882A69G01
20125/34500GY	115/67.08 & 115/67.08	175/300 & 175/300:1	0.3 W, X, M, & Y	1.9	1000	E-923A137G01

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

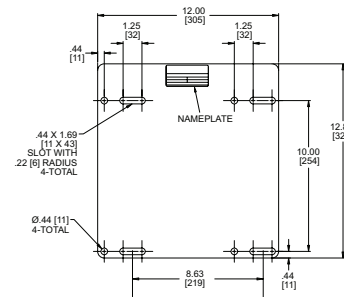
## Unit dimensions



Type VOY-20



Type VOY-20G



### Baseplate dimensions

For more information please contact:

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