Type VOG-17
Outdoor voltage transformer

Product features
- 12 and 17.5 kV, outdoor
- 110 kV BIL, 50 and 60 Hertz
- Power frequency withstand voltage: 42 kV
- Primary volts: 11000 - 13800
- Electrical clearances:
  Strike: 10.3" (262 mm)
  Creep: 24.7" (627 mm)
- Approximate weight: 45 lbs (20 kg)

Application
The VOG-17 outdoor voltage transformer is designed for measuring line-to-ground circuits. The single centered bushing and reduced neutral end insulation permit a significant reduction in size and installation spacing, while maintaining full 110 kV BIL insulation clearances.

Construction features
The primary and secondary coils are wound using special winding and shielding techniques for improved voltage stress distribution. Each coil is carefully insulated with mylar film to provide a high dielectric medium between layers. The completed winding structure and double-loop cores are assembled 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 surface properties of HCEP ensure highly reliable performance in wet, humid, or polluted environments.

Terminals
Electro-tin plated copper primary line terminals accommodate 6 mm² to 120 mm² conductors. Clamp-type secondary terminals accommodate 2.5 mm² through 25 mm² wire. A ground terminal is also provided for grounding the secondary circuit at the transformer.

Junction box
The metal junction box has a 1" conduit hub on each end. The box is anchored to the body of the transformer with screws and 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 VOG-17 can be mounted in upright, cantilever, or upside-down positions. Stress relief devices should be used to support cable connections. The unit can also be mounted using optional mounting rails.

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

Standards
This unit meets all applicable ANSI, CSA, and IEC standards.
Unit dimensions

Baseplate dimensions

Optional mounting accessories
The VOG-17 transformer is designed for mounting on poles or substation structures, with high voltage bushings in either vertical or horizontal positions.

When mounted with high voltage bushings in a horizontal plane, it is recommended that this plane be parallel to the ground and not one bushing above the other. This precaution prevents formation of ice and snow which could cause flashover between bushings.

- Vertical mounting with mounting brackets & back-up plates:
  Mounting bracket  463C035G02
  Back-up plate  28D2876G01
- Vertical mounting with mounting brackets and hangers:
  Mounting bracket  463C035G02
  Hangers  261A233G01
- Vertical mounting with channel brackets for tandem mounting of voltage and current transformers:
  Channel bracket  332B955G02
- Horizontal mounting with hangers:
  Hangers  261A233G01
- IEC mounting rails:  50C5124G01

Note: Metric dimensions are displayed in [mm].
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