

INSTRUMENT TRANSFORMERS

# Instrument transformers with ResiVolt™ technology

## Transient resistant portfolio for the modern grid



ABB transformers with ResiVolt technology offer enhanced withstand to very fast transient overvoltages, resulting in unparalleled performance for renewable and frequent line switching installations.

### Key product features

- Optimized using advanced mechanical and electrical modeling for field performance
- Excellent withstand capability against steep wave transients
- Meets all applicable IEEE instrument transformer standards
- Meets IEC 61869-3, class 7.2.3 and CAN/CSA 411.1, class 6.6 requirements for basic impulse and fast impulse transient withstand
- Various ratios available
- Can be mounted in upright, cantilever, or upside-down positions

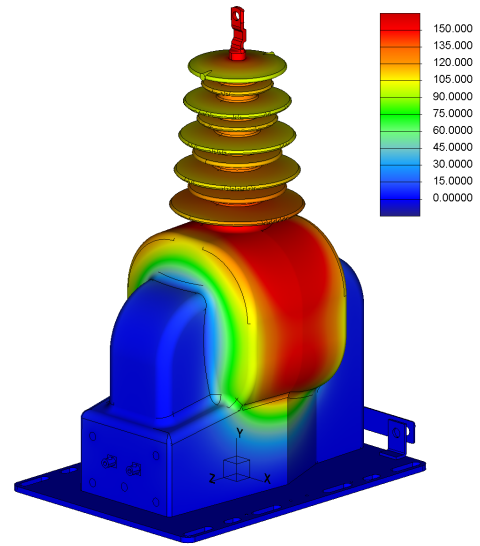
### Benefits

- Increased safety
  - Designed with the ability to withstand very fast transient overvoltage (VFTO) events without insulation degradation, reducing the chance of catastrophic failure
  - Units with ResiVolt technology offer a leaner design with superior performance

- Unparalleled reliability
  - Cutting edge transient resistant technology provides unrivaled performance and minimizes failures at critical interconnection or metering points
  - Industry leading creep distance minimizes potential flashover, resulting in long-term performance even in harsh coastal and industrial environments
  - HCEP (hydrophobic cycloaliphatic epoxy) material provides the best insulation for outdoor use, shedding water and debris, and reduces the probability of flashover, even in heavily polluted areas
- Dependable delivery
  - Rapid support for urgent needs with complete manufacturing, R&D, and applications assistance in Pinetops, NC
  - Transformers with ABB ResiVolt technology are provided with a 3-year warranty.

## Solutions

- Recloser installation
  - With reclosers being added to the grid, particularly for self-healing solutions, the frequency of line switching continuously increases and adds transients to the system. Transformers with ResiVolt technology are designed to withstand these transients.
- Solar and wind farm interconnections
  - The fast transient overvoltages at renewable energy interconnections can cause traditional voltage transformers to prematurely fail. With advanced ResiVolt technology, ABB voltage transformers provide unparalleled reliability at these critical connection points.
- Metering applications
  - The optimized design of products with ResiVolt technology provides a lightweight solution for compact metering applications

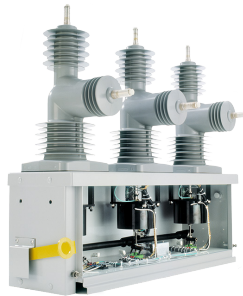


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### Technical data

Type		CVC-110BRER	VOG-15R	VOG-20BR	VRO-150G
Rated max voltage	kV	15	27	38	25
Rated lightning impulse withstand (BIL)	kV	110	150	200	150
Advanced transient resistant technology		Yes	Yes	Yes	Yes
Connection type		Line to ground (L-G)	Line to ground (L-G)	Line to ground (L-G)	Line to ground (L-G)
VT metering accuracy		0.3Y	0.3Y	0.3Y	0.3Y
Thermal rating at 30° C	VA	500	750	1500	2000
Rated voltage factor (RVF)		1.2	1.25	1.9	1.9
Creep distance	in/mm	22.3/567	38.47/977	50.2/1277	38/965
Strike distance	in/mm	14.4/366	17.72/450	21.6/549	16.6/422
Weight	lbs/kg	98/44	85/38.6	125/57	115/52

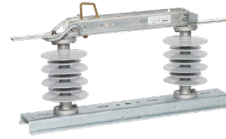
### ABB offers a complete apparatus portfolio:



Three-phase GridShield® recloser



By-pass switch (RBD)



Disconnect switch (DCD)



AccuRange® current transformers (high accuracy, extended range)