

DISTRIBUTION SOLUTIONS

ANSI/IEC three-phase GridShield® recloser

Ready today for the grid of tomorrow



GridShield reclosers are designed to be maintenance-free while providing unparalleled reliability for smart grid initiatives in even the harshest of environments.

Key features

- Unparalleled HCEP (hydrophobic cycloaliphatic epoxy) embedded poles with reliable sensors and vacuum interrupter with mean time to failure of 27,667 years
- Highest accuracy, ±1%, embedded dual voltage sensors
- Single-phase and three-phase tripping capability in every unit (3P and 3SP)
- Flexible controller with ABB, Beckwith and SEL options
- · Site-ready units for simple installation

Benefits

- · Unparalleled reliability
 - Embedded sensors with highest accuracy (± 1%) on horizontal bushings and stability with respect to environmental changes
 - High voltage unit passed the most rigorous environmental testing at KIPTS with no signs of material erosion, tracking, cracks, or punctures of any insulation
- Highest creep distance among the recloser poles globally for long-term performance in any environment
- Peak switching performance with ABB's industry leading vacuum interrupters and magnetic actuator

- Reduced maintenance
- Maintenance-free high voltage compartment (interrupting unit) with no consumable components, eliminating the need for a bucket truck to isolate potentials to service electronics
- HCEP (hydrophobic cycloaliphatic epoxy) material of the poles provides the best insulation for outdoor use, shedding water and debris, thus reducing the probability of flashovers even in heavily polluted areas
- · Simple integration
 - Multiple controller options, including the RER620, RER615, SEL-651R, and Beckwith M-7679 to accommodate any grid modernization application
 - Full portfolio and numerous mounting options are available for added flexibility
 - Site-ready units with voltage sensors, voltage transformers, surge arresters and animal guards are available, minimizing any work to prepare the unit for installation
 - Streamlined components and design for simplified and safer interaction with the unit



Solutions

- FDIR
- The GridShield® recloser is the ideal solution for any smart grid FDIR (Fault Detection Isolation Restoration) scheme with the ability for 3P and 1P tripping in every unit to ensure a future-proof flexible installation to support the reliability needs of today and tomorrow
- Flexibility to support any form of communication between devices and simple integration with a variety of controllers
- · Volt/VAr
 - The high accuracy sensors in the GridShield support an accuracy of ±1% over a wide temperature range and do not drift with humidity to provide accurate data for Volt/VAR application without the need for additional external equipment
- · Substation installations
 - With a high interrupting current of 16kA and a superior BIL rating of 170 kV BIL for the 38 kV unit, GridShield can be used in substation applications where traditional reclosers will not suffice

Technical data				
Rated max voltage	15.5	27	38	kV
Rated continuous current	1250	1250	1250	А
Rated symmetrical interrupting current	12.5/16	12.5/16	16	kA
Rated lightning impulse withstand (BIL)	110	150*	170	kV
Embedded sensor accuracy	± 1	± 1	± 1	%
External creep distance H2-ground	38.0 (960)	38.0 (960)	50.7 (1288)	in (mm)
External creep distance H1-H2	45.0 (1160)	45.0 (1160)	49.80 (1260)	in (mm)
High voltage unit weight	333 (150)	333 (150)	430 (195)	lbs (kg)

^{*125} kV BIL for DVS poles

Controller pin compatibility ABB ACM with ABB ACM with ABB RER620 ABB RER615 Beckwith M7679 SEL-651R 24 pin compatible 32 pin compatible 42 pin compatible



ABB RER620







ABB ACM with ABB RER615

Beckwith M7679

ABB ACM with SEL-

Complete the recloser installation with world-class ABB switches and instrument transformers!







Disconnect switch (DCD) By-pass switch (RBD) Loadbreak insulator switch (LSID)

27kV voltage transformer with ResiVolt™ technology (VOG-15R)

305 Gregson Dr. Cary, NC 27511

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