

OVR three-phase vacuum reclosers

SCADA switch for smart networks



ABB offers a complete range of three-phase mechanically gang-operated vacuum reclosers suitable for distribution networks up to 38 kV in accordance with IEC 62271-111 and IEEE C37.60. Advanced protection functions and communication protocols make them a more reliable solution for smart outdoor networks and substations.



Operator safety at its best

- Safer and more secure manual emergency trip handle to prevent accidental closing in an emergency situation
- No electronics to maintain in high voltage cabinet



Reliable in extreme conditions

- Solid dielectric design with HCEP (hydrophobic cycloaliphatic epoxy polymer) insulating material helps ensure superior performance over a longer service period
- Excellent performance even in high-pollution environments
- State-of-the-art magnetic actuation and vacuum interrupters help maintain reliable switching performance over the life of the recloser



Fast installation with easy operation and maintenance

- Site-ready units reduce installation time, effort and cost
- Flexible mounting options for single/double pole or substation frame available
- Draw-out protection Relion® relay for quick and easy maintenance or replacement
- Relay configuration and settings can be managed from front-panel HMI, web-based user interface or connectivity tool
- Integrated current and voltage measurement
- Flexibility in protection relay selection

- 01 OVR-15
- 02 OVR-27
- 03 OVR-38
- 04 Recloser control cabinet with Relion® RER615 IED
- 05 Recloser control cabinet with SEL-751 IED

Applications

- Utility feeder applications: tie point, sectionalizing and load break switch
- Medium voltage circuit breaker replacement for substation applications
- Point of interconnection for renewable, DERs and microgrid applications
- Three-phase laterals serving industrial and infrastructure customers
- Auto-recloser application for oil and gas customers

Technical characteristics	Units	OVR-15	OVR-27	OVR-38
Standards IEC 62271-111 / IEEE C37.60				
Nominal operating voltage	kV	Up to 15	Up to 27	Up to 38
Rated maximum voltage	kV	15.5	27	38
Rated power frequency	Hz	50/60	50/60	50/60
Rated continuous normal current	A	630	1000	1200
Rated short-time current withstand capacity	kA	12.5 for 3 sec.	12.5 for 3 sec.	16 for 3 sec.
Rated peak withstand current	kAp	31.25	31.25	40
Rated lightning impulse withstand voltage (BIL)	kVP	110	125	170
Rated power frequency withstand voltage (1 min. dry)	kV	50	60	70
Rated symmetrical interrupting current	kA	12.5	12.5	16
Rated line-charging current (LC) / cable-charging current (CC)	A	2 / 10	5 / 25	5 / 40
Rated operating (reclosing) sequence			O - 0.2 s - CO - 2 s - CO - 2 s - CO	
Minimum operation (CO cycles) at rated continuous current	Operations			10,000 ¹
Auxiliary power supply voltage	V AC			110 / 240
Type of battery pack				Sealed lead acid rechargeable
Standard battery bank offering	V (Ah)			24 (18) ²
Standard battery back-up	Hrs			24 ²
Current sensors per recloser				3 numbers current transformer
Voltage sensors per recloser		3 or 6 ³	3 or 6 ³	3 or 6 ³
Interrupting media				Vacuum interrupter
Type of mechanism				Bi-stable magnetic actuator
Ambient temperature range	°C			-40 to +55
Altitude	m			3000 ⁴
Minimum external creepage distance	mm (inch)	480 (19)	960 (37.7)	1306 (51)
Weight of HV unit	kg (lb)	140 (309)	140 (309)	175 (386)
Controller (IED)				Relion® RER615 / SEL-751

¹ Contact factory for higher number of operations

² Higher battery performances available on request

³ Six voltage sensors option available only with RER615 IED

⁴ For altitudes above 1000 m, suitable de-rating must be considered as per IEC 62271-111/IEC C37.100.1-2007



01



02



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