Technical Specification

Technical specification - OVR-27 Recloser with GAO4 Control Cabinet
Advanced model and standard configuration

Product code 2RCA047971A0001

OVR-27 (HV cabinet)

- Three phase recloser with mechanically ganged operation
- HV cabinet made of painted stainless steel
  - size: h=955 mm, w=1312 mm, d=576 mm
  - weight 140kg
- Eco-efficient with time-proven HCEP insulation material suitable for heavily polluted areas
- Current transformers (3, load side) and voltage dividers (3, supply side) integrated into the poles
- position indicator (RED=CLOSE, GREEN=OPEN) to be checked
- inbuilt manual trip handle and interlocking including separate reset handle for manual trip and interlocking
- MV connection bolt diameters and thread dimensions
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Unit</th>
<th>OVR-27</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interrupting medium</td>
<td></td>
<td>Vacuum</td>
</tr>
<tr>
<td>Insulating medium</td>
<td></td>
<td>HCEP</td>
</tr>
<tr>
<td>Actuator type</td>
<td></td>
<td>Magnetic</td>
</tr>
<tr>
<td>Ambient air temperature range</td>
<td>°C</td>
<td>-40°C... +55°C</td>
</tr>
<tr>
<td>Rated max. voltage</td>
<td>kV</td>
<td>27</td>
</tr>
<tr>
<td>Rated lightning impulse withstand voltage (BIL)</td>
<td>kV</td>
<td>125</td>
</tr>
<tr>
<td>Rated continuous (normal) current</td>
<td>A</td>
<td>1000</td>
</tr>
<tr>
<td>Rated short-time withstand current</td>
<td>kA</td>
<td>12.5 for 3sec</td>
</tr>
<tr>
<td>Rated symmetrical interrupting current</td>
<td>kA</td>
<td>12.5</td>
</tr>
<tr>
<td>Rated symmetrical making current</td>
<td>kA</td>
<td>31.25</td>
</tr>
<tr>
<td>Rated frequency</td>
<td>Hz</td>
<td>50/60</td>
</tr>
<tr>
<td>Rated operating sequence</td>
<td></td>
<td>O-0.2s-CO-2s-CO-2s-CO</td>
</tr>
<tr>
<td>Min. guaranteed operations at rated continuous current</td>
<td>Ops</td>
<td>10,000</td>
</tr>
<tr>
<td>Standards</td>
<td></td>
<td>IEC 62271-111-2012</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IEEE C37.60-2012</td>
</tr>
<tr>
<td>Auxiliary voltage supply</td>
<td>V</td>
<td>110-240 VAC</td>
</tr>
<tr>
<td>Pollution level as defined in IEC 60815</td>
<td></td>
<td>Very heavy</td>
</tr>
</tbody>
</table>
**GAO4 control cabinet (LV cabinet)**

- Stainless steel, AISI 304
  - IP55
  - size: h=620mm, w=500mm, d=357mm
  - weight 71 kg
- Integrated and pad lockable handle (diameter 8 mm and/or 5.5mm)
- auxiliary supply voltage 110 - 240 VAC
- 24Ah long life batteries

The picture shows a GAO4 cabinet with optional accessories not listed above.

- **RER615 protection-, supervision- and control unit**
  - Relay order code: HBRDADNABD1BBAN21G
  - Languages: English (IEC) / English (ANSI)
  - Communication protocols:
    - IEC 61850 + IEC 60870-5-101 + IEC 60870-5-104 + DNP3.0
- Standard application for recloser with the following functions activated:
  - Local operation from RER615 HMI (Open / Close and Local/Remote)
  - Measurements:
    - Current measurements, 3I load side
    - Voltage measurements, 3U load side
  - Protection functions:
    - Directional earth-fault protection, Io>, Io>>
    - Directional Overcurrent protection, 3I>, 3I>>
    - Negative-sequence overcurrent (broken conductor)
    - Frequency protection, f>, f<
    - Voltage protection U>, U<
    - Reclosing functionality
- Aux supply cable connection dimensions with bushing up to 3*6mm² to terminal blocks
- AC side protection with MCB C16A
- DC side protected with 1 pcs MCB K10A
- Auxiliary contact for essential MCBs
- Surge protection with auxiliary contact
- Socket outlet with residual current protection
- Aux supply voltage presence indicator (and alarm)
- Door micro switch for controlling fused cabinet lighting
- 24 VDC output for optional communication unit
- MCB C2A protected anti-condensation heater with thermostat
- MCB C2A protection for HV unit anti-condensation heater
- Temperature compensated battery charging
- Surveillance of essential MCB aux contacts and surge protection trip alarm
- Hatch lock for connectors on the bottom of the control cabinet
Standard accessories

- Mounting frame for Recloser, mounting equipment for substation mounting and mounting brackets for 6 (six) surge arresters (arresters not included).

- Substation mounting equipment for control cabinet

- Control cable length 12 m with multi-pin connectors in both HV and LV cabinets.

- 6 pcs NEMA 2 connectors

- Standard package to be defined for both Recloser and Control Cabinet
  - HV unit package size: h=1210 mm, w = 1490 mm, d= 820 mm
  - HV unit weight 220 kg
  - Structure package size: h=1510, w=6720, d=440
  - Structure package weight 222 kg
  - LV unit package size: h=800 mm, w= 600 mm, d=580 mm
  - LV unit weight 75 kg