Technical Specification

Technical specification - OVR-15 Recloser with GAO4 Control Cabinet

Standard model and configuration

Product code 2RCA047964A0001

OVR-15 (HV cabinet)

- Three phase recloser with mechanically ganged operation
- HV cabinet made of painted stainless steel
  - size: h=1117 mm, w=1305 mm, d=916 mm
  - weight 200kg
- Eco-efficient with time-proven HCEP insulation material suitable for heavily polluted areas
- Current transformers (3, load side) and voltage dividers (6, load and 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-15</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>15.5</td>
</tr>
<tr>
<td>Rated lightning impulse withstand voltage (BIL)</td>
<td>kV</td>
<td>110</td>
</tr>
<tr>
<td>Rated continuous (normal) current</td>
<td>A</td>
<td>630</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
- RER615 protection-, supervision- and control unit
  - Relay order code: HBRDADNABB1BBAN21
  - Languages: English (IEC) / English (ANSI)
  - Communication protocols:
    - IEC 61850 + IEC 60870-5-101 + IEC 60870-5-104
- Standard application for recloser with the following functions activated:
  - Local operation from RER615 HMI (Open / Close and Local/Remote)
o Measurements:
  - Current measurements, 3I load side
  - Voltage measurements, 6U supply and load side

o 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

o Functions:
  - Synch check

- Aux supply cable connection dimensions with bushing up to 3* 6mm² to terminal blocks
- Hatch lock for connectors on the bottom of the control cabinet
- Door micro switch (for door alarm)
- Aux supply voltage presence indicator
- Auxiliary contact for main MCB alarm
- Anti-condensation heater with thermostat
The picture shows a GAO4 cabinet with optional accessories not listed above.

**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.
- 3 pcs NEMA 2 connectors
- Standard package to be defined for both Recloser and Control Cabinet
  - HV unit package size: h=1390 mm, w = 1490 mm, d= 1080 mm
  - HV unit weight 395 kg
  - LV unit package size: h=800 mm, w= 600 mm, d=580 mm
  - LV unit weight 75 kg