Technical Specification

Technical specification – Control Cabinet type GAI2 for 4 feeders with motorized switch disconnectors

Product code 2RCA047237

Above picture above may include equipment not listed in this specification.
General

The cabinet is made for remote control of 4 motor controlled switch disconnectors including position indication from motor controlled switch disconnectors and earthing switches. The cabinet also includes 1 pcs manual operated switch disconnector with fuses for transformer supply feeder. The design also includes a communication gateway using GPRS/3G/LTE. The cabinet is intended to be mounted on wall besides the Ring Main Unit (RMU) and includes wall mounting equipment.

Enclosure

- Stainless Steel cabinet with door
  - IP55
  - h=620mm, w=532mm, d=330mm
  - Wall mounting brackets: h=718 mm w=532mm, d 370mm
- 1-point locking mechanism per door with key
- Thermostat controlled 50W anticondensation heater
- Ventilated cabinet
- Connections to the cabinet:
  - 3 pcs Control cable connectors (left side)
  - 1 pcs Power supply connector for aux supply cable up to 3* 1,5 mm² (right side)
  - Bushing for earthing conductor (bottom side)
  - Bushing for sensor cable (bottom side)
  - Bushing for current transformer cable (bottom side)
  - Bushing for antenna cable (bottom side)

Power supply equipment

- 230VAC power supply
- Surge protection device with auxiliary contact
- 230VAC socket outlet with residual current protection
- AC side protection with MCB C6A
- Battery charger 60W (Input range 240VAC +10%)
DC side protected with 2 pcs MCB C6A
DC motor circuits protected with 1 pcs MCB C16A
Auxiliary contacts for essential MCBs
Surveillance of F1 MCB aux contact and charger alarm
27.4VDC output voltage (adjustable range between 21-29 VDC)
24V (12 V * 2 in serial), 17Ah sealed valve regulated lead acid batteries
Micro switch for door open position
Fused cabinet lighting controlled by door open position micro switch

Wiring and terminal blocks
Terminal blocks (minimum):
- 6 mm² short-circuitable for measurement transformer circuits
- 2.5 mm² for AC supply voltage circuit
- 2.5 mm² for DC battery circuit
- 1.5 mm² for motor circuits

Wiring (minimum):
- Control circuits: 1.0 mm²
- Main equipment grounding circuit 6 mm²
- Other equipment grounding circuit 2.5 mm²

Remote control equipment
1pcs REC615 protection- supervision,- and control unit
- Relay order code: HBCAAANDD1BNNN21G
- Languages: English (IEC) / English (ANSI)

1 set RIO600 Fault Passage Indication System
- 1 pcs MOD600APSML07 RIO600 power supply module
- 1 pcs MOD600FLECMIR RIO600 galvanic communication module with RJ-45 interface
- 2 pcs MOD600A8DIML RIO600 Digital input module with 8 inputs - Low
- 1 pcs MOD600ARTD4 RIO600 RTD/ mA input module with 4 inputs
- 1 set ARG600 Communication module
  - 1 pcs ARG600A2625NA Arctic LTE (4G) Gateway communication module
    - GPRS/3G/LTE

- Functionality:
  - Communication protocols:
    - IEC61850 + IEC 60870-5-101 + IEC 60870-5-104 + DNP3.0
  - Monitoring of up to 4 objects (Switch Open/Close and Earth switch Open/Close)
  - Monitoring Enable /Disable Electric Control indication switch for each bay
  - Control of up to 5 objects (Switch Open/Close)
  - Temperature compensated battery charging
  - Door alarm
  - SF6 alarm
  - Switch for Enabled/Disabling electric control and indication monitoring of that for each switch disconnector (4 pcs)
  - Open / close switch disconnector indication monitoring for each switch disconnector (4 pcs)
  - Earthing switch grounded on cable side switch disconnector indication monitoring for each switch disconnector (4 pcs)
  - 230 VAC Supply voltage measurement
  - Current measurement on LV-side phase 2
  - Transformer temperature measurement

Note

Please note that the antenna and the sensors are not included in the control cabinet scope and needs to be ordered separately.