Technical Specification

Technical specification – Control Cabinet type GAI2 for 3 feeders with motorized switch disconnectors

Product code 2RCA047015

These pictures above may include equipment not listed in this specification.
General

The cabinet is made for remote control of 3 switch disconnectors including position indication from switch disconnectors and earthing switches. The design also includes a communication gateway using GPRS/3G/LTE. The cabinet is intended to be mounted on top of the Ring Main Unit (RMU) for ABB’s SafeRing RMU and includes mounting equipment for ABB’s SafeRing RMU.

Enclosure

- Al-Zn coated cabinet with painted doors (RAL7035)
  - IP43
  - h=383mm, w=1113mm, d=335mm
- 1-point locking mechanism per door with key
- 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 and right side)
  - Bushing for antenna cable (bottom and right side)
- Local operation from switch on door (Operation: Disabled / Enabled)

Power supply equipment

- 230VAC supply voltage
- Surge protection device with aux contact
- AC side protection with 2 pcs MCB C6A
- 230VAC socket outlet with residual current protection
- DC side protected with 1 pcs MCB C6A and 1 pcs MCB C3A
- DC motor circuits protected with MCB C6A /cubicle
- Auxiliary contacts for essential MCBs
- Surveillance of essential MCB aux contacts and surge protection trip alarm
- 24 VDC output voltage
- 24V (12 V * 2 in serial), 24Ah long life sealed valve regulated lead acid batteries

**Wiring and terminal blocks**

- Terminal blocks (minimum):
  - 6 mm² short-circuitable for measurement transformer circuits
  - 2,5 mm² for other circuits
- Wiring (minimum):
  - Control circuits: 1,5 mm²
  - Equipment grounding circuits 4 mm²

**Remote control equipment**

- 1pcs ARC600 controller module
  - ARC600A2324NA
- Functionality:
  - Communication protocols:
    - IEC 60870-5-104
      - integrated GPRS/3G/LTE modem
      - RJ45 Ethernet port for external modem
    - IEC 60870-5-101
      - DSUB9 serial port for external modem
  - Communication media
    - GPRS/3G/LTE modem integrated
  - Monitoring of up to 3 objects (Switch Open/Close and Earth switch Open/Close)
  - Control of up to 3 objects (Switch Open/Close)
  - temperature compensated battery charging
  - Heater control
  - SF6 low gas pressure alarm
- Fused 500mA supervised control cabinet lightning with controlled operation by door micro switch

**Note**

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