Technical Specification

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

Product code 2RCA047016

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

The cabinet is made for remote control of 4 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) and includes mounting equipment for ABB’s SafeRing RMU.

**Enclosure**

- Al-Zn coated cabinet with painted doors (RAL7035)
  - IP43
  - h=383mm, w=1410mm, 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 power supply
- 230VAC socket outlet with residual current protection
- Surge protection device with aux contact
- AC side protection with 2 pcs MCB C6A
- 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
o 24 VDC output voltage
o 24V (12 V * 2 in serial), 24Ah long life sealed valve regulated lead acid batteries
o door micro switch for controlling cabinet lighting

Wiring and terminal blocks

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

Remote control equipment

o 1pcs ARC600 controller module
  o ARC600A2324NA
o 1 set RIO600 Fault Passage Indication System
  o 1 pcs MOD600APSML07 RIO600 power supply module
  o 1 pcs MOD600FLECMIR RIO600 galvanic communication module with RJ-45 interface
  o 1 pcs MOD600ADIM8L RIO600 binary input module with 8 input and 13 Vdc input threshold
  o 1 pcs MOD500ADOM4R RIO600 binary output module

o Functionality:
  o 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
  o Communication media
    ▪ GPRS/3G/LTE
- Monitoring of up to 5 objects (Switch Open/Close and Earth switch Open/Close)
- Control of up to 5 objects (Switch Open/Close)
- Integrated battery charger and monitoring
- Temperature compensated battery charging
- Heater control
- SF6 gas alarm
- Fused 500mA supervised control cabinet lighting 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.