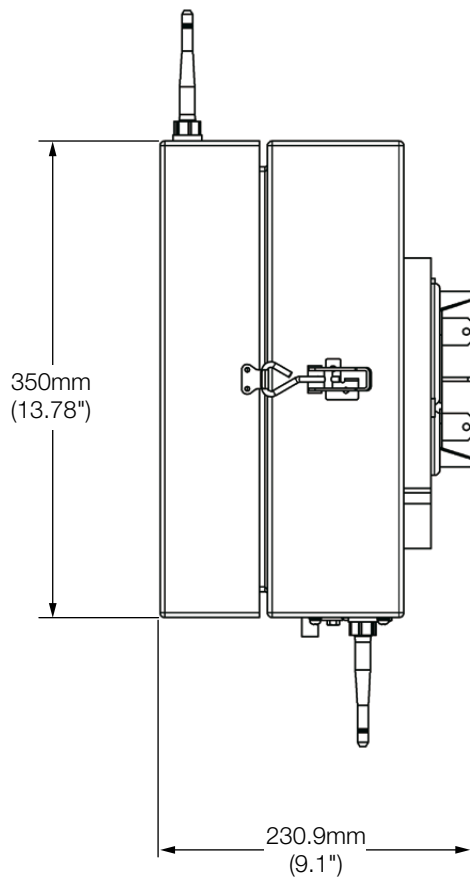
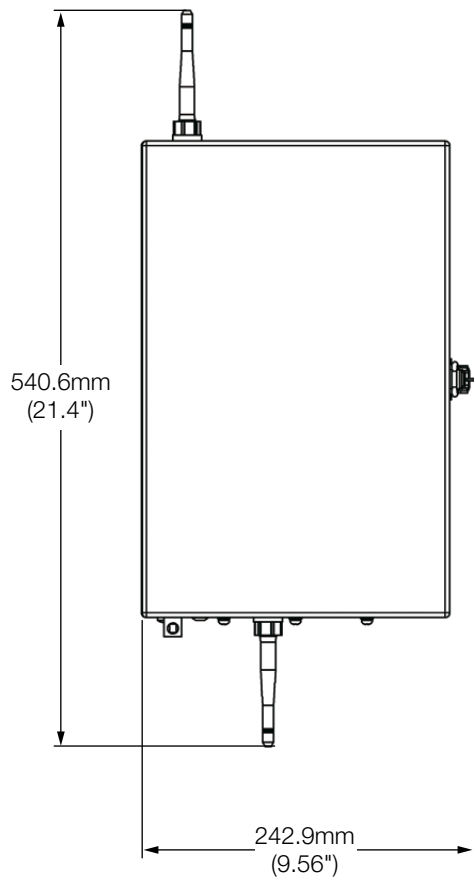
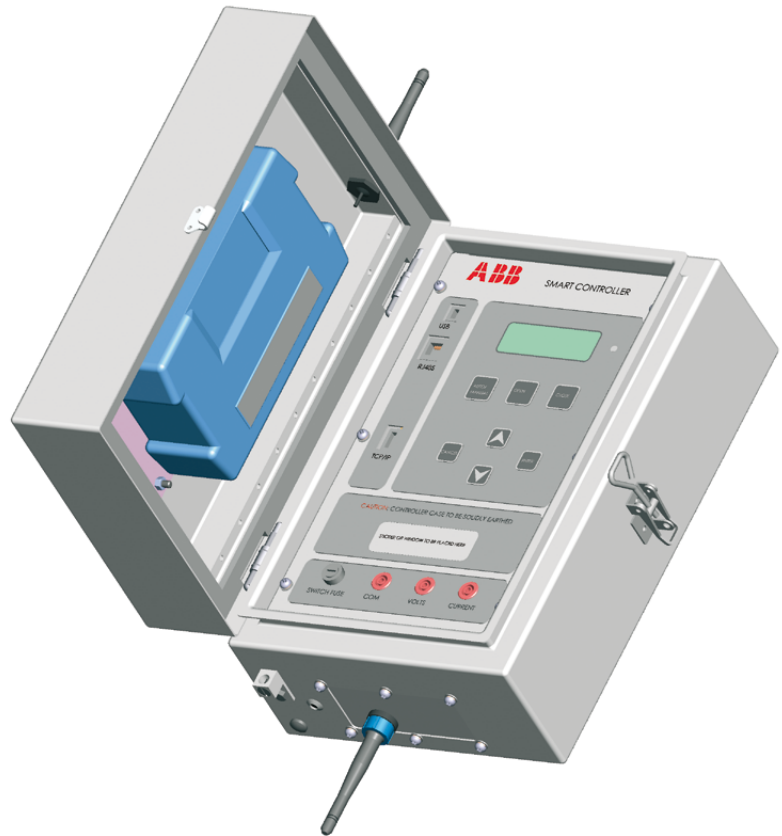
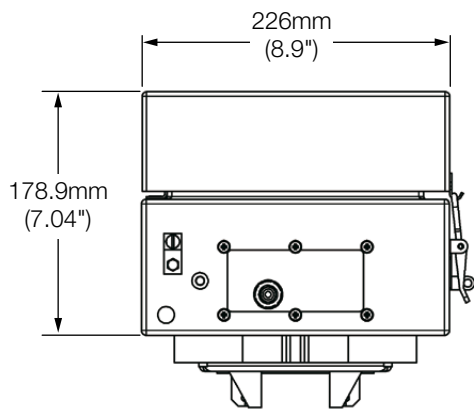




CQ900-R Capacitor controller

Capacitor controller



CQ900-R CONTROLLER

Technical data

Control system

- Micro-processor-based system for balanced three-phase networks
- Field upgradeable firmware capability through USB interface allows future upgrades and features to be deployed in field

Supply voltage

90 VAC to 264 VAC universal power supply

Consumption

10 VA max (no modem), 30 VA max (with modem*)

Connection type for measuring circuit and power supply

- Phase-phase or phase-neutral. User selectable VT ratios
- External current sensor converting 0–600 A to 0–10 VAC (optional for power based measurements)

Frequency range

47 Hz to 63 Hz - Real time frequency measurement monitors actual system frequency and calculates kvar, PF, KVA, kW etc, based on actual system conditions

Electrical isolation/protection

- 450 V varistor protection
- Transient voltage suppressors providing fast spike and ESD protection (1500 V 8/20 us impulse protection)
- Electrically protected auxiliary digital inputs

Fuse protection

- Unit protection: 2 A Fast blow (M205) internal
- Switch protection: 10 A SLOW-BLO® (M205)

Operating environment

Operating temperature:

-40°C to +70°C (ambient)
(-40°F to +158°F)

Unit display operating temperature:

-20°C to +70°C
(-4°F to +158°F)

Humidity range: 5% to 95% (non-condensing)

Measurement sensor performance

Voltage: ± 375.8 V peak (264 Vrms) range
0.2 VAC resolution
± 1% accuracy

Current: 0 to 600A range
0.5A resolution
± 1% accuracy + sensor accuracy

Phase angle: -179° to +180° range
1° resolution
± 0.1% accuracy

Temperature: -40°C to +70°C
(-40°F to +158°F) range
1°C (1°F) resolution
± 1% non-linearity

Output contacts

Switch contacts: 2 x 20 A volt free contacts
1 open, 1 close

Continuous current (max): 20 A

Inrush current (max): 100 A

Contact closure period: User selectable, 100 ms to 10 s as well as constant closed for electrically held switch operation

Settings

Control modes:

- Remote (control or monitor only)
- Automatic (local)
- Manual (local)

Automatic control modes:

- Schedule only (Time)
- Temperature only
- Voltage only
- VAR only
- Schedule with temperature override
- Schedule with voltage override
- Schedule with temperature and voltage override
- Schedule with VAR override

Switch on schedule:

- Single or seasonal
- Work day and non-work day schedules with full customisation

Switch on temperature range: -40°C to +50°C
(-40°F to +122°F)

Switch on voltage range: 105 V to 130 V
or 210 V to 260 V

Switch on VAR range: -10 Mvar to +10 Mvar

Open/Close time delay: 5 s to 10 min
Separate open and close times

Maximum operations: 1 to 30 daily operations

Logging periods: 30 s to 60 min

Enclosure

Lockable, IP54, powder coated, stainless steel enclosure

Mounting

Pole mounting brackets provided as standard.

Optional wall and meter socket mounts are also available.

Memory/Calendar

Time clock: Battery backed RTC

- Calendar:**
- 20 years preset
 - 30 user settable annual holidays
 - Daylight savings operation and auto season adjust
 - Fully user selectable weekdays and weekends

Non-volatile flash data logging memory:

10,000+ record logs

Non-volatile storage of log and operating parameters in data FLASH

Backup battery: 3.6 V lithium cell — 10 year life (unpowered state)

Communications

- Unit configuration and data log transfer via USB
- Optional “ABB Smart Link” radio allows local interrogation without touching unit. (Up to 50m range)
- RS232 and Ethernet interfaces allow monitoring over remote networks using a wide range of modem devices. DNP3.0 communication protocol enabled

Quality

- Printed circuit board in accordance to IPC-D-2221
- Unit in accordance applicable electrical standards
- CE mark (C-tick), RoHS component compliant
- Manufactured in an ISO 9001 and ISO 14001 environment

Contact us

**Please contact your local sales representative
for further information**

www.abb.com/powercapacitors
www.abbaustralia.com.au

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