

# ESP Intelligent

## CHQ-MRC2(SCI)

### Fail Safe Analogue Mains Relay Controller

#### Features

- ▶ Loop Powered with Single Loop Address
- ▶ Provides single mains rated relay contact
- ▶ Provides fail safe relay control (check for control panel compatibility for fail safe operability)
- ▶ Provides Relay Contact Rated at 250 VAC @ 5 A (resistive) & 48 VDC @ 2 A (resistive)
- ▶ Provides Auxiliary monitored input
- ▶ Also available as DIN
- ▶ Both models feature an integral SCI
- ▶ Deeper, glanded IP65 backbox available
- ▶ Can be used with CHQ-BACKBOX to comply with BS 7671.



#### Description

Model CHQ-MRC2/FS(SCI) is a Single Input/Output Module, which provides a single, mains-rated relay output for the control of such devices as dampers, access control equipment (e.g. door magnets), extractors or plant and equipment shutdown. The monitored input can be used for local power supply fault monitoring or as a general-purpose input.

The unit is also available as a DIN Rail mountable version; with an integral short-circuit isolator. The CHQ-MRC2/FS(SCI) utilises simple DIL switches for reliable addressing.

#### Specification

| Ordering code                         | CHQ-MRC2(SCI) - Module  | CHQ-MRC2/DIN(SCI) - DIN Module                        |
|---------------------------------------|---|---|
| Operating voltage                     | 17 – 41 VDC   |   |
| Low power mode (0.75s)                | 100 $\mu$ A   |   |
| Quiescent current (typ)               | 300 $\mu$ A   |   |
| Current consumption                   | 22 mA $\pm$ 20 % (polling)  |   |
| Current in short circuit              | 8 mA  |   |
| Maximum short circuit current         | 1 A   |   |
| Relay contact rating* **              | 48 VDC max, 2 A (resistive load), 250 VAC max, 5 A (resistive load) – For mains ac switching, the Control Panel must be compliant with Low Voltage Directive for SELV circuits. |   |
| Input EOL resistor                    | 10 k $\Omega$ , $\pm$ 5%, 0.25 W  |   |
| Input threshold level                 | ON=470 $\Omega$ , Short cct <50 $\Omega$ , Open cct >100 K $\Omega$   |   |
| Storage / Operating temperature range | -30 $^{\circ}$ C to +60 $^{\circ}$ C / -10 $^{\circ}$ C to +50 $^{\circ}$ C   |   |
| Maximum humidity                      | 95% RH non-condensing (at 40 $^{\circ}$ C)  |   |
| Weight (g) Dimensions (mm)            | Module  | 360 (add 235 to module weight when using CHQ-BACKBOX) |
|                                       | DIN Module  | 145   |
| Colour / Material                     | CHQ Module & CHQ-BACKBOX White ABS, DIN Module Green ABS, Module Lid Semi-Opaque Black ABS as standard (white version – CHQ-LID(WHT) also available)                            |   |

\* Fire alarm control panel compatibility required for these products.

\*\* No fuses are fitted on this device. The relay output circuit must therefore be protected by a suitable over-current protection device to prevent excessive current through the relay contacts. Refer to the relay contact specification in this document.