

RCM01 SERIES FOR MODE 2 EV CHARGING

The RCM01 range of residual current monitors is intended for the detection of DC and/or AC residual currents in 50Hz/60Hz AC or DC installations (see model options below).

The RCM01 is primarily intended to be installed in Mode 2 EV In-Cable Control and Protection Devices. The RCM01 can be used to detect DC and AC currents in single phase or three phase AC supplies. Under a fault condition, the RCM01 can be used to disconnect the supply to the EV by opening a contactor or relay.

MAIN FEATURES

- Operates from a 12V DC supply
- External Test Facility
- “Fault” signal output
- For use with 1, 2 or 3 phase loads rated up to 100A/400V
- ROHS compliant
- Complies with the DC protection requirements of IEC62752 (Mode 2) & UL2231
- 3000A Surge Current Withstand



Supply Conditions

Correct performance of the RCM01 is assured when the supply voltage remains within the specified limits of 12Vdc +/- 10%. Performance may be compromised if the supply voltage exceeds these limits.

Fault Operation & Auto Reset

Once a residual fault current which exceeds the rated AC or DC level is detected by the RCM01, the module will go into its fault state within the specified response times.



V: Vertical assembly



W: Horizontal pre-wired



H: Horizontal assembly

PRODUCT OPTIONS

MODELS

RCM01-W01 = 0.006A DC

RCM01-W02 = 0.006A DC / 0.03A AC

RCM01-W03 = 0.056A DC / 0.02A AC

RCM01-H01 = 0.006A DC

RCM01-H02 = 0.006A DC / 0.03A AC

RCM01-H03 = 0.056A DC / 0.02A AC

RCM01-V01 = 0.006A DC

RCM01-V02 = 0.006A DC / 0.03A AC

RCM01-V03 = 0.056A DC / 0.02A AC

H: Horizontal assembly V: Vertical assembly W: Horizontal pre-wired

INPUTS & OUTPUTS

Pin 1 & 2:
12 V DC+, 0V DC

Pin 3:
Test Function

Pin 4:
Output (Active High Open Drain)

PARAMETER	RCM01-01	RCM01-02	RCM01-03
Operating Residual Current Limits - (I Δ n)	6mA DC	6mA DC / 30mA AC	56mA DC / 20mA AC
Non-operating Residual Current Limits - (I Δ no)	3mA DC	3mA DC / 15mA	15mA AC
Response Time to residual current fault (time between appearance of fault to output going high)	According to IEC 62752	According to IEC 62752	According to UL2231-2
DC Supply Voltage (Vcc): Power Consumption		12Vdc \pm 10% <60mW maximum	
Rated Load Current - Amps The RCM modules can accommodate single phase loads up to 100A or three phase loads up to 40A		100A 1 or 2 Phase 40A 3 Phase	
Test Function (Externally applied 12V dc) - Current		12mA turns Max	
Fault Signal Output Drain Current Pull up Voltage		Active High Open Drain 100mA Maximum +12Vdc Maximum	
Environmental Operating Conditions Absolute Temperature		-40°C to +85°C	
Weight		22g	

