RCM14-04 AC/DC RESIDUAL CURRENT MONITOR

The RCM14-04 is a residual current monitor intended for the detection of AC and DC residual currents in 60Hz AC installations.

The RCM14-04 is primarily intended for use in CCID20 Electric Vehicle charging stations to disconnect the supply to the Electric Vehicle under an AC and/or DC residual fault current condition.

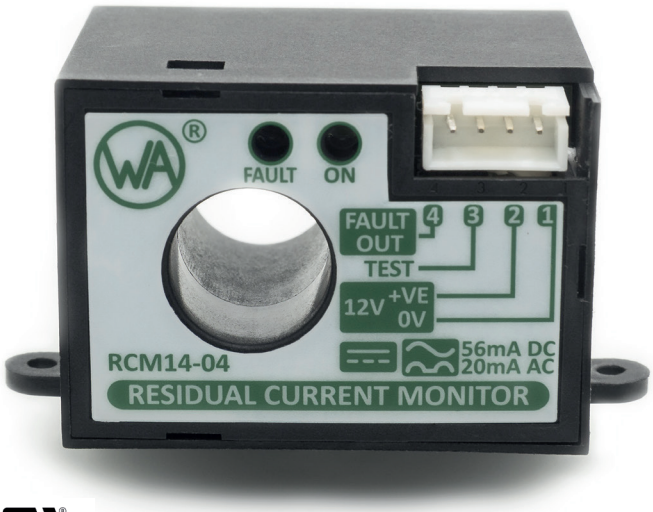
The RCM14-04 may be used to detect AC and/or DC residual currents in DC, single phase or multiphase installations.

The RCM14-04 is a compact solution designed to be panel mounted. It has a JST connector for easy installation.

This product is fully compliant with the detection requirements of UL2231-2.

MAIN FEATURES

- Operates from a 12V DC supply
- External Test Facility
- JST XH 2.5mm Pitch Connector JST:B4B-XH-A (LF) (SN)
- "Fault" signal output
- LED Indication for "On" and "Fault"
- For use with single or 3 phase loads
- ROHS 2 compliant
- Complies with AC and DC detection requirements of UL2231 (CCID20)
- 3000A Surge Current Withstand
- 14mm Aperture



Order Code: 90148

SEE ALSO

RCM14-01	*6mA DC Detection to IEC62955, 14mm CT Aperture*
RCM14-03	*6mA DC/30mA AC Detection to IEC62752, 14mm CT Aperture*
RCM14-04 SYSTEM	*56mA DC/20mA AC Detection to UL2231-2, 14mm CT Aperture, PCB Mount Sensor Board + CT*
RCM20-04	*56mA DC/20mA AC Detection to UL2231-2, 20mm CT Aperture*

Supply Conditions

The RCM14-04 is intended for operation with a supply voltage of 12V DC +/- 10%.
Performance may be compromised if the supply voltage is outside these limits.

Fault Operation & Auto Reset

When a residual fault current that exceeds the rated AC or DC levels is detected, the RCM14-04 Output pin will switch to the “Fault” state within the specified response times. The Output pin will Auto-Reset when the fault is removed.

PIN OUT	
Pin 1	0V DC
Pin 2	+12V DC
Pin 3	External Test Facility
Pin 4	Fault Signal Output (Active High Open Drain)

See Application Sheet WA-AS-016 for Connection Diagram

TECHNICAL DATA	
Relevant Product Standard	UL2231-2 (CCID20)
Rated Operating Residual Current Limits - (IΔn)	56mA DC / 20mA AC
Rated Non-operating Residual Current Limit - (IΔno)	15mA AC
Response Time to residual current fault (time between appearance of fault to output going high)	According to UL2231-2
DC Supply Voltage (Vcc): Supply current (no fault present) Supply current (fault current >264mA)	12V DC ± 10% 3.5mA 40mA
Rated Load Current - Amps The RCM14 modules can accommodate single phase loads up to 100A or three phase loads up to 40A	100A Single Phase 40A 3 Phase
Test Function (Externally applied 12V DC) - Test Current Limit	3mA DC
Fault Signal Output Drain Current Pull up Voltage	Active High Open Drain 100mA Maximum 24V DC Maximum
Environmental Operating Conditions Absolute Temperature	-40°C to +85°C
Weight	45g
Recommended Screw Type	M3 × 6 (2 pcs.)