

RCM01-02 DC/AC RESIDUAL CURRENT MONITOR

The RCM01-02 is a residual current monitor intended for the detection of DC and AC residual currents in 50Hz/60Hz AC installations.

The RCM01-02 is primarily intended for use in Mode 2 Electric Vehicle In-Cable Control and Protection Devices (IC-CPDs), to disconnect the supply to the Electric Vehicle under an AC or DC residual current fault condition.

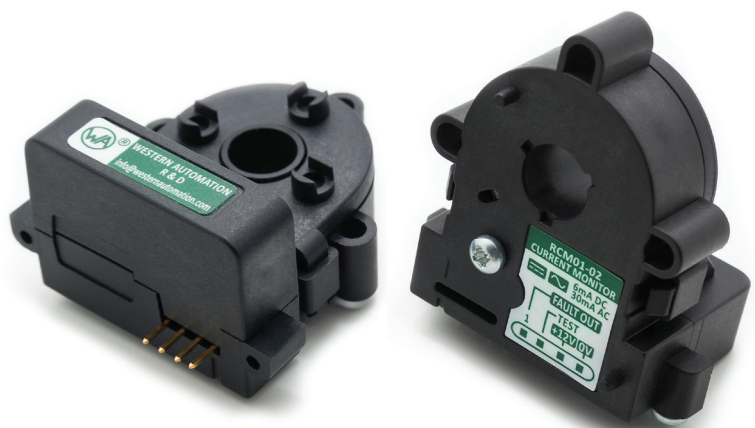
The RCM01-02 may also be used to detect DC or AC residual currents in DC, single phase or multiphase installations.

The RCM01-02 is a compact solution designed to be mounted directly onto a PCB.

This product is fully compliant with IEC62752.

MAIN FEATURES

- Operates from a 12V DC supply
- External Test Facility
- “Fault” signal output
- For use with single phase or 3 phase loads
- ROHS compliant
- Complies with the DC and AC protection requirements of IEC62752 (Mode 2)
- 3000A Surge Current Withstand



SEE ALSO

RCM14-01	<i>Residual Current Monitor, 14mm Aperture, 6mA DC (IEC62955)</i>
RCM14-03	<i>Residual Current Monitor, 14mm Aperture, 6mA DC / 30mA AC (IEC62955)</i>
RCM14-04	<i>Residual Current Monitor, 14mm Aperture, 56mA DC / 20mA AC (UL2231)</i>
RCM20	<i>Residual Current Monitor, 19mm Aperture, 6mA DC / 30mA AC (IEC62955)</i>
RCM Mode 2 System	<i>Residual Current Monitor, Sensor Board + PCB Mountable Current Transformer</i>

Supply Conditions

The RCM01-02 is intended for operation with a supply voltage of 12V DC +/- 10%.

Performance may be compromised if the supply voltage is outside these limits.

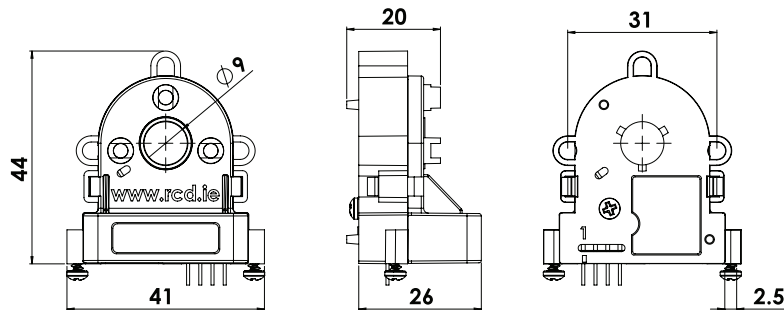
Fault Operation & Auto Reset

When an AC or DC residual fault current exceeds the rated level the RCM01-02 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	Output (Active High Open Drain)
Pin 2	Test Function
Pin 3	+12V DC
Pin 4	0V DC

See Application Sheet WA-AS-026 for Connection Diagram

TECHNICAL DATA	
Relevant Product Standard	IEC62752
Rated Residual Operating Current - (I _{Δn})	6mA DC / 30mA AC
Rated Non-operating Residual Current Limits - (I _{Δno})	3mA DC / 15mA AC
Response Time to residual current fault (time between appearance of fault to output going high)	According to IEC 62752
DC Supply Voltage (V _{cc}): Power Consumption	12V DC ± 10% 60mW maximum
Rated Load Current - Amps The RCM modules can accommodate single phase loads up to 63A or three phase loads up to 32A	63A Single Phase 32A 3 Phase
Test Function (Externally applied 12V DC) - Current	0.8mA DC
Fault Signal Output Drain Current Pull up Voltage	Active High Open Drain 100mA Maximum +12V DC Maximum
Environmental Operating Conditions Absolute Temperature	-40°C to +85°C
Weight	22g



All dimensions in mm
CAD model available on request



www.westernautomation.com

Ballinasloe, Co. Galway, H53 TD 78, Ireland.
Tel: +353 9096 43359. E: info@westernautomation.com

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Datasheet: RCM01-02
WA-DS-026 Rev B