

# 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, Medium Aperture (14mm), 6mA DC (IEC62955)</i>
RCM14-03	<i>Residual Current Monitor, Medium Aperture (14mm), 6mA DC / 30mA AC (IEC62752)</i>
RCM14-04	<i>Residual Current Monitor, Medium Aperture (14mm), 56mA DC / 20mA AC (UL2231)</i>
RCM20	<i>Residual Current Monitor, Large Aperture (19mm)</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 exceeds these limits.

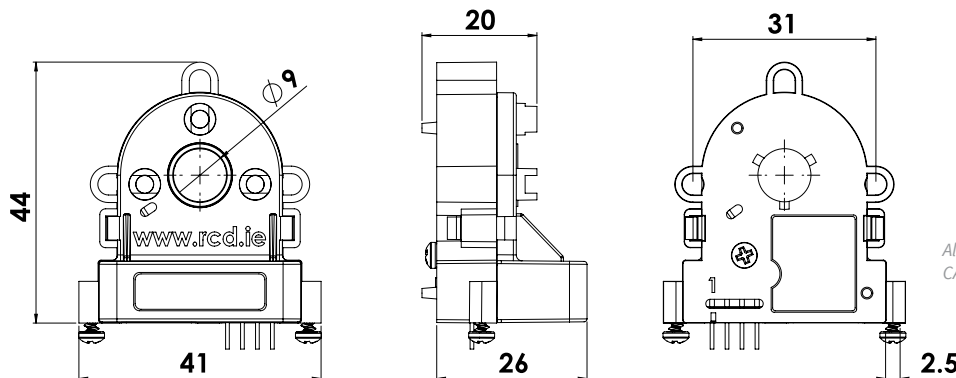
## Fault Operation & Auto Reset

When an AC or DC residual fault current exceeds the rated levels is detected, 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

Connection diagram available on request

TECHNICAL DATA	
Residual Operating Current - (I $\Delta$ n)	6mA DC / 30mA AC
Non-operating Residual Current Limits - (I $\Delta$ no)	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 (Vcc): Power Consumption	12V DC $\pm$ 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