

RCM14-04 SYSTEM - RESIDUAL CURRENT MONITOR

The RCM14-04 System is a Residual Current Monitor intended for the detection of DC and AC Residual currents in UL2231 EV Charging Systems where such currents may flow under a fault condition.

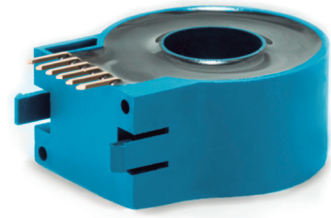
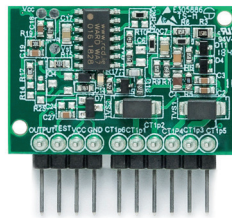
The RCM14-04 System comprises of a CT with 14mm aperture, and a Sensor PCB intended to be mounted directly onto a printed circuit board by OEMs.

The RCM14-04 System may be used to detect 56mA DC and 20mA AC Residual Currents in DC, single phase or 3 phase installations, and is the equivalent of RCM14-04.

This product is fully compliant with the detection requirements of a CCID20 as defined by UL2231-2.

MAIN FEATURES

- Operates from a 12-24V DC Supply
- External Test Facility
- “Fault” signal output
- Frequency Response DC and 60Hz
- ROHS 2 compliant
- Complies with the DC and AC detection requirements of UL2231-2
- 3000A Surge Current Withstand



Order Code: 90157



SEE ALSO

RCM14-01 SYSTEM *6mA DC Detection to IEC62955, 14mm CT Aperture*

RCM14-03 SYSTEM *6mA DC/30mA AC Detection to IEC 62752, 14mm CT Aperture*

RCM14-04 *56mA DC/20mA AC Detection to UL2231-2, 14mm CT Aperture*

Supply Conditions

The RCM14-04 System is intended for operation with a supply voltage of 12-24V DC +/-10%. Performance may be compromised if the supply voltage is outside these limits.

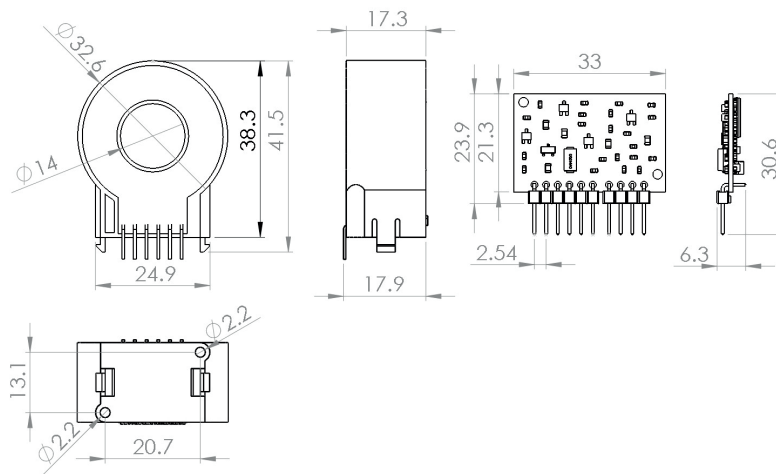
Fault Operation & Auto Reset

When a Residual Fault Current that exceeds the rated AC or DC level is detected, the RCM14-04 System 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	
1	CT 1
2	CT 2
3	CT 3
4	CT 4
5	CT 5
6	CT 6
7	GND
8	VCC
9	Test
10	Output

See Application Sheet WA-AS-034 for Connection Diagram

TECHNICAL DATA	
Relevant Product Standard	UL2231-2
Rated Residual Operating Current - (I _{Δn})	56mA DC / 20mA AC
Rated Non-operating Residual Current Limits - (I _{Δno})	15mA AC
Response Time to residual current fault (time between appearance of fault to Output going high)	According to UL2231-2
DC Supply Voltage (V _{cc}): Supply Current (no fault present @24V) Supply Current (fault current >264mA @24V)	12-24V DC (+/-10%) 5mA 25mA
Test Current Limit on Test Function for 12 – 24V externally applied to Test Pin	2mA DC Min (12V) 4mA DC Min (24V)
Fault Signal Output Drain Current Pull up Voltage	Active High Open Drain 100mA Maximum +26.4V DC Maximum
Environmental Operating Conditions Absolute Temperature	85°C to -40°C (derated below -25°C)
Recommended Screw Type	Self Tapping Screw M2.5× 6 (2pcs.)
Weight	35g



Disclaimer: Whilst every effort has been made to ensure the technical accuracy of this document, changes may be made to the document without notice based on information received by WA which necessitate such changes. WA ensures compliance of its products/technology with Product Standards relevant to the WA technology. However, the User of our products/technology has the sole responsibility to ensure that any Product that they produce which uses WA technology complies with the relevant Product Standards and Installation Rules as applicable to the end Product using the WA technology.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Littelfuse:](#)

[RCM14-04](#) [RCM14-04 SYSTEM CT](#) [RCM14-04 SYSTEM PCB](#) [RCM14-04_SYS](#)