

Specification: RCMB-H15



Revision: Rev. 2.0

Date: July 11, 2025



1. General Product Information

Product Name	RCMB-H15
Model Type	Type B RCM (Residual Current Module)
Applicable Models	EV Chargers (MODE II, III), Solar Inverters
Applicable Standards	IEC 62955

2. Key Features

- Fluxgate-based current sensor technology
- Open-collector output for signaling system faults
- Composed of AEC-Q certified parts

3. Electrical Specifications

CHARACTERISTICS	Symbol	VALUE
Supply Voltage	V _{cc}	4.8 - 5.2 V
Rated Residual Operating Current	I _{ΔN}	6 mA
Current Consumption	I _{cc}	50 - 60 mA
Measuring Range (Peak)		30 mA
Primary nominal RMS current (1 Phase / 3Phase)	I _P	80/ 32 A
Measuring Range(Peak)	I _{ΔN}	30 mA
Resolution (I _{ΔN} 25°C)	X	0.5 mA

CHARACTERISTICS	Symbol	VALUE
Trip Tolerance	I Δ N,tolerance	4 - 6 mA
Recovery		Reset function (Reset key in)
Rated frequency	Hz	50Hz / 60Hz
Frequency Range	Hz	DC
Response Time (DC 300mA)	Tr	40 ms
Limit values of break time 6mA DC	LV1	Max 700 ms
Scaling Factor For 30mA DC	Spwm-DC	3.3/1 %/mA
Booting Time		100 ms

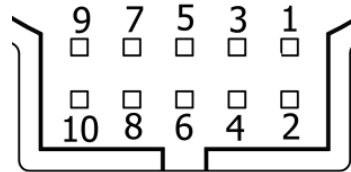
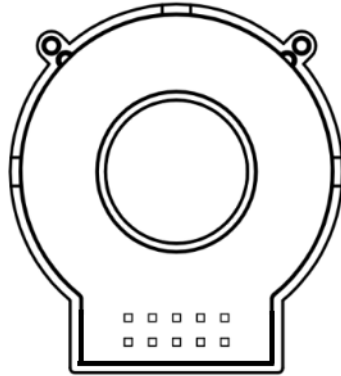
4. Environmental Specifications

Operating Temperature Range	-40 ~ 105°C
Storage Temperature Range	-55 ~ 150°C
Weight	25 g

5. Mechanical and Material Specifications

Case Material	Polyamide Epoxy
Lead Pin Material	Tin-plated Copper

6. Pin Configuration and Functions



Pin No.	FUNCTION	DESCRIPTION
Pin 1	NC (No Connection)	
Pin 2	RESET +5V Pull-up (internal)	A function is activated if this PIN is connected to GND(operate 1~2 time)
Pin 3	DC FAULT (LOW / Open Collector)	If the residual current is below DC 6 mA the output on PIN 3 is a low level (GND). In any other case output PIN 3 is in a high impedance state.
Pin 4	NC (No Connection)	
Pin 5	GND (0V Ground connection)	Ground connection
Pin 6	VCC (5V Power)	Positive supply voltage : +5V DC
Pin 7	DC-PWM (FS 30mA)	Acc. to the DC component of residual current a duty-cycle is generated. This is for monitoring purposes only and is not safety function.
Pin 8	NC (No Connection)	
Pin 9	NC (No Connection)	
Pin 10	NC (No Connection)	

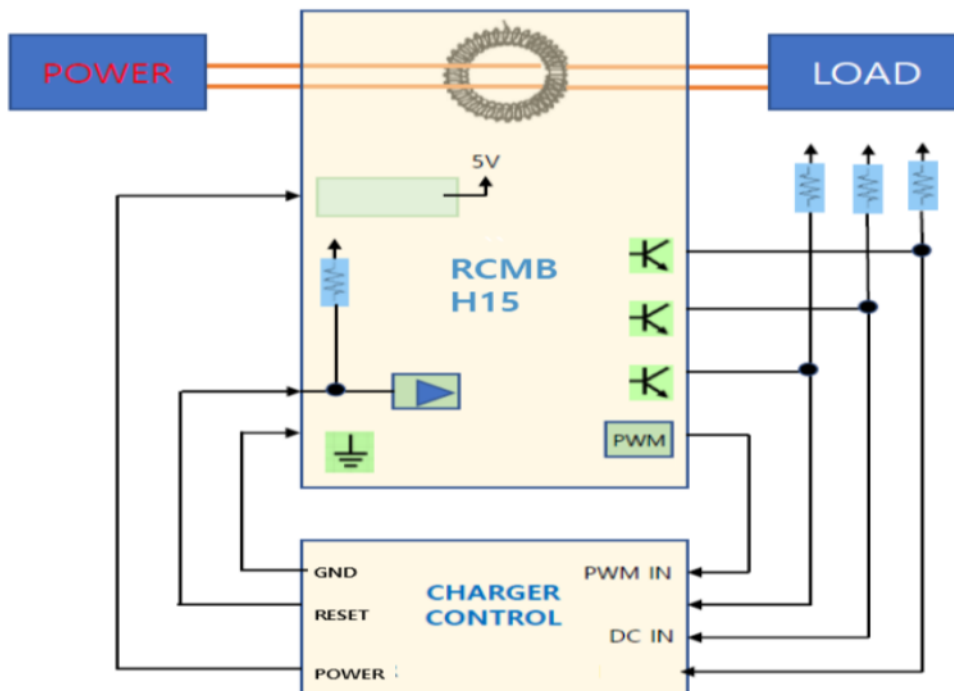
7. Certifications and Test Results

Applicable Standards	IEC 62955
EMC Test	UL2231-2, ISO 11452-2 - PASS
ESD Test	IEC 61000-4-2 - PASS

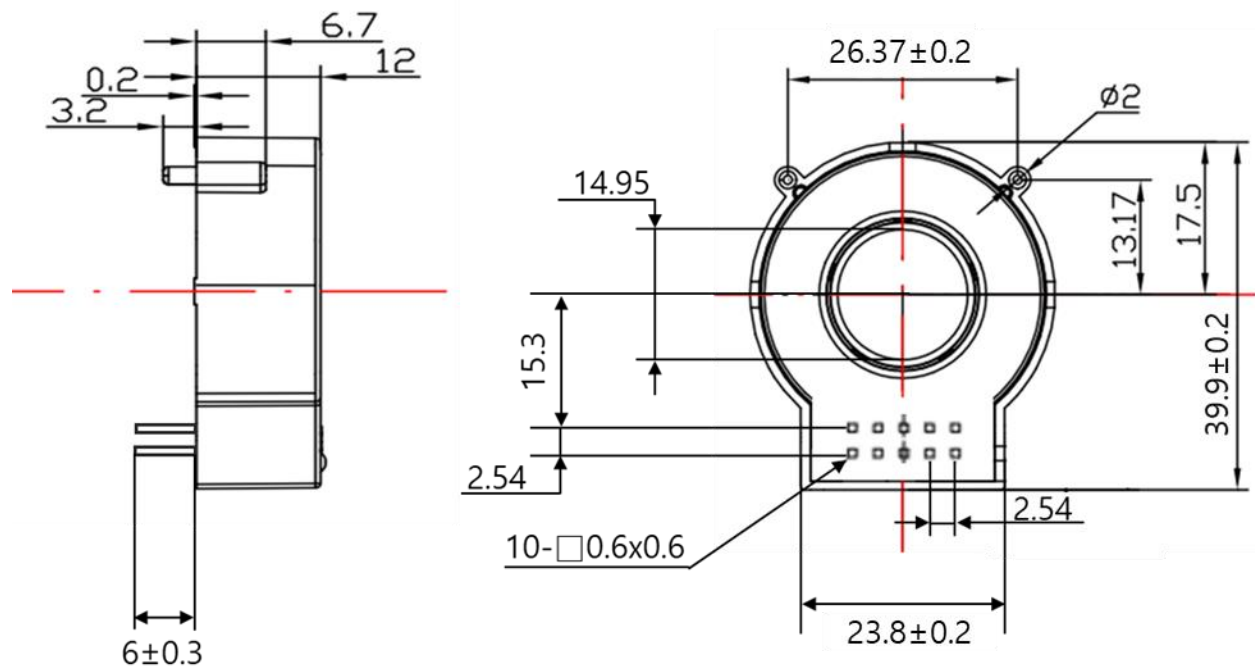
8. Performance and Test Results

Response Time	DC 300 mA: 40 ms
Trip Interruption Time Limit	6 mA DC: Max 700 ms,
Power Consumption	320 mW during normal operation

9. Application Circuit Diagram



10. Dimensions



11. Packaging