

EV-RCM-C1-AC30-DC6 - Differential current monitoring

1622450
<https://www.phoenixcontact.com/us/products/1622450>

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The residual current module is used for AC and DC residual current detection in AC charging points. The higher-level safety equipment (e.g., residual current circuit breaker) is protected against potential DC residual currents. A 1 or 2-channel product version is available.

Commercial data

Item number	1622450
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	EM01
Product key	XWBRYA
GTIN	4055626039794
Weight per piece (including packing)	359.9 g
Weight per piece (excluding packing)	190 g
Customs tariff number	85362010
Country of origin	DE

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Technical data

Product properties

Product type	Residual current monitoring module
Product family	CHARX control basic
Application	Residual current monitoring module (RCM) for AC charging controllers for private applications (EU/CN)
Operating elements	Test/reset button; 2 status LEDs
Number of charging points	1
Charging standard	Type 2
Charging mode	Mode 3

System properties

Charging controllers

Number of charging points	1
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Electrical properties

Type of charging current	AC 3-phase
Current consumption	< 1 W
Power consumption	< 5 VA
Reload function	3 switch-on attempts at intervals of 15 min.

Measuring current transducer

Connection method	Connector
Supply	via RCM module
Diameter of measuring coil	15 mm

Measuring range: Residual current

Rated frequency f_n	≤ 2000 Hz
Nominal differential current	± 300 mA (Peak)
Measuring range	50 A (45 Hz ... 50 Hz)
Residual current $I_{\Delta n}$	30 mA
	6 mA
Rated current I_n	32 A
Tripping time for $I_{\Delta n}$	< 180 ms
Response time for $2 \times I_{\Delta n}$	< 70 ms
Tripping time for $5 \times I_{\Delta n}$	< 20 ms
Tripping time for I_N	< 500 ms

Supply

Supply voltage range	100 V AC ... 240 V AC (nominal voltage range)
Max. current consumption	22 mA
Nominal power consumption	< 0.5 W (No-load)
Frequency range	45 Hz ... 60 Hz

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1622450

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Input data

Digital

Description of the input	Plug-in; front
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Output data

Switching

Output name	Alarm relay 1 $I_{\Delta n}$: DC residual currents Alarm relay 2 $I_{\Delta n}$: AC residual currents
Maximum switching voltage	250 V
Max. switching current	5 A (1 N/O contact each)
Number of contacts as N/O contacts	1
Note regarding the switch contact	Quiescent current
Switching cycles	10000

Connection data

Conductor connection

Connection method	Spring-cage connection
Conductor cross-section rigid	0.2 mm ² ... 2.5 mm ²
Conductor cross-section flexible	0.2 mm ² ... 2.5 mm ²
Conductor cross-section AWG	24 ... 14

Interfaces

Others

Number of interfaces	1 (Measuring transducer)
Transmission length	max. 100 m (with shielded, twisted-pair data cable)
Number of interfaces	2 (Error/Reset)

Dimensions

Width	36 mm
Height	90 mm
Depth	70.50 mm

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20 (Terminal blocks) IP30 (Inserts)
Ambient temperature (operation)	-25 °C ... 80 °C
Climatic class	according to IEC 60271/-1 / -2/ -3

Approvals

Conformity/Approvals

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Conformance	CE-compliant
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Standards and regulations

Standards	
Standards/regulations	IEC 61851-1

Mounting

Mounting position	any
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Classifications

ECLASS

ECLASS-13.0	27144703
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ETIM

ETIM 9.0	EC002889
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UNSPSC

UNSPSC 21.0	39121800
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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	7(a), 7(c)-I

China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	c06c4ec1-9761-40e2-8470-0bdbc25b0729

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