

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



### Key Commercial Data

Packing unit	1 pc
GTIN	
GTIN	4055626039794

### Technical data

#### Product definition

Type	1-channel
Application	Residual current monitoring module (RCM) for AC charging controllers for private applications (EU/CN)
Standards/regulations	IEC 61851-1
Charging standard	Type 2
Charging mode	Mode 3
Number of supported charging points	1
Conformance	CE-compliant

#### Dimensions

Height	90 mm
Width	36 mm
Depth	70.50 mm

#### Ambient conditions

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

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## Technical data

### Inputs

Description of the input	Plug-in; front
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### Switching outputs

Control of charging contactor	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

### Measuring range of the residual current

Rated frequency $f_n$	$\leq 2000$ Hz
Nominal differential current	$\pm 300$ mA (Peak)
Current measuring range	50 A (45 Hz ... 50 Hz)
Residual current $I_{\Delta n}$	30 mA
	6 mA
Tripping time for $I_{\Delta n}$	$< 180$ ms
Rated current $I_n$	32 A
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
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

### Connection data

Connection method	Spring-cage connection
Conductor cross section flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section solid	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section AWG	24 ... 14

### Device 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

### Mounting

Mounting position	any
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## Technical data

### Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

## Classifications

### eCl@ss

eCl@ss 10.0.1	27144703
eCl@ss 11.0	27144703
eCl@ss 4.0	27210900
eCl@ss 4.1	27371100
eCl@ss 5.0	27371800
eCl@ss 5.1	27371800
eCl@ss 6.0	27371800
eCl@ss 7.0	27371809
eCl@ss 8.0	27371809
eCl@ss 9.0	27144703

### ETIM

ETIM 3.0	EC001505
ETIM 4.0	EC001599
ETIM 5.0	EC001321
ETIM 6.0	EC002889
ETIM 7.0	EC002889

### UNSPSC

UNSPSC 6.01	30211916
UNSPSC 7.0901	39121535
UNSPSC 11	39121535
UNSPSC 12.01	39121535
UNSPSC 13.2	39121801
UNSPSC 18.0	39121801
UNSPSC 19.0	39121801
UNSPSC 20.0	39121801
UNSPSC 21.0	39121801

## Accessories

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AC charging controller

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### Accessories

#### AC charging controller - EM-CP-PP-ETH - 2902802



EV charge control is used to charge electrical vehicles on the 3-phase AC mains power supply according to IEC 61851-1 Mode 3. All necessary control functions are integrated. Additional functions are available for various charging applications.

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#### AC charging controller - EV-CC-AC1-M3-CBC-SER-HS - 1622452



The EV-CC-AC1-M3-CBC-SER-HS charging controller with housing for DIN rail mounting is used for charging electric vehicles at 3-phase AC networks according to IEC 61851-1, Mode 3. All charging functions, comprehensive configuration settings as well as a locking controller are already integrated.

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#### AC charging controller - EV-CC-AC1-M3-CBC-SER-PCB - 1622453



The EV-CC-AC1-M3-CBC-SER-PCB charging controller as PCB is used for charging electric vehicles at 3-phase AC networks according to IEC 61851-1, Mode 3. All charging functions, comprehensive configuration settings as well as a locking controller are already integrated.

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#### AC charging controller - EV-CC-AC1-M3-CBC-SER-PCB-XC-25 - 1627743



The EV-CC-AC1-M3-CBC-SER-PCB charging controller as PCB is used for charging electric vehicles at 3-phase AC networks according to IEC 61851-1, Mode 3. All charging functions, comprehensive configuration settings as well as a locking controller are already integrated.

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#### AC charging controller - EV-CC-AC1-M3-CBC-SER-PCB-MSTB - 1627353



The EV-CC-AC1-M3-CBC-SER-PCB-MSTB charging controller as a PCB for charging electric vehicles according to IEC 61851-1, Mode 3, Case B (Socket Outlet) or C (Vehicle Connector). Connection via PCB connector on header.

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### Accessories

#### AC charging controller - EV-CC-AC1-M3-CC-SER-HS - 1622459



The EV-CC-AC1-M3-CBC-SER-HS charging controller with housing for DIN rail mounting is used for charging electric vehicles at 3-phase AC networks according to IEC 61851-1, Mode 3. Optimized for charging stations with permanently mounted Vehicle Connector. All charging functions and comprehensive configuration settings are already integrated.

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#### AC charging controller - EV-CC-AC1-M3-CC-SER-PCB - 1622460



The EV-CC-AC1-M3-CC-SER-PCB charging controller as a PCB for charging electric vehicles on a 3-phase AC power grid according to IEC 61851-1, Mode 3. Optimized for charging stations with permanently mounted Vehicle Connector. All charging functions and comprehensive configuration settings are already integrated.

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#### AC charging controller - EV-CC-AC1-M3-CC-SER-PCB-XC-25X - 1627742



The EV-CC-AC1-M3-CC-SER-PCB charging controller as a PCB for charging electric vehicles on a 3-phase AC power grid according to IEC 61851-1, Mode 3. Optimized for charging stations with permanently mounted Vehicle Connector. All charging functions and comprehensive configuration settings are already integrated.

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#### AC charging controller - EV-CC-AC1-M3-CC-SER-PCB-MSTB - 1627367



The EV-CC-AC1-M3-CC-SER-PCB-MSTB charging controller as a PCB for charging electric vehicles according to IEC 61851-1, Mode 3, optimized for charging stations with permanently mounted Vehicle Connector. Connection via PCB connector on header.