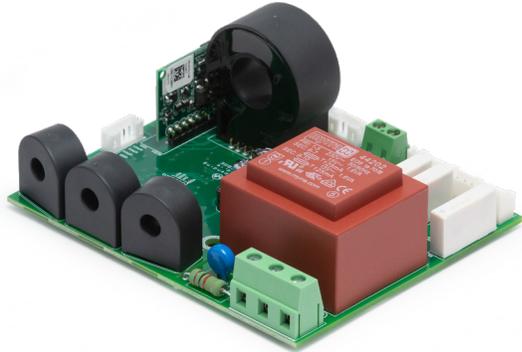


# Charge Controller

## EVCC-01 Series

Mode 3 EVSE



### Description

The EVCC-01 is a single PCBA solution providing full control functionality for Mode 3 EV charging, compliant with IEC 61851. Designed for integration into OEM EVSE such as charging stations or units, it supports communication via control pilot, continuous current monitoring, 6 mA dc fault detection, and external IO interfaces.

Optional features include ventilation control, EV plug locking, and remote switching. The controller supports single-phase and three-phase systems up to 32 A, with live load current adjustment for supply balancing.

Fully compliant with IEC 61851 and IEC 62955, the EVCC-01 can also be configured to meet UK wiring regulation BS7671:2018+A1:2020 722.411.4.1(iv), eliminating the need for a local earth rod.

### Features & Benefits

FEATURES	BENEFITS
<b>Integrated PSU (operates from the ac supply)</b>	Simplifies system design and reduces BOM cost by eliminating the need for a separate power supply. Enables direct connection to the ac mains, streamlining installation and improving reliability through fewer components
<b>Configurable Power (1 or 3-phase, 16 A/32 A)</b>	Provides flexibility to support a wide range of installation environments and regional requirements. OEMs can use a single controller across multiple product lines, reducing inventory complexity and accelerating time-to-market
<b>Charging Current Protection on All Phases</b>	Enhances safety and compliance by ensuring overcurrent protection across all phases. Minimizes risk of equipment damage and supports regulatory standards, reducing liability and improving end-user trust

### Applications

- Mode 3 EV Charging

### Ordering Information

CATALOG #	DESCRIPTION
90151	EVCC-01 EV Charger Controller for Mode 3 EVSE

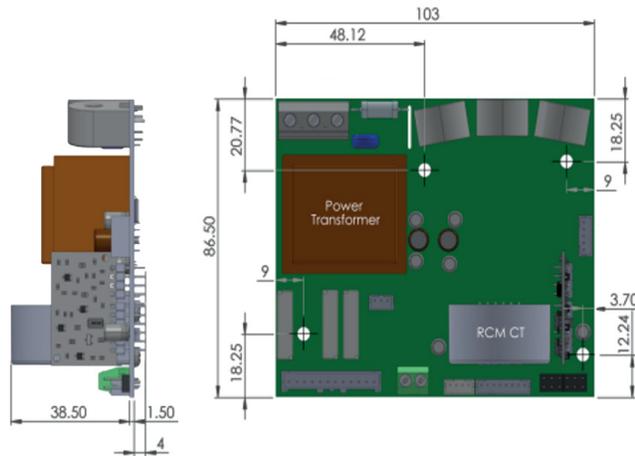
# Charge Controller

## EVCC-01 Series

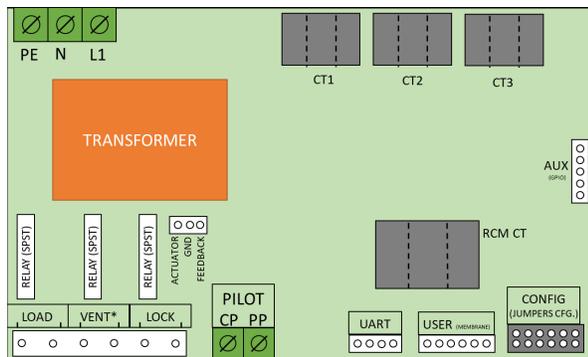
### Specifications

<b>Mode 3 Charger Standard</b>	IEC 61851
<b>Residual Current Device Standard</b>	IEC 62955
<b>Rated Residual Operating Current (I<math>\Delta</math>n)</b>	6 mA dc
<b>Rated Non-operating Residual Current Limit (I<math>\Delta</math>no)</b>	3 mA dc
<b>Operating Temperature Change</b>	-25 °C to +50 °C
<b>Rated Charging Current</b>	16 A / 32 A
<b>Rated Supply Voltage</b>	230 V ac
<b>Supply Voltage Range</b>	207 V ac to 253 V ac, 50 Hz
<b>Integrated Relays Capability</b>	250 V ac / 30 V dc - 3 A
<b>Mounting Holes Diameter</b>	4.2 mm (4 pcs.)

### Dimensional Drawings (Millimeters)



### High-Level Block Diagram



# Charge Controller

## EVCC-01 Series

### Handling Instructions

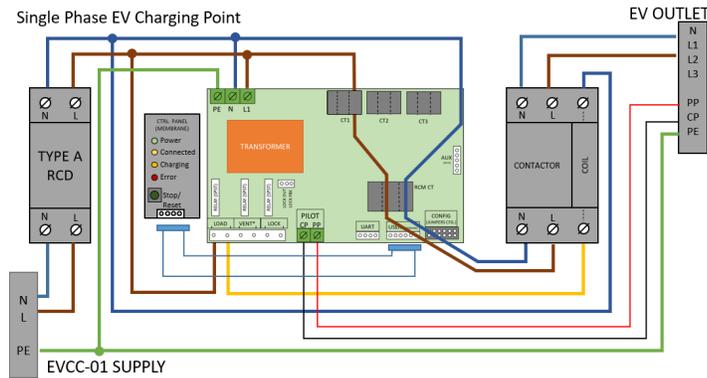
Care should be taken to ensure the correct connection of the EVCC-01. Miswiring the product may cause permanent damage.

### ESD Caution

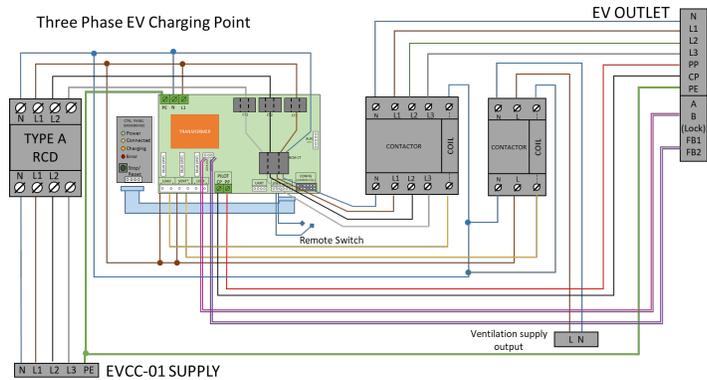
PCBA contains ESD (electrostatic discharge) sensitive devices. Damage may occur on devices subjected to high-energy ESD. Therefore, proper ESD precautions should be taken to avoid performance degradation or loss of functionality.

### Wiring Diagrams

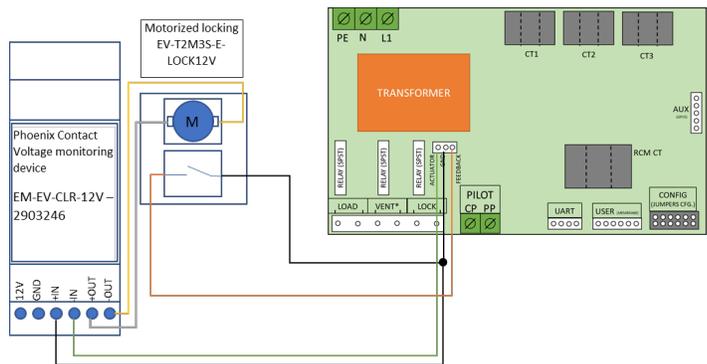
#### SINGLE PHASE WITHOUT EXTRA FEATURES



#### THREE PHASES WITH VENTILATION, EV LOCKING AND REMOTE ON/OFF FEATURE



#### MOTORIZED EV LOCKING SYSTEM CONNECTION



# Charge Controller

## EVCC-01 Series

### Standards Conformity & Certifications

#### Product Safety Certifications

Products tested, compliant and certified to the following standards that states the requirements for electrical products to ensure they are safe for consumers to use.

CERTIFICATION BODY MARK	CERTIFICATION BODY NAME	CERTIFICATION DESCRIPTION	STANDARDS COVERED BY THE CERTIFICATION
	IEC	Meets the requirements for conductive charging systems for electric vehicles for both on-board and off-board charging equipment as defined by IEC61851.	<b>IEC 61851</b>
	IEC	Meets the requirements for residual direct current detecting devices (RDC-DDx) used in Mode 3 AC electric vehicle charging stations as specified in IEC 61851-1.	<b>IEC 62955</b>

#### Related Products

**RCM20-01:** 6 mA dc Detection to IEC 62955, Mode 3, 20 mm CT Aperture

**RCM14-01 System:** 6 mA dc Detection to IEC 62955, Mode 3, 14 mm CT Aperture

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