EV CHARGER CONTROLLER FOR MODE 3 EVSE

The EV Charger Controller (EVCC-01) consists of a single PCBA designed to provide all of the required control functions for Electric Vehicle charging in accordance with IEC61851 for Mode 3 chargers.

The EVCC-01 can be integrated into OEM Electric Vehicle Supply Equipment (EVSE) for Mode 3 chargers, e.g. Charging Stations or charging units.

The EVCC-01 includes control pilot function for communication with the EV, continuous monitoring of the charging current, 6mA DC fault current detection and IO ports for external communication.

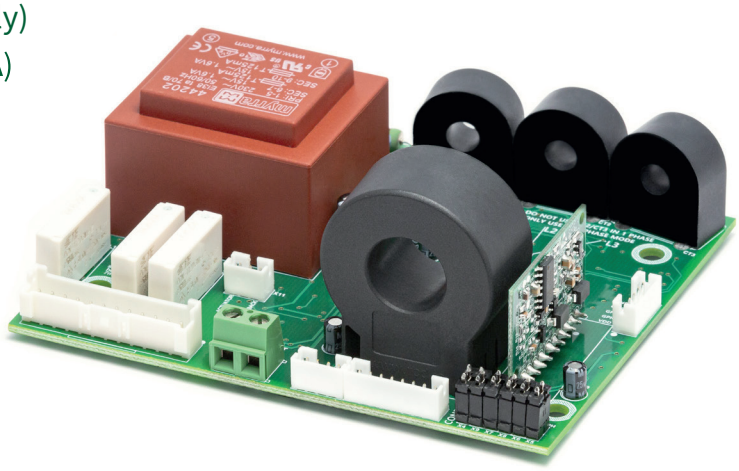
Optional features like ventilation, EV Plug locking, and remote switching are available.

The EVCC-01 can be configured to suit different charger needs. The system can work with single phase or three phase systems up to 32A. **Live Load Current adjustment is also available for supply current balancing.**

This product is fully compliant with IEC61851 and IEC 62955. It can also be configured to meet the UK wiring requirements BS7671:2018 +A1 2020 regulation 722.411.4.1 (iv) **(no need for local earth rod)**

MAIN FEATURES

- Integrated PSU (operates from the AC supply)
- Configurable power (1 or 3 Phase, 16A / 32A)
- Charging Current protection on all phases
- DC fault current detection
- Command based UART communication
- Integrated relays for flexible control of:
  - Contactor for charging current
  - EV plug locking
  - User defined switching
    (Ventilation activation or Switched Earth)



Order Code: 90151

SEE ALSO

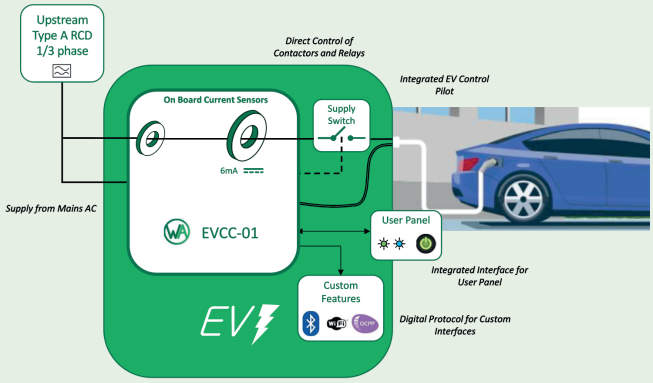
RCM20-01	*6mA DC Detection to IEC62955, Mode 3, 20mm CT Aperture*
RCM14-01 system	*6mA DC Detection to IEC62955, Mode 3, 14mm CT Aperture*

Supply Conditions

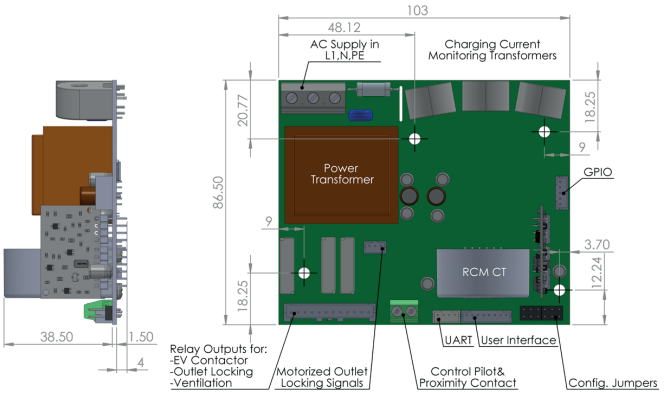
The EV charger control board is intended to be supplied from single phase or 3-phase 230VAC (±10%). Performance may be compromised if the supply voltage exceeds these limits.

Fault Operation

When a residual fault current exceeds the rated DC levels, the EVCC-01 will switch to the fault state within the specified response times. Likewise, if the charging current exceeds the rated level, the controller will disconnect the supply to the EV keeping it in a safe state.



TECHNICAL DATA	
Mode 3 charger standard	IEC61851
Residual Current Device Standard	IEC62955
Rated Residual Operating Current (IΔn)	6mA DC
Rated Non-operating Residual Current Limit (IΔno)	3mA DC
Operating Temperature Change	-25°C to +50 °C
Rated Charging Current	16A / 32A
Rated Supply Voltage	230V AC
Supply Voltage Range	207VAC – 253VAC, 50Hz
Integrated relays capability	250VAC/30VDC - 3A
Mounting Holes Diameter	4.2 mm (4 pcs.)



All dimensions in mm
CAD model available on request

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