

CC613 Charge Controller

The next generation of smart charge controllers

Abstract

The CC613 is a charge controller for usage in AC charging of electric vehicles (charge mode 3) according to IEC 61851-1. The charge controller has its application in AC charging stations, wall boxes or street light charging stations.

1. Product Features

The CC613 is the next-generation intelligent Bender charge controller. It offers the same technical features as its predecessor CC612, but the range of functions of the CC613 has been significantly extended.

The new product features are as follows:

- Emergency opener
In case of a mains power failure, the charge controller releases the charging plug connection to the charging station. No additional hardware component is required.
- PE monitoring
Continuous PE monitoring ensures that the PE connection is properly connected to the charge controller.
- 230 V relay
The newly integrated 230 V control relay can be used for direct contactor switching for vehicle-side power release.
- Ethernet interface
The controller now provides an integrated Ethernet interface that allows an easy integration of the CC613 in an existing network via Ethernet or Modbus TCP. It is also possible to integrate the CC613 in an energy management system (EMS) with the help of the EEBUS protocol.
- External Modbus interface
The external Modbus interface enables remote control of the CC613 independent of a backend connection. In addition, the CC613 can be easily integrated into an EMS.
- Weld check
The integrated weld check function is able to detect a “sticking” or “welding” of the contactor



Product Management Notification

In addition, the CC613, similar to the CC612, offers the following features:

- Powerline communication (PLC) acc. to ISO 15118
- Dynamic load management (DLM) for an optimized and efficient distribution of the available power.
- DC residual fault current detection acc. to IEC 62955 which avoids the use of an RCD type B, therefore an RCD type A is sufficient.
- Master/Slave variants
- Free software updates
- Integrated 4G modem (variant dependent)
- OCPP 1.5 & 1.6 (JSON & SOAP) compliant for a connection to backend system
- Remote maintenance capable
- RFID module for user authorization
- Modbus meter interface (supporting various meter manufacturers)
- USB interfaces: 2x USB host & 1x USB CONFIG
- One digital input & one digital output
- Control of an additional SCHUKO socket outlet possible
- Same compact housing design as the CC612 (dimensions 112,3 mm x 23,5 mm x 99 mm)

2. Ordering Information

2.1. Charge Controller

Type	Modem	Interface	RDCM	External Modbus	LED	PLC ¹	User Interface	Art.-No.
CC613-ELM4PR-M	4G	Modbus, Ethernet	✓	✓	STATUS	✓	✓	B.94060020
CC613-ELPR-M	-			✓				B.94060021
CC613-ELM4PR	4G							B.94060026
CC613-ELPR	-							B.94060027

¹Powerline Communication acc. ISO 15118

The first variant of the innovative charge controller, CC613-ELM4PR-M (B94060020), will be available in calendar week 17/18 2020. The other three variants will go into series production successively during Q2/2020.

2.2. Accessories

Accessory type	Art.-No.
RFID110-L1 with RJ45 cable (length 500 mm)	B.94060110
RFID114 with RJ45 cable (length 500 mm)	B.94060114
Current transformer W15BS (cable length 1450 mm) ¹	B.98080065
Current transformer W15BS-02 (cable length 180 mm) ¹	B.98080067
Current transformer W15BS-03 (cable length 300 mm) ¹	B.98080068
DPM2x16FP (display module)	B.94060120
Plug kit CC613 (to be ordered separately) ²	B.94060129

¹Inner diameter:15 mm

²Not included in the scope of delivery of the CC613

3. Further Information

Further information can be found on the CC613 product website.