

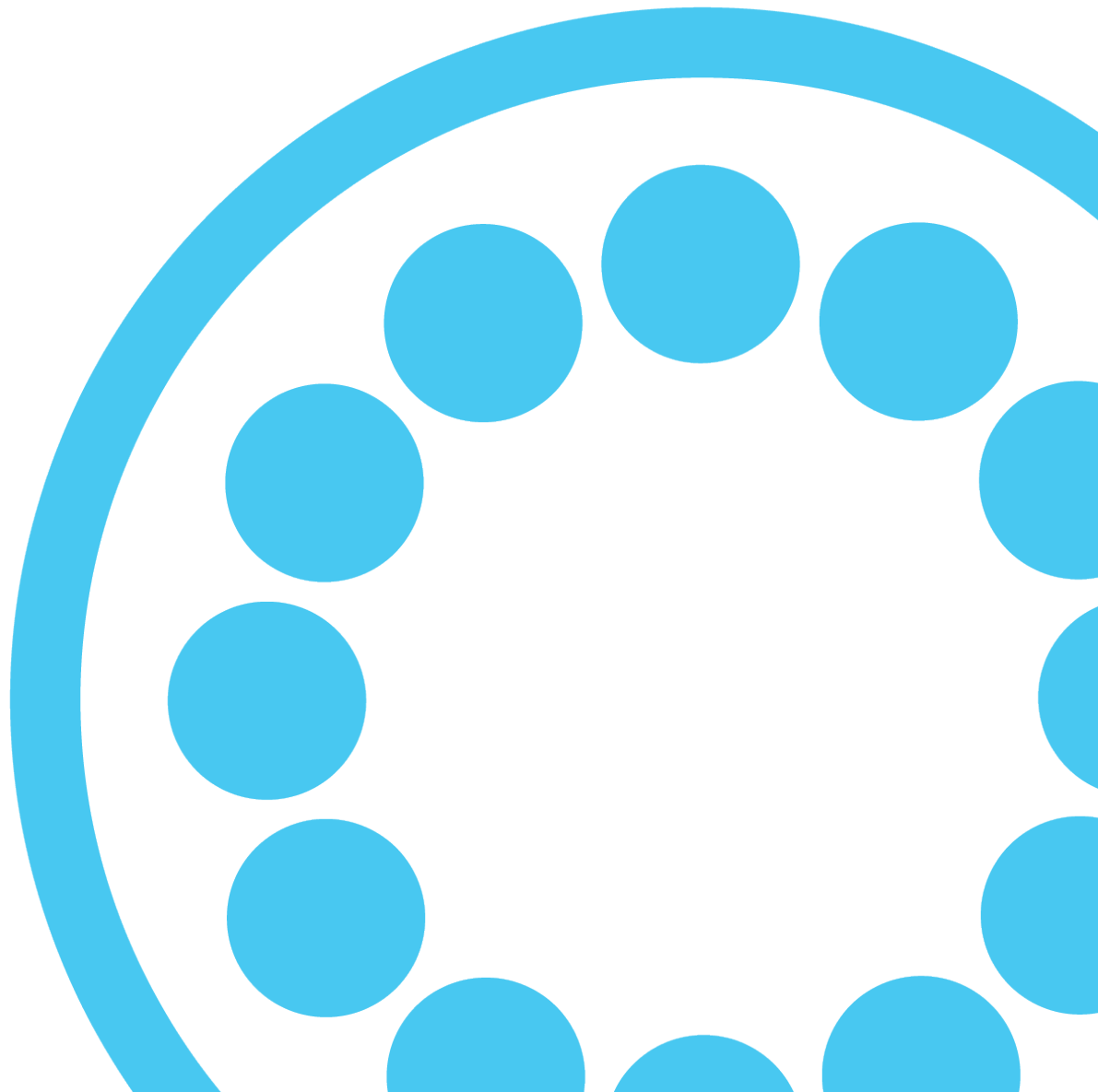


EV Charger (AC)

Commissioning Report

Version: 2.6.3

Date: 02/12/2019



Charger Information:

- | | | | |
|---|---|---|--|
| <input type="checkbox"/> (G4) Elvi | <input type="checkbox"/> (G4) Business Line | <input type="checkbox"/> (G3) BusinessLine | <input type="checkbox"/> (G3) PublicLine |
| <input type="checkbox"/> Single Station | <input type="checkbox"/> Hub/Satellite | <input type="checkbox"/> Autostart (Offline) | <input type="checkbox"/> Satellite |
| <input type="checkbox"/> Fixed Cable | <input type="checkbox"/> Type 2 Socket | <input type="checkbox"/> Type 2 socket + Schuko / Type F Socket | |
| <input type="checkbox"/> Smart Charging (Smappee) | <input type="checkbox"/> SMATCH | <input type="checkbox"/> (G3) HomeLine | |

| | |
|--------------------------------------|--|
| Serial number: | |
| HUB/Single Station ID*: | |
| Article Number*: | |
| Security code*: | |
| Customer: | |
| Address / Country / GPS coordinates: | |
| Parking spot (s): | |

*For Hub/Satellite configurations fill in the details below

Installation:

| | | | | | |
|--|--|------------------------------------|--------------------------------------|-----------------------------|-----------------------------|
| Phases | <input type="checkbox"/> Single-Phase | | <input type="checkbox"/> Three-Phase | | |
| Grid Type | <input type="checkbox"/> TN-C | <input type="checkbox"/> TN-S | <input type="checkbox"/> TN-C-S | <input type="checkbox"/> IT | <input type="checkbox"/> TT |
| Maximum available current (A) | | | | | |
| Frequency (Hz) | | | | | |
| Ground resistance (loop value, maximum ohms) (Ω) (1) | | | | | |
| Voltage between phases and neutral and between neutral and earth. (V) | L1-N = | | L2-N = | | |
| | L3-N = | | G-N = | | |
| Voltage between phases and neutral or between neutral and earth, during charging (V) | L1-N = | | L2-N = | | |
| | L3-N = | | G-N = | | |
| Output at the DC power supply (V) | | | | | |
| Upstream Protection Device: | <input type="checkbox"/> Type A | <input type="checkbox"/> Type A-EV | <input type="checkbox"/> Type B | | |
| Cable Cross Section: | | | | | |
| External modem installed | <input type="checkbox"/> Yes <input type="checkbox"/> No | | | | |
| +location of (HL/BL/PL) (2) | Location of: | | | | |

Verifications and Tests:

| Requirements | O K | N/OK | N/A | Remarks |
|--|--------------------------|--------------------------|--------------------------|---------|
| Check that the EV Charger has clearance space around it for future maintenance | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Check that the installation position is not blocking any walkway or doorway | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Make sure that the mounting of the EV Charger on the floor or wall is done according to the installation manual. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Check that the EV Charger is correctly leveled | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Visual inspection of the EV Charger: (mechanical and electrical, paint, visible scratches) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Perform a visual check for damages | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Check for proper PE connection, interconnected with the low voltage switchboard ground connection (1) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Check that power cable has the appropriate cross-section and is correctly connected | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Check that the correct type of protection was installed on distribution panel (3) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Check that input AC voltage values are right according to Specification (4) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Check that all internal components are ready to power up | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Check that the socket lock motor is operating and has enough clearance (5) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Check that all internal cables and connectors have good contact | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Check that SIM card is inserted correctly | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Check that cover seal is inserted correctly (BL / HL Only) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Check that the cover is correctly mounted in order to guarantee the IP54 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| The LED ring around the socket displays the following color indication after power on: <ul style="list-style-type: none"> 1. RED (Blinking) - Starting up and trying to connect to the network; 2. GREEN or OFF - Stand-by or ready for use; | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Backend communication tests: Register the station online under the appropriate account on the cloud management system | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Test correct charging procedure (with test box): <ul style="list-style-type: none"> 1. GREEN - Standby, ready to be used 2. GREEN - (Blinking) - Verification & connection to car | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |

| | | | | |
|--|--------------------------|--------------------------|--------------------------|--|
| 3. YELLOW - Waiting for car to authorize charging 4. BLUE - Charging | | | | |
| Test correct charging procedure (with vehicle): 1. GREEN - Standby, ready to be used 2. GREEN - (Blinking) – Verification & connection to car 3. YELLOW - Waiting for car to authorize charging 4. BLUE – Charging | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Communicate / adjust Max current and phase rotation configuration in Backoffice / Hey – Hub/Satellite only | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Final inspection (6) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |

- 1) The resistance of the ground electrode should be no more than 167 Ohm. (conform IEC 60364); (less 50 Ohm to ZOE)
- 2) Recommended to install external modem if 3G connectivity RSSI is below 40dBm
- 3) Each charging station should be protected by a residual current device Type A (>30mA/AC), Type A EV (>30mA/AC) or Type B with direct current fault detection >6mA/DC. The residual current device must switch off all the phases connected and the "N". The applied RCB must comply with local law and regulations.
- 4) We always advise the use of phase rotation in the installation of several charging stations connected to the same cabinet.
- 5) Only for stations equipped with a Type 2 socket.
- 6) We advise to take provide photos of the installation and add them to this document (Electrical cabinet, power input, general view of installation etc.).

Notes:

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Responsibility:

| | |
|----------------------|--|
| Date: | |
| Installer Name: | |
| Reseller: | |
| Installer Signature: | |
| Customer Signature: | |

Annex: Hub / Satellite Charger configuration

| | |
|--|--|
| Cable used for RS485 connection (Hub/Sat Only) | |
| Check that termination resistor is installed (Hub/Sat Only) | |

| # | EVb Station ID | Phase Configuration | | | | Output Power | |
|----|----------------|--------------------------|----|----|----|---------------------------------|--------------------------------|
| 1 | | <input type="checkbox"/> | L1 | L2 | L3 | <input type="checkbox"/> 3,7 kW | <input type="checkbox"/> 11 kW |
| | | <input type="checkbox"/> | L2 | L3 | L1 | <input type="checkbox"/> 7,4 kW | <input type="checkbox"/> 22 kW |
| | | <input type="checkbox"/> | L3 | L1 | L2 | | |
| 2 | | <input type="checkbox"/> | L1 | L2 | L3 | <input type="checkbox"/> 3,7 kW | <input type="checkbox"/> 11 kW |
| | | <input type="checkbox"/> | L2 | L3 | L1 | <input type="checkbox"/> 7,4 kW | <input type="checkbox"/> 22 kW |
| | | <input type="checkbox"/> | L3 | L1 | L2 | | |
| 3 | | <input type="checkbox"/> | L1 | L2 | L3 | <input type="checkbox"/> 3,7 kW | <input type="checkbox"/> 11 kW |
| | | <input type="checkbox"/> | L2 | L3 | L1 | <input type="checkbox"/> 7,4 kW | <input type="checkbox"/> 22 kW |
| | | <input type="checkbox"/> | L3 | L1 | L2 | | |
| 4 | | <input type="checkbox"/> | L1 | L2 | L3 | <input type="checkbox"/> 3,7 kW | <input type="checkbox"/> 11 kW |
| | | <input type="checkbox"/> | L2 | L3 | L1 | <input type="checkbox"/> 7,4 kW | <input type="checkbox"/> 22 kW |
| | | <input type="checkbox"/> | L3 | L1 | L2 | | |
| 5 | | <input type="checkbox"/> | L1 | L2 | L3 | <input type="checkbox"/> 3,7 kW | <input type="checkbox"/> 11 kW |
| | | <input type="checkbox"/> | L2 | L3 | L1 | <input type="checkbox"/> 7,4 kW | <input type="checkbox"/> 22 kW |
| | | <input type="checkbox"/> | L3 | L1 | L2 | | |
| 6 | | <input type="checkbox"/> | L1 | L2 | L3 | <input type="checkbox"/> 3,7 kW | <input type="checkbox"/> 11 kW |
| | | <input type="checkbox"/> | L2 | L3 | L1 | <input type="checkbox"/> 7,4 kW | <input type="checkbox"/> 22 kW |
| | | <input type="checkbox"/> | L3 | L1 | L2 | | |
| 7 | | <input type="checkbox"/> | L1 | L2 | L3 | <input type="checkbox"/> 3,7 kW | <input type="checkbox"/> 11 kW |
| | | <input type="checkbox"/> | L2 | L3 | L1 | <input type="checkbox"/> 7,4 kW | <input type="checkbox"/> 22 kW |
| | | <input type="checkbox"/> | L3 | L1 | L2 | | |
| 8 | | <input type="checkbox"/> | L1 | L2 | L3 | <input type="checkbox"/> 3,7 kW | <input type="checkbox"/> 11 kW |
| | | <input type="checkbox"/> | L2 | L3 | L1 | <input type="checkbox"/> 7,4 kW | <input type="checkbox"/> 22 kW |
| | | <input type="checkbox"/> | L3 | L1 | L2 | | |
| 9 | | <input type="checkbox"/> | L1 | L2 | L3 | <input type="checkbox"/> 3,7 kW | <input type="checkbox"/> 11 kW |
| | | <input type="checkbox"/> | L2 | L3 | L1 | <input type="checkbox"/> 7,4 kW | <input type="checkbox"/> 22 kW |
| | | <input type="checkbox"/> | L3 | L1 | L2 | | |
| 10 | | <input type="checkbox"/> | L1 | L2 | L3 | <input type="checkbox"/> 3,7 kW | <input type="checkbox"/> 11 kW |
| | | <input type="checkbox"/> | L2 | L3 | L1 | <input type="checkbox"/> 7,4 kW | <input type="checkbox"/> 22 kW |
| | | <input type="checkbox"/> | L3 | L1 | L2 | | |
| 11 | | <input type="checkbox"/> | L1 | L2 | L3 | <input type="checkbox"/> 3,7 kW | <input type="checkbox"/> 11 kW |
| | | <input type="checkbox"/> | L2 | L3 | L1 | <input type="checkbox"/> 7,4 kW | <input type="checkbox"/> 22 kW |
| | | <input type="checkbox"/> | L3 | L1 | L2 | | |
| 12 | | <input type="checkbox"/> | L1 | L2 | L3 | <input type="checkbox"/> 3,7 kW | <input type="checkbox"/> 11 kW |
| | | <input type="checkbox"/> | L2 | L3 | L1 | <input type="checkbox"/> 7,4 kW | <input type="checkbox"/> 22 kW |
| | | <input type="checkbox"/> | L3 | L1 | L2 | | |
| 13 | | <input type="checkbox"/> | L1 | L2 | L3 | <input type="checkbox"/> 3,7 kW | <input type="checkbox"/> 11 kW |
| | | <input type="checkbox"/> | L2 | L3 | L1 | <input type="checkbox"/> 7,4 kW | <input type="checkbox"/> 22 kW |
| | | <input type="checkbox"/> | L3 | L1 | L2 | | |
| 14 | | <input type="checkbox"/> | L1 | L2 | L3 | <input type="checkbox"/> 3,7 kW | <input type="checkbox"/> 11 kW |
| | | <input type="checkbox"/> | L2 | L3 | L1 | | |

| | | | | | | | |
|----|--|--------------------------|----|----|----|--|--|
| | | <input type="checkbox"/> | L3 | L1 | L2 | <input type="checkbox"/> 7,4 kW | <input type="checkbox"/> 22 kW |
| 15 | | <input type="checkbox"/> | L1 | L2 | L3 | <input type="checkbox"/> 3,7 kW <input type="checkbox"/> 7,4 kW | <input type="checkbox"/> 11 kW <input type="checkbox"/> 22 kW |
| | | <input type="checkbox"/> | L2 | L3 | L1 | | |
| | | <input type="checkbox"/> | L3 | L1 | L2 | | |
| 16 | | <input type="checkbox"/> | L1 | L2 | L3 | <input type="checkbox"/> 3,7 kW <input type="checkbox"/> 7,4 kW | <input type="checkbox"/> 11 kW <input type="checkbox"/> 22 kW |
| | | <input type="checkbox"/> | L2 | L3 | L1 | | |
| | | <input type="checkbox"/> | L3 | L1 | L2 | | |
| 17 | | <input type="checkbox"/> | L1 | L2 | L3 | <input type="checkbox"/> 3,7 kW <input type="checkbox"/> 7,4 kW | <input type="checkbox"/> 11 kW <input type="checkbox"/> 22 kW |
| | | <input type="checkbox"/> | L2 | L3 | L1 | | |
| | | <input type="checkbox"/> | L3 | L1 | L2 | | |
| 18 | | <input type="checkbox"/> | L1 | L2 | L3 | <input type="checkbox"/> 3,7 kW <input type="checkbox"/> 7,4 kW | <input type="checkbox"/> 11 kW <input type="checkbox"/> 22 kW |
| | | <input type="checkbox"/> | L2 | L3 | L1 | | |
| | | <input type="checkbox"/> | L3 | L1 | L2 | | |
| 19 | | <input type="checkbox"/> | L1 | L2 | L3 | <input type="checkbox"/> 3,7 kW <input type="checkbox"/> 7,4 kW | <input type="checkbox"/> 11 kW <input type="checkbox"/> 22 kW |
| | | <input type="checkbox"/> | L2 | L3 | L1 | | |
| | | <input type="checkbox"/> | L3 | L1 | L2 | | |
| 20 | | <input type="checkbox"/> | L1 | L2 | L3 | <input type="checkbox"/> 3,7 kW <input type="checkbox"/> 7,4 kW | <input type="checkbox"/> 11 kW <input type="checkbox"/> 22 kW |
| | | <input type="checkbox"/> | L2 | L3 | L1 | | |
| | | <input type="checkbox"/> | L3 | L1 | L2 | | |