



ELECTRIC VEHICLE CHARGER **EVC04 Series**

Installationsanleitung
Installation Guideline



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SAFETY INFORMATION



CAUTION RISK OF ELECTRIC SHOCK:



CAUTION: ELECTRIC VEHICLE CHARGER DEVICE SHALL BE MOUNTED BY A LICENSED OR AN EXPERIENCED ELECTRICIAN AS PER ANY REGIONAL OR NATIONAL ELECTRIC REGULATIONS AND STANDARDS IN EFFECT.



CAUTION



AC grid connection and load planning of the electric vehicle charging device shall be reviewed and approved by authorities as specified by the regional or national electric regulations and standards in effect. For multiple electric vehicle charger installations the load plan shall be established accordingly. The manufacturer shall not be held liable directly or indirectly for any reason whatsoever in the event of damages and risks that are borne of errors due to AC grid supply connection or load planning.

IMPORTANT - Please read these instructions fully before installing or operating

SAFETY WARNINGS

- Keep this manual in a safe place. These safety and operating instructions must be kept in a safe place for future reference.
- Check that the voltage marked on the rating label and do not use charging station without appropriate mains voltage.
- Do not continue to operate the unit if you are in any doubt about it working normally, or if it is damaged in any way - switch off the mains supply circuit breakers (MCB and RCCB). Consult your local dealer.
- The ambient temperature range should be between -35°C and $+55^{\circ}\text{C}$ (-25°C and $+50^{\circ}\text{C}$ for RCCB equipped models: EVC04-AC***A-*) without direct sunlight and at a relative humidity of between 5 % and 95 %. Use the charging station only within these specified operating conditions.
- The device location should be selected to avoid excessive heating of the charging station. High operating temperature caused by direct sunlight or heating sources, may cause reduction of charging current or temporary interruption of charging process.
- The charging station is intended for outdoor and indoor use. It can also be used in public places.
- To reduce the risk of fire, electric shock or product damage, do not expose this unit to severe rain, snow, electrical storm or other severe weathers. Moreover, the charging station shall not be exposed to spilled or splashed liquids.
- Do not touch end terminals, electric vehicle connector and other hazardous live parts of the charging station with sharp metallic objects.
- Avoid exposure to heat sources and place the unit away from flammable, explosive, harsh, or combustible materials, chemicals, or vapors.
- Risk of Explosion. This equipment has internal arcing or sparking parts which should not be exposed to flammable vapors. It should not be located in a recessed area or below floor level.
- This device is intended only for charging vehicles not requiring ventilation during charging.

- To prevent risk of explosion and electric shock, ensure that the specified Circuit Breaker and RCD are connected to building grid.
- The lowest part of the socket-outlet shall be located at a height between 0,5 m and 1,5 m above ground level.
- Adaptors or conversion adapters are not allowed to be used. Cable extension sets are not allowed to be used.



WARNING: Never let people (including children) with reduced physical, sensory or mental capabilities or lack of experience and or knowledge use electrical devices unsupervised.



CAUTION: This vehicle charger unit is intended only for charging electric vehicles not requiring ventilation during charging.

GROUND CONNECTION WARNINGS

- Charging station must be connected to a centrally grounded system. The ground conductor entering the charging station must be connected to the equipment grounding lug inside the charger. This should be run with circuit conductors and connected to the equipment grounding bar or lead on the charging station. Connections to the charging station are the responsibility of the installer and purchaser.
- To reduce the risk of electrical shock, connect only to properly grounded outlets.
- **WARNING :** Make sure that during installing and using, the charging station is constantly and properly grounded.

POWER CABLES, PLUGS and CHARGING CABLE WARNINGS

- Be sure that charging cable is Type 2 socket compatible on charging station side.
- A damaged charging cable can cause fire or give you an electric shock. Do not use this product if the flexible Charging cable or vehicle cable is frayed, has broken insulation, or shows any other signs of damage.
- Ensure that the charge cable is well positioned thus; it will not be stepped on, tripped over, or subjected to damage or stress.
- Do not forcefully pull the charge cable or damage it with sharp objects.
- Never touch the power cable/plug or vehicle cable with wet hands as this could cause a short circuit or electric shock.
- To avoid a risk of fire or electric shock, do not use this device with an extension cable. If the mains cable or vehicle cable is damaged it must be replaced by the manufacturer, its service agent, or similarly qualified persons in order to avoid a hazard.

WALL MOUNTING WARNINGS

- Read the instructions before mounting your charging station on the wall.
- Do not install the charging station on a ceiling or inclined wall.
- Use the specified wall mounting screws and other accessories.
- This unit is rated for indoor or outdoor installation. If this unit is mounted outdoors, the hardware for connecting the conduits to the unit must be rated for outdoor installation and be installed properly to maintain the proper IP rating on the unit.

DESCRIPTION

1 - MODEL DESCRIPTION

| | |
|--------------------------|---|
| <p>Model Name</p> | <p><u>MODEL DESCRIPTION: EVC04-AC**-*</u></p> <p>EVC04 : Electric Vehicle AC Charger (Mechanical Cabinet 04) 1st Asterisk (*) : Rated Power</p> <p>11 : 11 kW (3Phase Supply Equipment) 22 : 22 kW (3Phase Supply Equipment)</p> <p>2nd Asterisk (*) can include combinations of the following communication module options. RFID reader is standard equipment for all of the model variants. "S" option must be included for selecting combinations of W and L:</p> <p>Blank : No connectivity module except RFID reader S : Smart Board with Ethernet Port W : Wi-Fi module or WiFi & Bluetooth module L : LTE / 3G / 2G module P : ISO 15118 PLC module</p> <p>3rd Asterisk (*) : Can be one of the following:</p> <p>Blank : No Display D : 4.3" TFT color display</p> <p>4th Asterisk (*) can include combinations of the following:</p> <p>Blank : No RCCB A : Charging unit with Type-A RCCB MID: Charging unit with MID Meter</p> <p>5th Asterisk (*) can be one of the following:</p> <p>Blank : Case-B Connection with normal socket T2S : Case-B Connection with shuttered socket T2P : Case-C Connection with Type-2 plug T1P : Case-C Connection with Type-1 plug</p> |
| <p>Cabinet</p> | <p>EVC04</p> |

Table-1

2 - MODEL REFERENCES

Model reference table does not include all model variants of EVC04.

| | Single phase | Three phase | Smart | LTE | WiFi | Display | MID Meter | Type 2 socket | Shuttered type 2 socket output | RCCB Type-A | DC 6mA RCD | Type-2 Attached Cable | Type-1 Attached Cable |
|---------------------|--------------|-------------|-------|-----|------|---------|-----------|---------------|--------------------------------|-------------|------------|-----------------------|-----------------------|
| EVC04-AC11SLD | | x | x | x | | x | | x | | | x | | |
| EVC04-AC11SWDA | | x | x | | x | x | | x | | x | x | | |
| EVC04-AC11SW | | x | x | | x | | | x | | | x | | |
| EVC04-AC11SW-T2P | | x | x | | x | | | | | | x | x | |
| EVC04-AC11SLWDA-T2P | | x | x | x | x | x | | | | x | x | x | |
| EVC04-AC11SLWDA-T2S | | x | x | x | x | x | | | x | x | x | | |
| EVC04-AC22SW | | x | x | | x | | | x | | | x | | |
| EVC04-AC22SW-T2P | | x | x | | x | | | | | | x | x | |
| EVC04-AC22SLDMID | | x | x | x | | x | x | x | | | x | | |
| EVC04-AC22SWDA | | x | x | | x | x | | x | | x | x | | |
| EVC04-AC22SLWDA-T2P | | x | x | x | x | x | | | | x | x | x | |
| EVC04-AC22SLWDA-T2S | | x | x | x | x | x | | | x | x | x | | |

Table-2

GENERAL INFORMATION

1 - INTRODUCTION OF THE PRODUCT COMPONENTS

1.1 - RCD MODELS

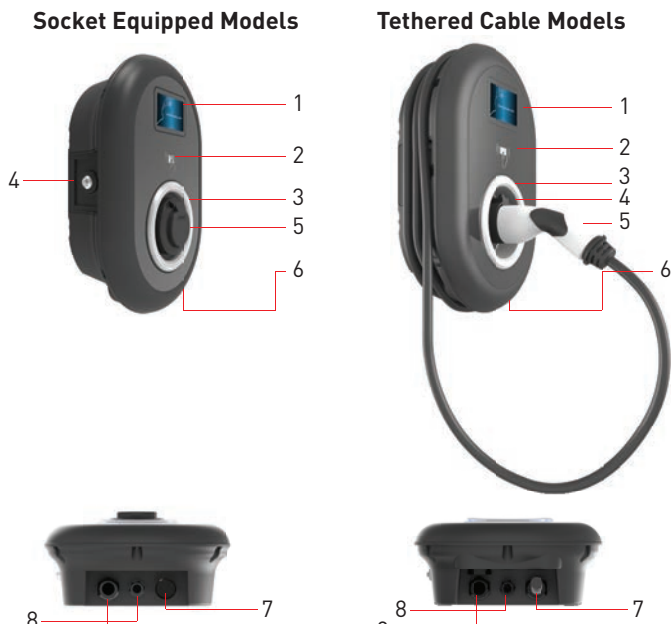


Figure-1

en **Socket Models**

- 1- Information Display (Optional)
- 2- RFID Card Reader
- 3- Status indicator LED
- 4- Access cover for residual current device (Optional)
- 5- Socket Outlet
- 6- Product Label
- 7- Plastic Bling Flange
- 8- Charging station communication cable gland nut
- 9- Charging station supply inlet gland nut

en **Tethered Cable Models**

- 1- Information Display (Optional)
- 2- RFID Card Reader
- 3- Status indicator LED
- 4- Access cover for residual current device (Optional)
- 5- Dummy Socket
- 6- Charging Plug
- 7- Product Label
- 8- Charging cable
- 9- Charging station communication cable gland nut
- 10- Charging station supply inlet gland nut

1.2 - MID MODELS

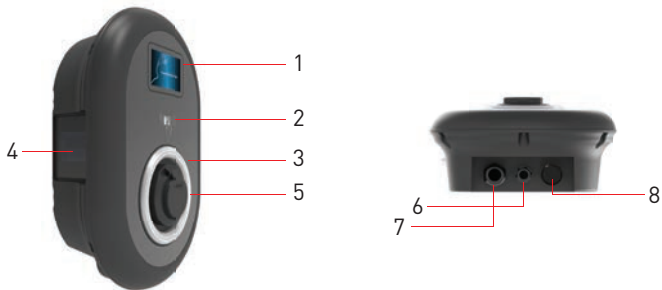


Figure-2

en Socket Models with MID Meter

- 1- Information Display (Optional)
- 2- RFID Card Reader
- 3- Status indicator LED
- 4- MID Meter Display (Optional)
- 5- Socket Outlet
- 6- Product Label
- 7- Charging station supply inlet gland nut
- 8- Charging station communication cable gland nut
- 9- Plastic Bling Flange

2 - DIMENSIONAL DRAWINGS

2.1 - Without Display Model

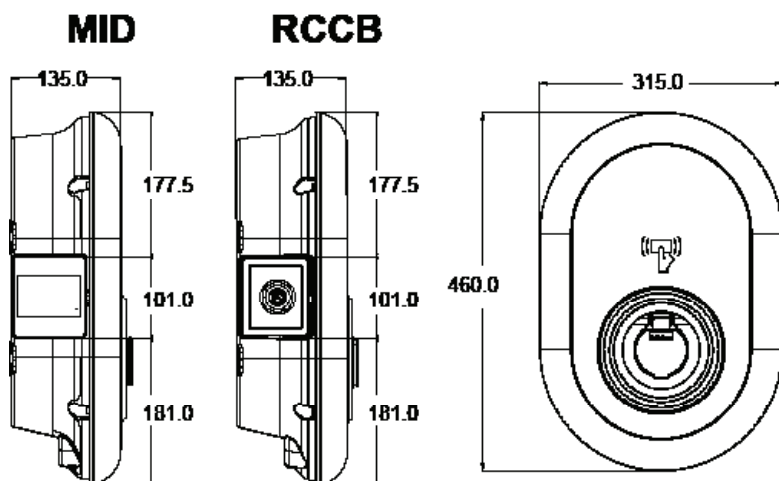


Figure-3

2.2 - With Display Model

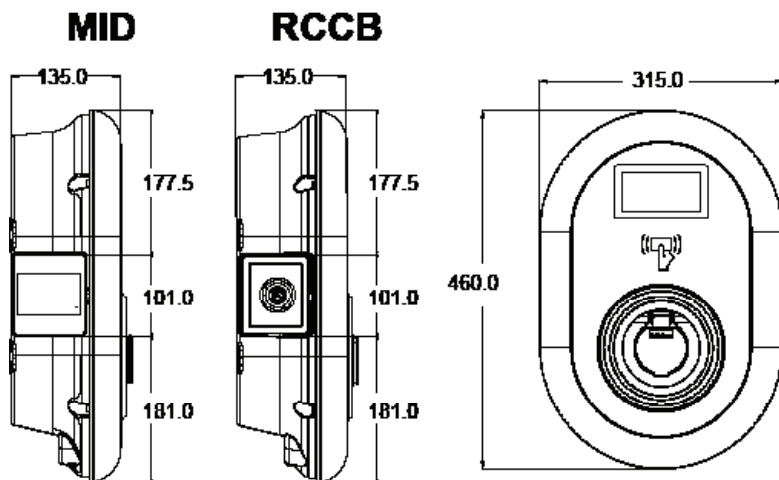


Figure-4

REQUIRED EQUIPMENT, TOOLS and ACCESSORIES

1 - SUPPLIED INSTALLATION EQUIPMENT and ACCESSORIES







| | |
|---------------------------------|---|
| Dowels (M8x50 Plastic Dowels) |  |
| Torx T25 Security Screw (M6x75) |  |
| Torx T20 Security L-Wrench |  |
| Wrench |  |
| Triangle Key |  |
| RJ45 Male Connector |  |

Table-3

2 - RECOMMENDED TOOLS

| | | |
|---|---|---|
|  |  |  |
| Drill Bit 8mm | Impact Drill | PC |
|  |  |  |
| Volt Indicator | Torx T25 Security Screwdriver | Water Level |
|  |  |  |
| Flathead Screwdriver (Tip width 2.00-2.5 mm) | Pointed Spudger | Right Angle Screwdriver Adapter / Torx T20 Security Bit |
|  | RJ45 Crimping Tool | |

Table-4

TECHNICAL SPECIFICATIONS

This product is compliant to IEC61851-1 (Ed3.0) standard for Mode 3 use.

| | | | |
|--|---------------------|--|---|
| Model | | EVC04-AC22 Series | EVC04-AC11 Series |
| IEC Protection class | | Class - I | Class - I |
| Vehicle Interface | Socket Model | Socket TYPE 2 (IEC 62196) | Socket TYPE 2 (IEC 62196) |
| | Cable Model | 5 m Cable with TYPE 2 (IEC 62196) Female Plug | 5 m Cable with TYPE 2 (IEC 62196) Female Plug |
| Voltage and Current Rates | | 400VAC 50/60 Hz - 3-phase 32A | 400VAC 50/60 Hz- 3-phase 16A |
| AC Maximum Charge Output | | 22kW | 11kW |
| Idle Power Consumption | | 3.5W | 3.5W |
| Required Circuit Breaker on AC Mains | | 4P-40A MCB Type-C | 4P-20A MCB Type-C |
| Required Leakage Current Relay on AC Mains (for products which are not equipped with RCCB Type A) | | 4P -40A - 30mA RCCB Type-A | 4P -20A - 30mA RCCB Type-A |
| Required AC Mains Cable | | 5x 6 mm ² (< 50 m) External Dimensions: Ø 15-21 mm | 5x4 mm ² (< 50 m) External Dimensions: Ø 15-21 mm |

CONNECTIVITY

| | |
|-----------------------------|---|
| Ethernet | 10/100 Mbps Ethernet (Standard with Smart Options) |
| Wi-Fi (Optional) | Wi-Fi 802.11 a/b/g/n/ac |
| Bluetooth (Optional) | BT 4.2 / BT5.0 |
| Celular (Optional) | LTE: B1 (2100 MHz), B3 (1800 MHz), B7 (2600 MHz), B8 (900 MHz), B20 (800 MHz), B28A (700 MHz) WCDMA: B1 (2100 MHz), B8 (900 MHz) GSM: B3 (1800 MHz), B8 (900 MHz) |

OTHER FEATURES (Connected Models)

| | |
|------------------------|--|
| Diagnostics | Diagnostics over OCPP WebconfigUI |
| Software Update | Remote software update over OCPP WebconfigUI update Remote software update with server |

AUTHORIZATION

| | |
|-------------|----------------------------|
| RFID | ISO-14443A/B and ISO-15693 |
|-------------|----------------------------|

MECHANIC SPECIFICATIONS

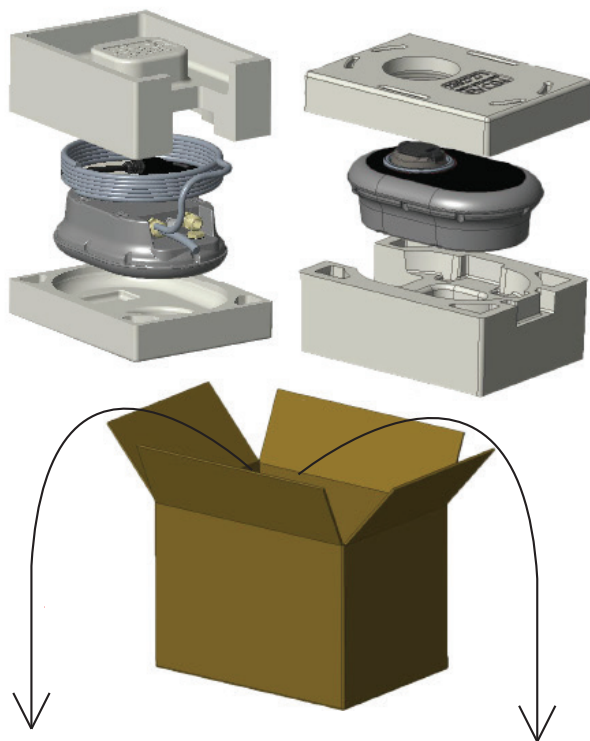
| | |
|---------------------------|--|
| Material | Plastic |
| Size | 315 mm (Width) x 460 mm (Height) x 135 mm (Depth) |
| Dimensions (Package) | 405 mm (Width) x 530 mm (Height) x 325 mm (Depth) |
| Weight (Product) | 5 kg for socket equipped model, 6,8kg TETHERED CABLE model |
| Weight with package | 7,1 kg for socket equipped model, 8,9kg TETHERED CABLE model |
| AC Mains Cable Dimensions | For 22 kW version Ø 15-21 mm |
| | For 11 kW version Ø 15-21 mm |
| Cable Inlets | AC Mains / Ethernet / Modbus |

ENVIRONMENTAL TECHNICAL SPECIFICATIONS

| | | |
|------------------|---|---|
| Protection Class | Ingress Protection Impact Protection | IP54 IK10 (Optional display have IK08 protection) |
| Usage Conditions | Temperature Humidity Altitude | -35 °C to 55 °C (without direct sunlight) (-25°C to +50 °C for RCCB equipped models) 5% - 95% (relative humidity, no dew) 0 - 4,000m |

INSTALLING CHARGE STATION

1 - BOX CONTENTS FOR CHARGING STATION WITH SOCKET AND CABLE



Installation and User Guide



1 Master + 2 User RFID Card



2 - PRODUCT INSTALLATION STEPS

CAUTION!

- Ensure that ground resistance of the installation less than 100ohms
- Prior to mounting your charging station on the wall, read these instructions.
- Do not mount your charging station to the ceiling or an inclined wall.
- Use the wall mounting screws and other accessories specified.
- This charging station is classified as indoor and outdoor installation compatible. If the device is installed outside the building, the hardware that will be used to connect the cables to the charger shall be compatible with outdoor use and the charging station shall be mounted preserving the IP rate of the charger.

2.1 OPENING THE COVER OF THE CHARGING STATION

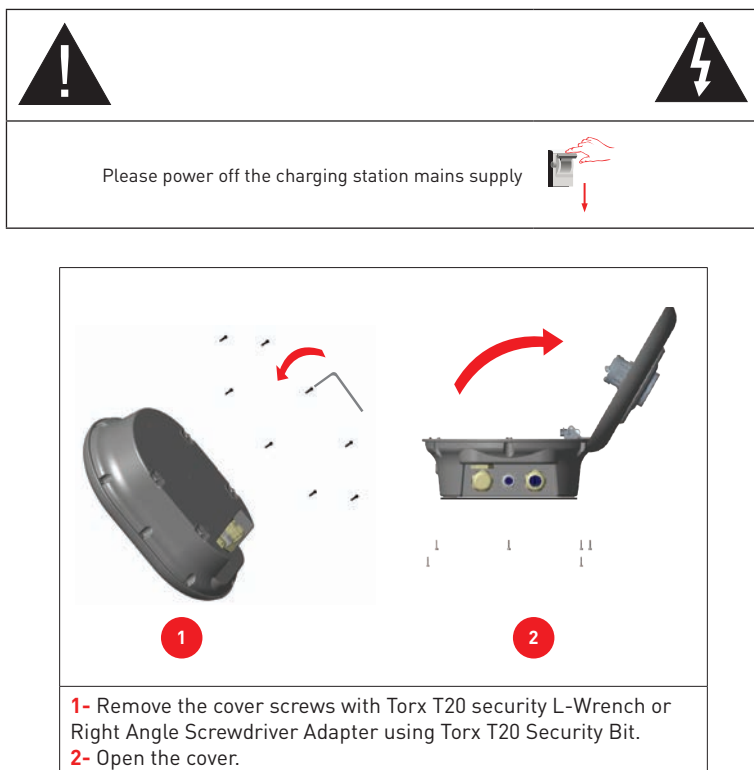
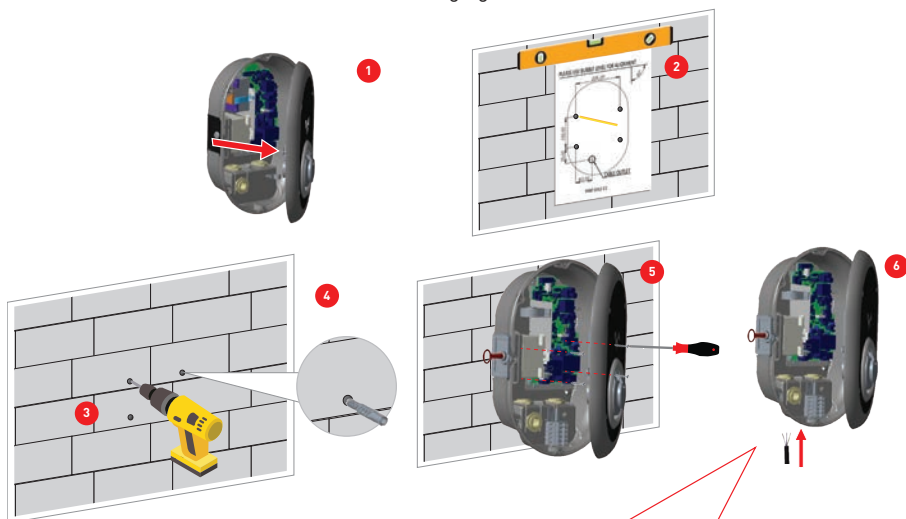


Figure-8

2.2 - WALL MOUNT INSTALLATION

Wall mount installation is common for all charging station models.



Before next step [7], Please check the instructions for Single Phase or Three Phase cable connections in sections 2.3 or 2.4.

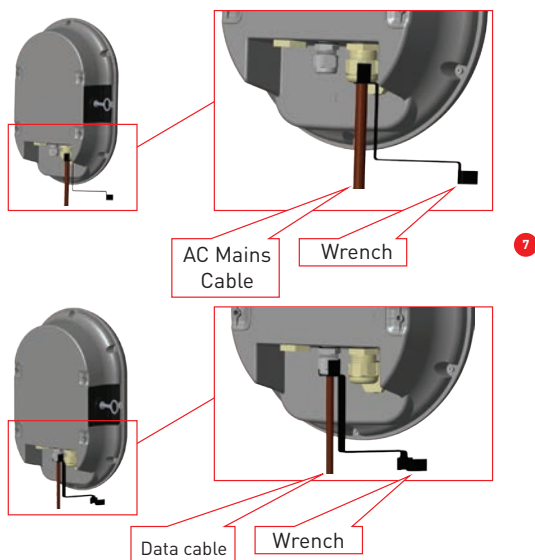


Figure-9

Before closing the cover of the charging station, check instructions in sections 2.6 and 2.7 if any function related to these sections are used.

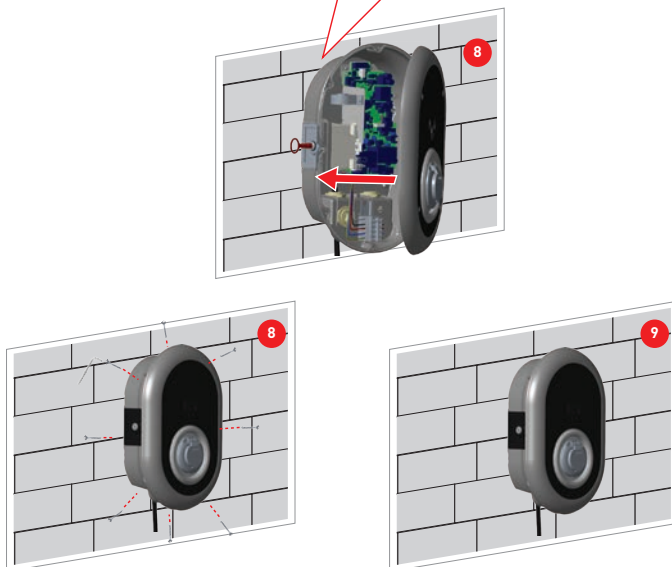


Figure-10

- 1- Open the product front cover following the instructions for cover opening under section 5.2.
 - 2- Center the charging station using the alignment template, and mark the drill bit holes with a pencil.
 - 3- Drill the wall on the marked points using the impact drill (8mm drill bit).
 - 4- Place the dowels into the holes.
 - 5- Tighten the security screws (M6x75) of the product using Torx T25 Security Screwdriver.
 - 6- Insert the open lead wires into the charging station through the hole on the lower left. Follow the AC Mains Connection instructions on the next pages, see section 2.3 or 2.4 depending on the model of the charger. (Single/Three Phase)
 - 7- Tighten the cable glands as shown in the figure. Before close the cover of the charging station, follow instructions in sections 2.6 and 2.7 if any function related to these sections are used.
- NOTE :** Also check section 3 commissioning.
- 8- To close the cover of the charging station, tighten the cover screws that you removed before with Torx T20 Security L-Wrench or Right Angle Screwdriver Adapter using Torx T20 Security Bit.
 - 9- Mounting the charging station on wall is now finished.

2.3- SINGLE PHASE CHARGING STATION AC MAINS CONNECTION

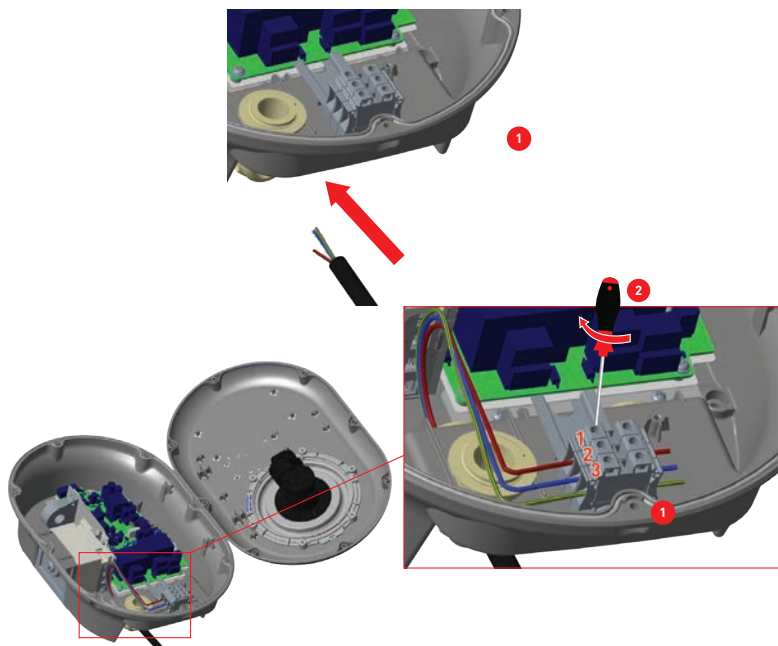


Figure-11

1- Insert the cables to the terminal block as shown in the image. Check the table-6 below to match Electric Terminal number with AC Cable Color.

2- Tighten the screws on the terminal block as shown in the image with the tightening torque of 2.5Nm.

| Electric Terminal | AC Cable Color |
|-------------------|----------------------|
| 1 | AC L1 (Brown) |
| 2 | AC Neutral (Blue) |
| 3 | Earth (Green-Yellow) |

Table-5

2.4- THREE PHASE CHARGING STATION AC MAINS CONNECTION

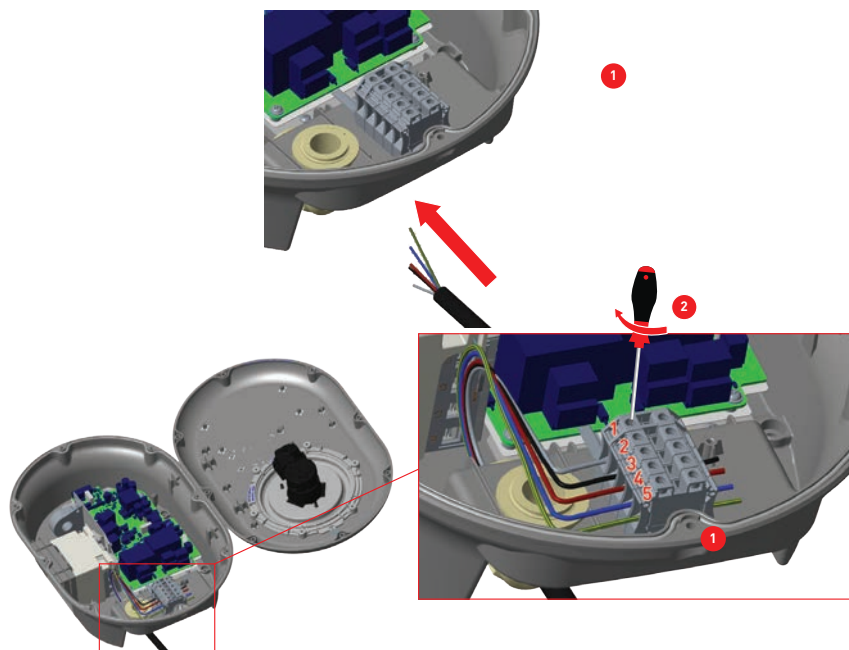


Figure-12

- 1- Insert the cables to the terminal block as shown in the image.
- 2- Tighten the screws on the terminal block as shown in the image with the tightening torque of 2.5Nm.

| Electric Terminal | AC Cable Color |
|-------------------|----------------------|
| 1 | AC L3 (Grey) |
| 2 | AC L2 (Black) |
| 3 | AC L1 (Brown) |
| 4 | AC Neutral (Blue) |
| 5 | Earth (Green-Yellow) |

Table-6

2.5 - ADJUSTING CURRENT LIMITER

The arrow in the middle of the rotary switch must be adjusted by gently rotating with a flathead screwdriver (Tip width 2.00-2.5 mm) to the position of the required current rate. The device current limiter is set to 16A in production by default.

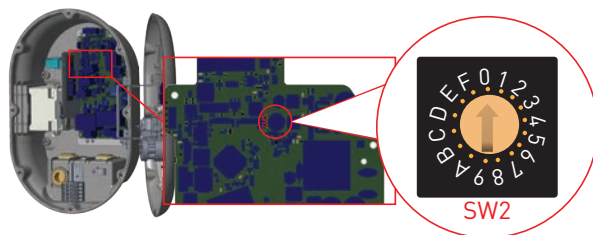


Figure-13

| Current Limiter Position | Current Limit | |
|--------------------------|---------------|------|
| | 22 kW | 11kW |
| 0 | 10 A | 10 A |
| 1 | 13 A | 13 A |
| 2 | 16 A | 16 A |
| 3 | 20 A | |
| 4 | 25 A | |
| 5 | 26 A | |
| 6 | 32 A | |
| 7 | | |
| 8 | 10 A | 10 A |
| 9 | 13 A | 13 A |
| A | 16 A | 16 A |
| B | 20 A | |
| C | 25 A | |
| D | 26 A | |
| E | 32 A | |
| F | | |

Table-7

| Required Circuit Braker on AC Mains | |
|--|--------------------|
| <u>EV Charging Station Current Limiter Setting</u> | <u>C-Curve MCB</u> |
| 10 A | 13 A |
| 13 A | 16 A |
| 16 A | 20 A |
| 20 A | 25 A |
| 25 A | 32 A |
| 26 A | 40 A |
| 32 A | 40 A |

Table-8

2.6 - DIP SWITCH SETTINGS

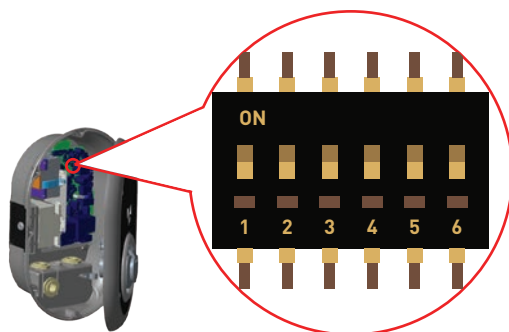


Figure-14

Brief descriptions of the DIP switch pin settings can be found in below table.

| Pin Number | Description |
|------------|---|
| Pin-1 | Reserved |
| Pin-2 | External Enable Input Functionality |
| Pin-3 | Locked Cable Function (only for socket models) |
| Pin-4-5-6 | Power Optimizer (Requires Optional Accessories) |

Table-9

2.6.1 - DATA CABLE CONNECTION

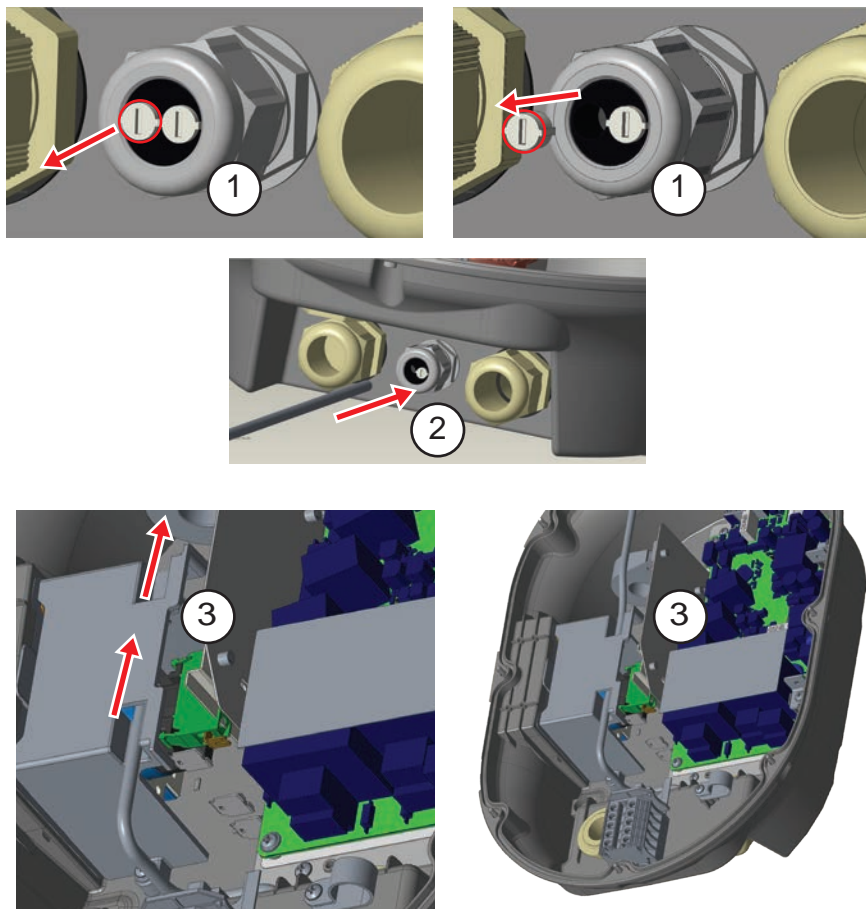


Figure-15

- 1- Remove rubber cork.
- 2- Insert cable through the cable hole.
- 3- Insert the cable through the RCCB housing holes.
- 4- Finally, to connect the wires on mainboard, check the following sections in 2.6 and 2.7 depending on the function(s) to be used.

2.6.2 - EXTERNAL ENABLE INPUT FUNCTIONALITY

Your charging station has external potential free enable / disable functionality which can be used for integration of your charging station to an carpark automation systems, energy supplier ripple control devices, time switches, photovoltaic inverters, auxiliary load control switches, external key lock switches etc. DIP switch position 2 is used for enabling and disabling this functionality.

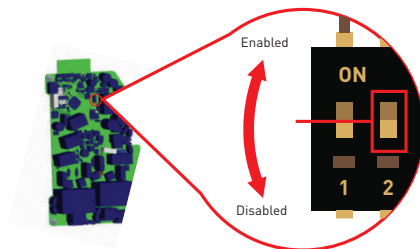


Figure-16

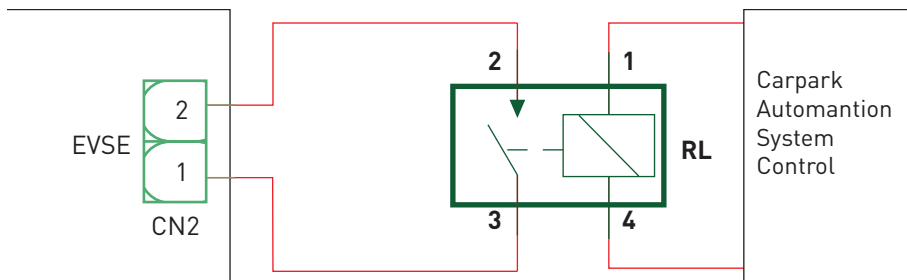


Figure-17

If the external relay (RL) is in conducting state (closed), the charging station will not be able to charge the electric vehicle.

You can connect potential free input signals as shown in above circuitry (see figure-17). See section 2.6.1-Data Cable Connection.

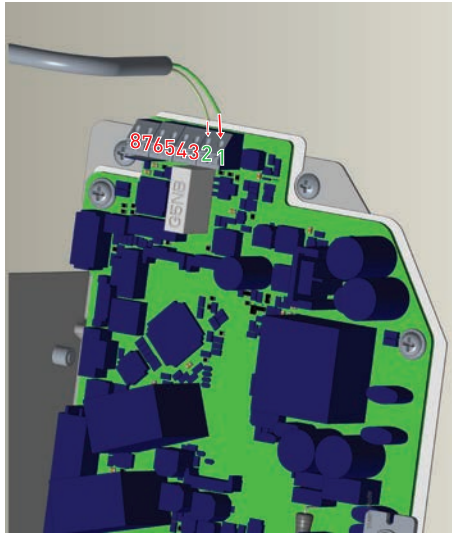


Figure-18

| Cable Terminal | Cable Color |
|----------------|---------------------|
| 1 (CN2-1) | Green |
| 2 (CN2-2) | Green + White Green |

Table-10

2.6.3 - LOCKED CABLE FUNCTION (Model with Socket)

The cable becomes locked and your socket model charging station starts behaving as a cable model.

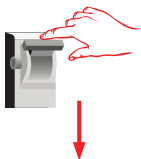
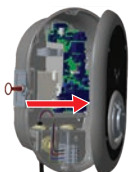
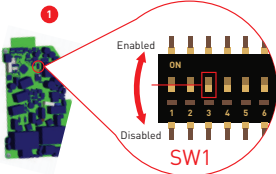
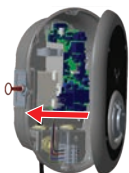


| | |
|--|--|
| <p>1- Turn off the power of your charging station.</p>  | <p>2- Open the product cover as described in the installation manual.</p>  |
| <p>3- To enable locked cable function, toggle DIP switch pin 3 to ON position using pointed spudger or a plastic pointed tool. The DIP switch location is as shown in below figure.</p>  | <p>4- Close the product cover as described in the installation manual.</p>  |
| <p>5- Open the front cover of the socket outlet and plug the charging cable to the socket outlet.</p>  | <p>6- Turn on the power to your charging station. The cable becomes locked and the charging station starts behaving as a cable model.</p>  |

Table-11

2.6.4 - POWER OPTIMIZER (REQUIRES OPTIONAL ACCESSORIES)

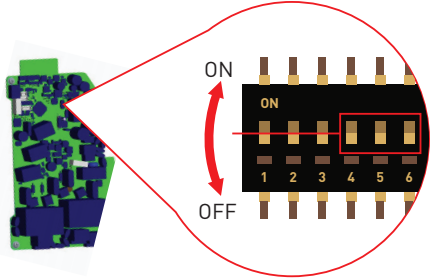


Figure-19

This feature is provided with an optional metering accessories which are sold separately. In power optimizer mode, the total current drawn from the main switch of the house by charging station and other household appliances is measured with current sensor integrated to the main power line. Current limit of the main power line of the system is set through the DIP switches inside the charging station. According to the limit set by the user, charging station adjusts its output charging current dynamically according to the measurement of main power line.

Last 3 DIP switch pins {4,5,6} corresponds to binary digits of the maximum current value as shown in the table-12 below. When 4, 5, 6 pins are in OFF position, power optimizer functionality is disabled.

| DIP Switch Positions | | | Current Limit Value |
|----------------------|-----|-----|--------------------------|
| 4 | 5 | 6 | |
| OFF | OFF | OFF | Power Optimizer Disabled |
| OFF | OFF | ON | 16 |
| OFF | ON | OFF | 20 |
| OFF | ON | ON | 25 |
| ON | OFF | OFF | 32 |
| ON | OFF | ON | 40 |
| ON | ON | OFF | 63 |
| ON | ON | ON | 80 |

Table-12

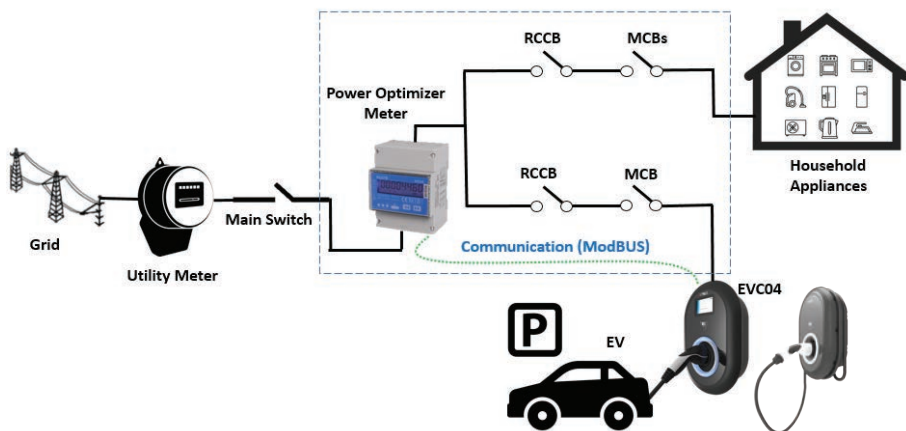


Figure-20

Power Optimizer Meter should be placed just after the main switch of the house as shown in the figure-20.

Power Optimizer Meter wiring connections can be made according to the information below. See section 2.6.1- Data Cable Connection

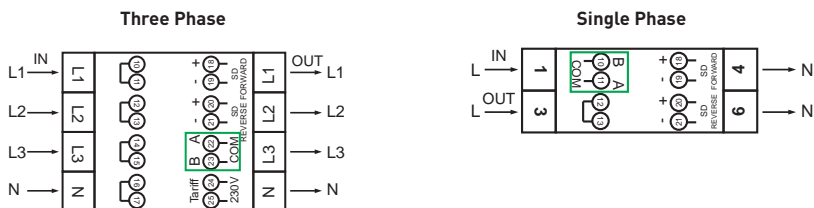


Figure-21

■ 22-23: A-B (COM) Modbus connection over RS485 for three phase charging station models. (See section 2.6.2- STP Connection)

■ 11-12: A-B (COM) Modbus connection over RS485 for single phase charging station models. (See section 2.6.2- STP Connection)

Related board wiring of Power Optimizer connections can be made as shown below:

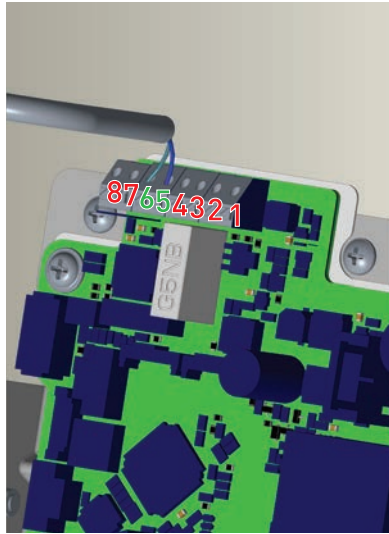


Figure-22

| Cable Terminal | Cable Color | Description |
|----------------|-------------|-------------|
| 6 (CN20-2) | White Blue | A (COM) |
| 5 (CN20-1) | Blue | B (COM) |

Table-13

2.7 - MONITORING OF WELDED RELAY CONTACTS FAILURE

According to IEC 61851-1 and EV/ZE Ready requirements, EVC04 EV Charging Station has welded contactor sensing function, and welded contactor information is provided as a contactor welded output signal from the control board.

To detect welded contact failure for the relays, CN1 connector output terminals must be monitored. In case of a welded contact for the relays CN1 connector output terminals are shorted. If there isn't an error, CN1 connector output terminals must be open.

The circuitry on the main board of the charging station is shown in figure-23.

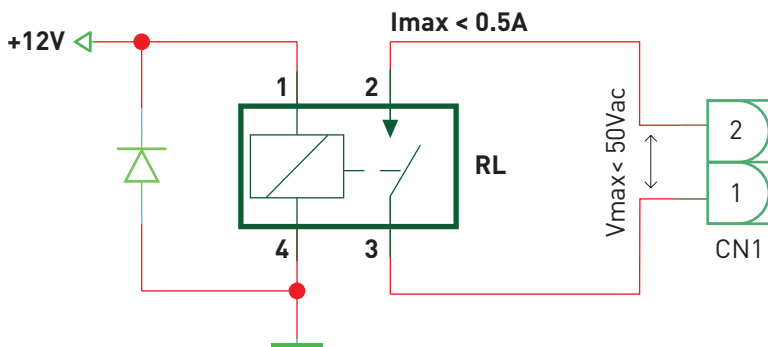


Figure-23

Connector terminals must be connected to a safety extra low voltage circuitry ($V_{cc} < 50V$ and $I_{cc} < 0.5A$). Shunt trip module is mechanically coupled to RCCB (or MCB) at the fuse box of the charging station. The circuitry block diagram that must be used at the fuse box of the charging station is shown below.

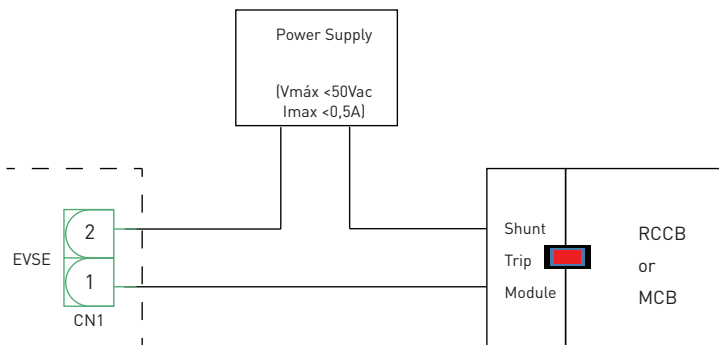


Figure-24

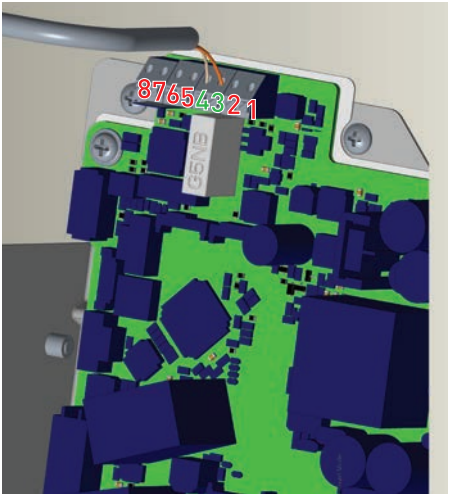


Figure-25

| Cable Terminal | Cable Color |
|----------------|-----------------------|
| 3 (CN1-1) | Orange |
| 4 (CN1-2) | Orange + White Orange |

Table-14

2.8 - FACTORY RESET

You must push the button on HMI board shown in figure-26 for factory reset. When you hold the button for 5 seconds user configuration will be reset to factory configuration. (e.g OCPP config, Network Config will be back to factory configuration.)

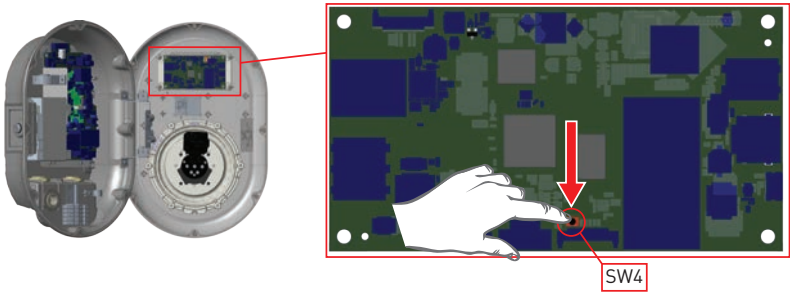


Figure-26

2.9 - OPEN RCD COVER

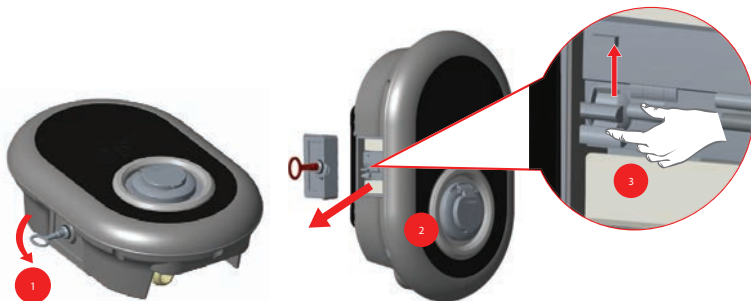


Figure-27

You may access the residual current device by opening the lock which is placed on the side cover as shown in the figure 27. Place and push triangle key on the side cover lock then rotate the key 90 degree counter-clockwise.

2.10 - RESETING LOCAL RFID CARD LIST AND REGISTERING NEW MASTER RFID CARD IN STANDALONE USAGE MODE

If you lose your master RFID card and need to define a new master RFID card, below steps should be followed by your authorised service technician.

- Make sure the charging station is powered-off and open the front cover of your charger which is mentioned in installation guideline.
- Toggle the first position of dip switch which is on the smart card of the charger shown in figure 28. After that please turn on the charger again.

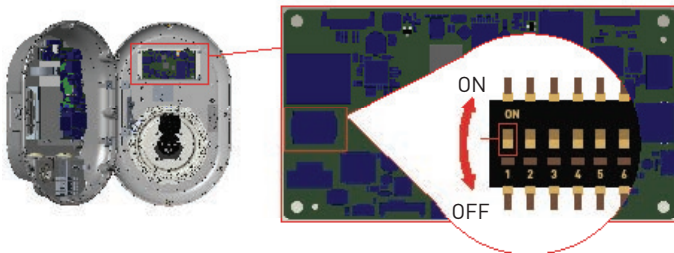


Figure.28

When the charger re-energised, please note that;

- Previously stored master card and user card list, if any exists, are deleted from charging station while entering the configuration mode.
- If master card had not been registered during 60 seconds then configuration mode expires and charging station behaves as autostart product.
- The first RFID card which is registered within this 60 seconds of duration will be the new master RFID card. Please follow instructions to register RFID user card which is used during charging process.

2.11 - SETTING ETHERNET PORT OF CHARGER TO STATIC IP IN STANDALONE USAGE MODE

If you need to set the Ethernet port of your charger to static IP, below steps should be followed:

- Make sure the charging station is powered-off and open the front cover of your charger which is mentioned in installation guideline.
- Toggle the second position of dip switch which is on the smart card of the charger shown in figure 29. After that please turn on the charger again.
- Charging station sets the Ethernet port to 192.168.0.10 address statically and subnet mask will be set to 255.255.255.0

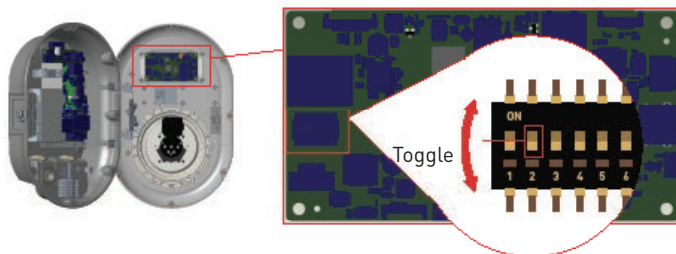


Figure.29

If the charger's Ethernet port is needed to be set in DHCP mode, this should be done from the webconfig interface.

2.12 - WEBCONFIG UI ENABLE / DISABLE

If you need to enable/disable the WebConfig UI below steps should be followed:

- Make sure the charging station is powered-off and open the front cover of your charger which is mentioned in installation guideline.
- If you want to enable the WebConfig UI, third position of dipswitch should be in "OFF" position as shown in figure 30.
- If you want to disable the WebConfig UI, third position of dipswitch should be in "ON" position as shown in figure 30.

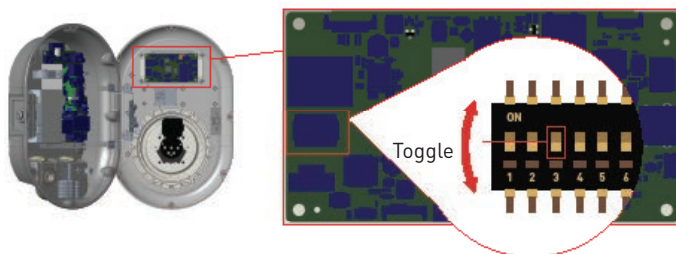


Figure.30

3 - OCCP CONNECTION (Optional)

Make sure the charging station is powered-off.

3.1 - CONNECT OCPP OVER CELLULAR NETWORK

Insert the Micro SIM card in the cellular module SIM card slot as shown in the below figure.

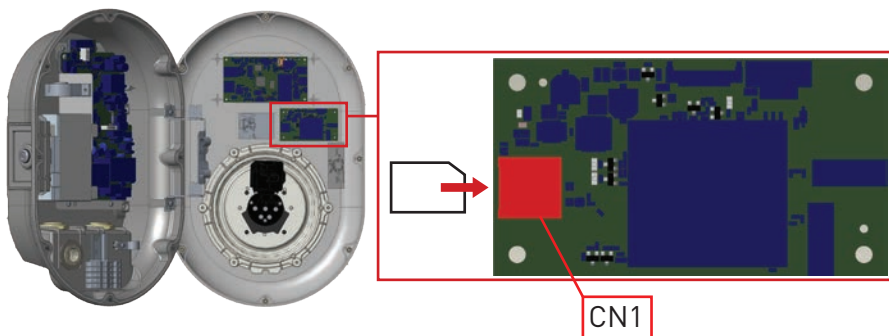
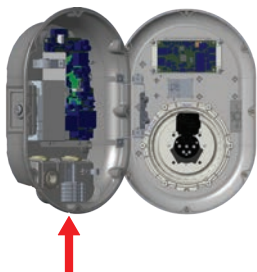


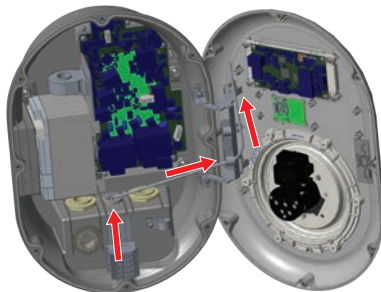
Figure-31

3.2 - CONNECT OCPP OVER ETHERNET

1- Insert cable through the cable gland. See section "2.6.1 Data Cable Connection" instructions, 1 and 2.



2- Pull the cable through the cable clamps as indicated by arrows in below figure.



3- Using a Crimping Tool, trim the end of the cable you're terminating, to ensure that the ends of the conducting wires are even.



4- Strip off approximately 1 inch of the cable's jacket, using a modular crimping tool or a UTP cable stripper.



5- Separate the 4 twisted wire pairs from each other, and then unwind each pair, so that you end up with 8 individual wires.



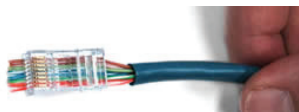
6- Moving from left to right, arrange the wires in a flat, side-by-side ribbon formation, placing them in the following order: white/orange, solid orange, white/green, solid blue, white/blue, solid green, white/brown, solid brown.



7- Carefully insert the flattened, arranged wires into the connector, pushing through until the wire ends emerge from the pins.



8- Check to make sure that the wire ends coming out of the connector's pin side are in the correct order. If you realize that a mistake has been made in wire order after termination, you'll have to cut the connector off and start all over again!



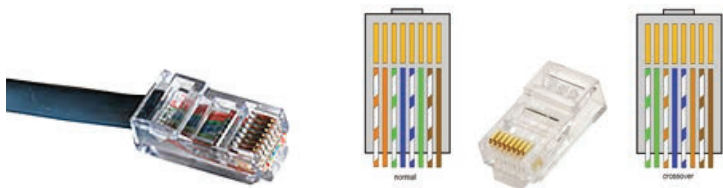
9- Insert the prepared connector/cable assembly into the RJ45 slot in your crimping tool. Firmly squeeze the crimper's handles together until you can't go any further. Release the handles and repeat this step to ensure a proper crimp.



10- If your crimper doesn't automatically trim the wire ends upon termination, carefully cut wire ends to make them as flush with the connector's surface as possible. The closer the wire ends are trimmed, the better your final plug-in connection will be.



11- Termination is complete.



12- Insert the RJ45 connector to the socket as shown in figure below.

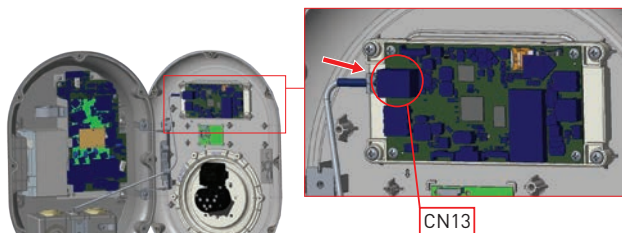


Table-15

4 - COMMISSIONING

You must connect your PC to the charging station to use functions and make configurations below:

- Login
- Change Password
- Main Page
- General Settings : Display Language
- OCPP Settings : OCPP Connection, OCPP Version, Connection Settings, OCPP Configuration Parameters
- Network Interface Settings: Cellular, Ethernet, Wi-Fi
- Standalone mode settings
- System Maintenance:
- Log Files, Firmware Updates, Configuration BackUp&Restore, System Reset, Administration Password, Factory Default Configuration

4.1 - CONNECT PC TO THE SAME NETWORK WITH HMI BOARD

In order to access Web Config UI, first you need to connect your PC and EV charger to the same ethernet switch or connect EV charger to your PC directly.

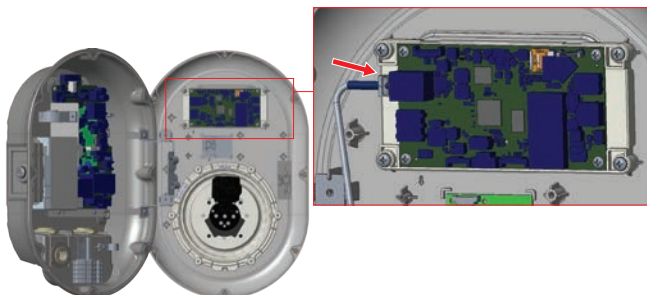


Figure.32

Default IP address of HMI board is 192.168.0.10. For this reason, you need to give static IP to your PC in the same network with HMI board.
You should assign static IP address to your PC in 192.168.0.254 network which means that IP address should be in a range of between 192.168.0.1 and 192.168.0.254.

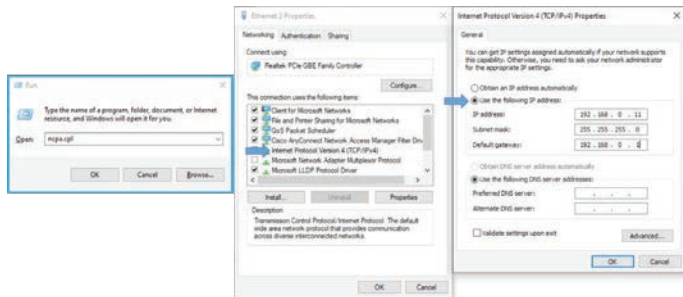


Figure.33

4.2 - OPEN WEB CONFIG UI WITH BROWSER

Open your Mozilla Firefox or Google Chrome web browser and type 192.168.0.10 which is IP address of HMI board.

You will see login page on your browser;

When the first time of the entering to Web Config or you never change your password, you will see the warning which is "We recommend you to change your default password from system maintenance menu".

You can enter the system with:

Default username = admin

Default password = admin

You can change password with Change Password Button in login page or Administration Password section in the System Maintenance tab.

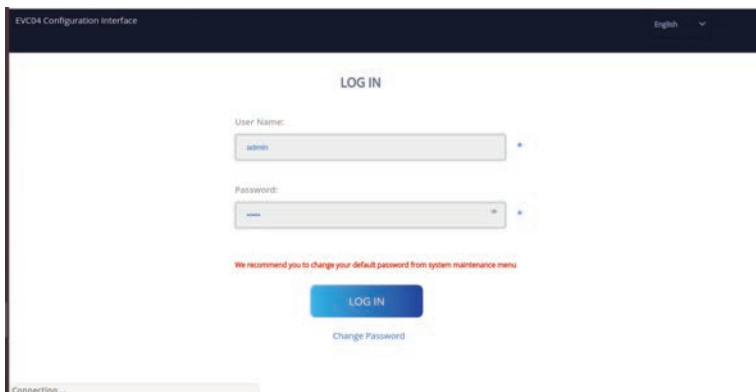


Figure.34

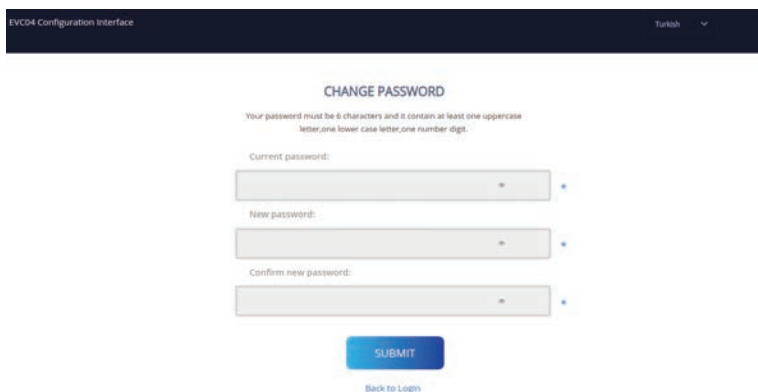
4.3 - CHANGE PASSWORD FOR LOGIN

If you click the “Change Password Button” you will be redirected to the Change Password page. New password must contain at least 1 lowercase letter, 1 uppercase letter, 1 numeric character and minimum 6 characters.

After typing your current password and new password twice, you will be redirected to the login page again to log in with your new password.

All spaces you will see are mandatory in this page.

After submitting this page you will be redirected to login page. Also if you don't want to change the password you can turn back the login page with “Back To Login”. Changing password is important for your security.



The screenshot shows the 'CHANGE PASSWORD' page of the EVC04 Configuration Interface. The page has a dark header with 'EVC04 Configuration Interface' on the left and 'Türkçe' with a dropdown arrow on the right. The main content area is white and contains the following elements: a title 'CHANGE PASSWORD', a password requirement note 'Your password must be 6 characters and it contain at least one uppercase letter, one lower case letter, one number digit.', three password input fields labeled 'Current password:', 'New password:', and 'Confirm new password:', each with a blue eye icon for toggling visibility, a blue 'SUBMIT' button, and a blue 'Back to Login' link.

Figure.35

4.4 - MAIN PAGE

After the successfully login operation, you are directed to the main page.

Main page shows the general information about the device that are software versions, connection interface and ids

You can also change the language and log out of the web config with the buttons in the upper right corner of the page.

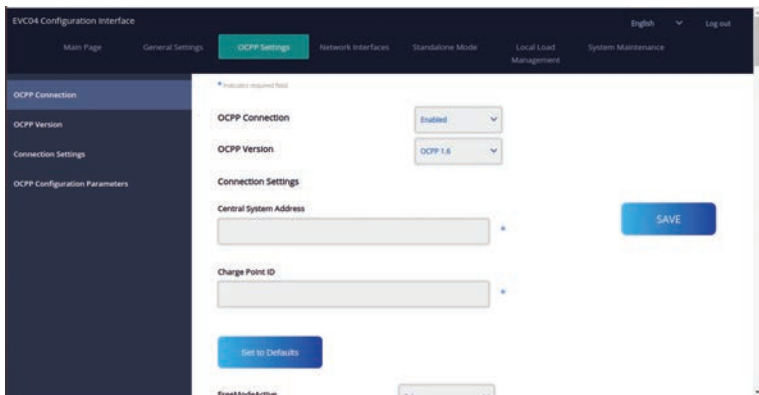


Figure.38

You can set OCPP configuration parameters to their default values by clicking “Set to Defaults” button.

You can select the OCPP settings type you want from the menu which is at the left side of the page. For example OCPP Connection, OCPP Version, Connection Settings and OCPP Configuration Parameters.

Then, click “Save” button.

Please be careful for your entered values because the system does not accept the unsuitable values and gives the warning. In this case, values will not be saved. Then the page does not be redirected the main page so you should check your values.

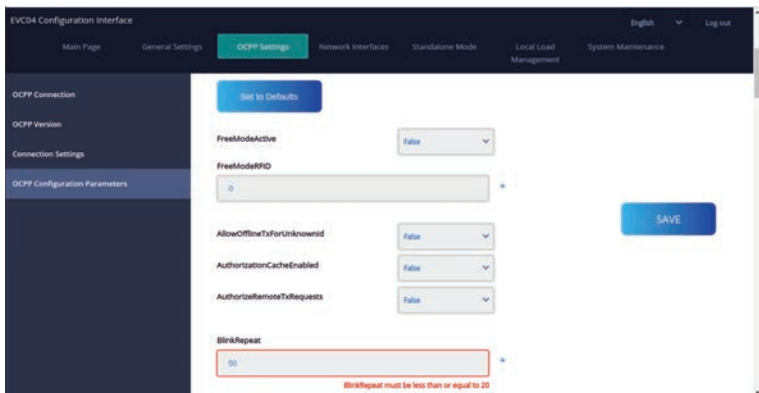


Figure.39

Also if you make changes and you don't save them before the leaving that page, you will see the warning as shown below.

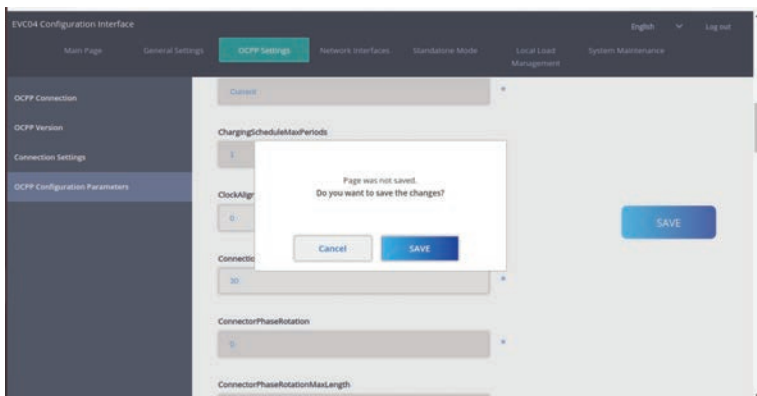


Figure.40

4.7 - CHANGE NETWORK INTERFACES SETTINGS OF THE DEVICE

There are three types of network interfaces in this page; Cellular, Ethernet and Wi-Fi. Select interfaces' modes as "Enabled" if you want to activate it.

If you select Ethernet or Wi-Fi IP Settings as "Static"; "IP Address", "Network Mask", "Default Gateway" and "Primary DNS" spaces are mandatory.

If you set Wi-Fi as enabled, "SSID", "Password" and "Security" are mandatory. You should fill all spaces in suitable formats.

CELLULAR

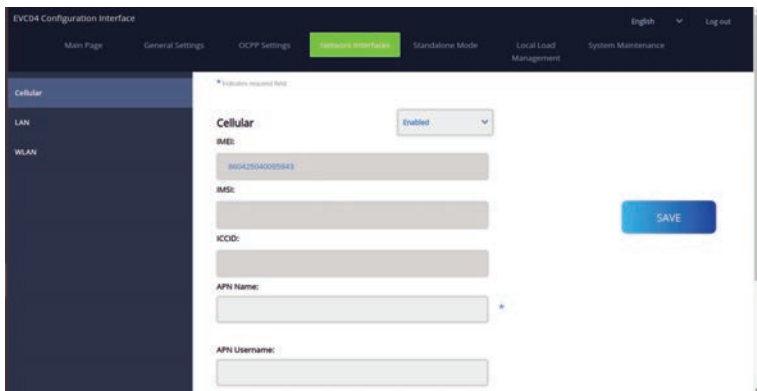


Figure.41

LAN

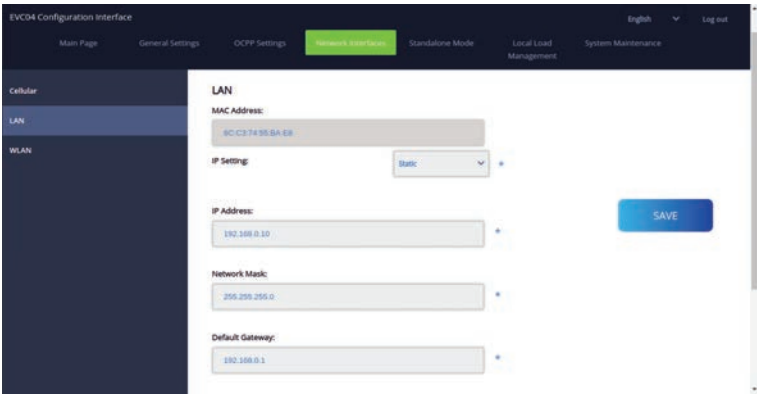


Figure.42

WLAN

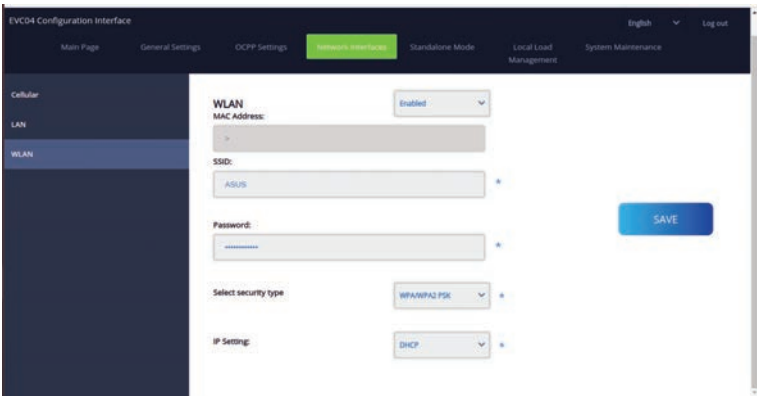


Figure.43

When you finish it, click "Save" button.

4.8 - CHANGE STANDALONE MODE SETTINGS OF THE DEVICE

If you have set OCPP as enabled in OCPP settings before, standalone mode cannot be selected. The mode list and “Save” button will be disabled in this situation.

Otherwise, you can select standalone mode from the list. There are three modes in the list;

Select “RFID Local List” mode to authenticate a RFID local list which will be entered by you. You can make an addition or deletion from the RFID local list later.

Select “Accept All RFID’s” mode to authenticate all RFID’s.

Select “Autostart” mode to allow charging without the need for authorization. It will be enough to plug to start charging.

Select “Smart” mode to activate smart mode.

If you are done with mode selection, click “Save” button.

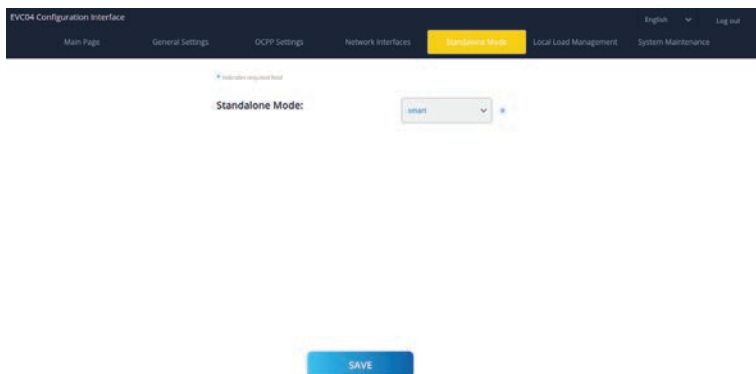


Figure.44

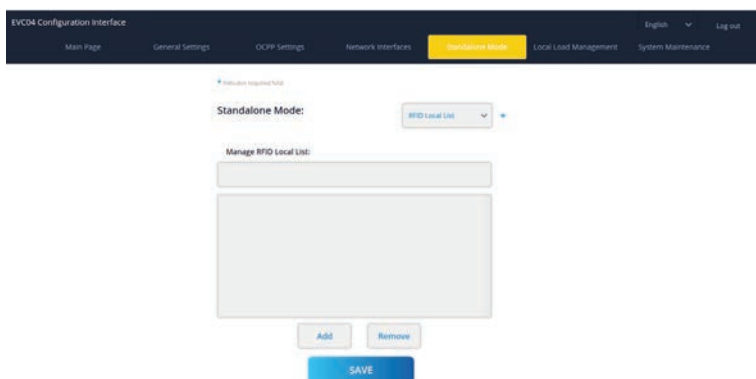


Figure.45

4.9 - MAKING SYSTEM MAINTENANCE OF THE DEVICE

In **LOG FILES Page**, you can download OCPP or HMI logs by clicking buttons. Download log files will be shown after a few seconds.

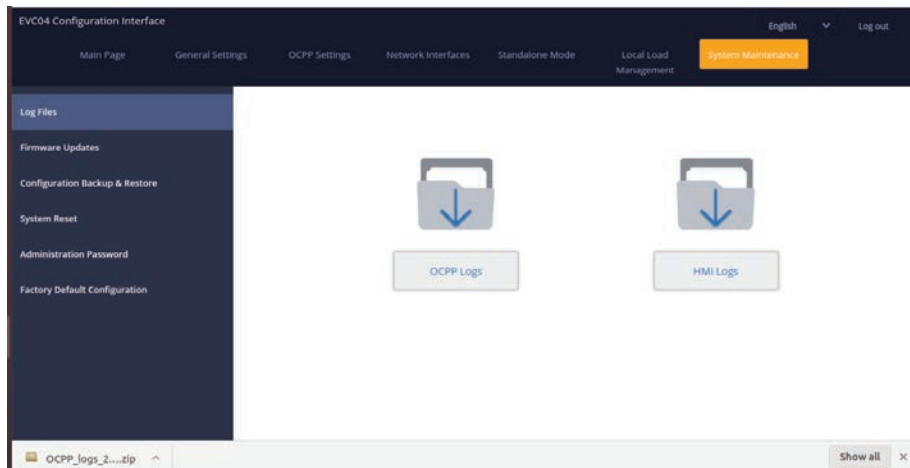


Figure.46

In **FIRMWARE UPDATE Page**, you can upload the firmware update file from your PC by clicking "Upload" button. After the file is uploaded, you can click "Update" button to start the firmware update.

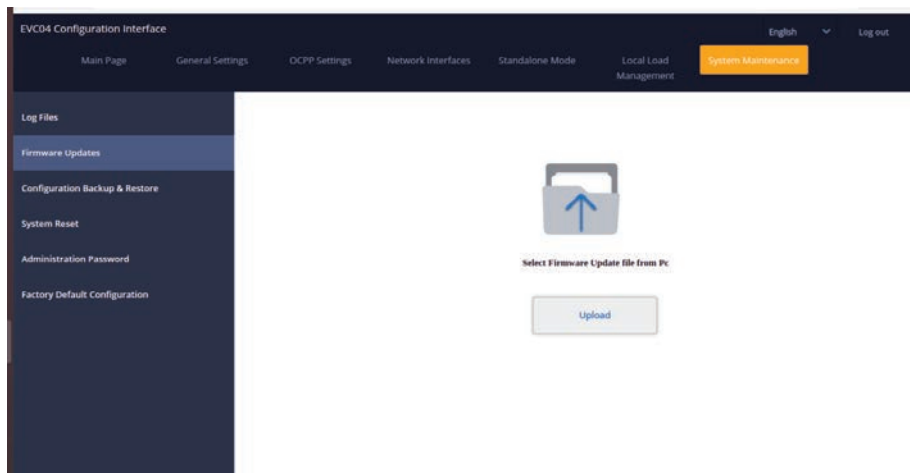


Figure.47

When update is started, your charger's LED indication will be seen as constant green. If your charger has display, you can see the firmware update screen in display. See to Firmware Uptade Screen Flow section.

After the firmware update is finished, your charger will restart automatically. You can see the latest firmware version of your charger from webconfig UI in main page.

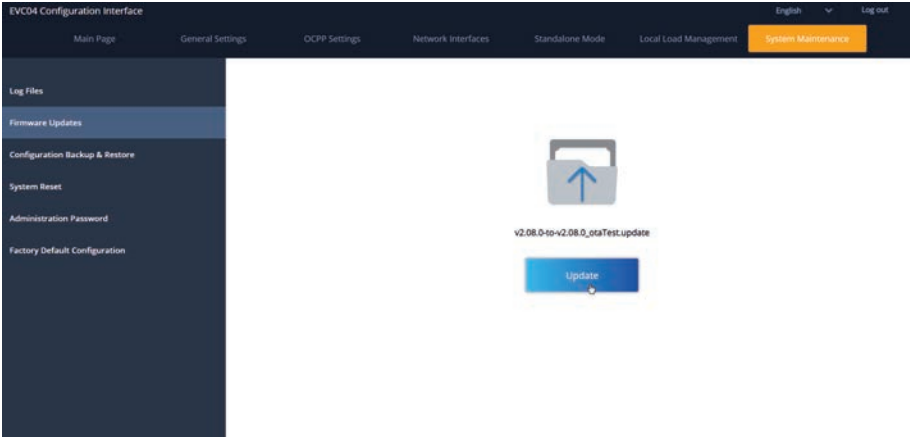


Figure.48

FIRMWARE UPDATE SCREEN FLOW (With Display Models)

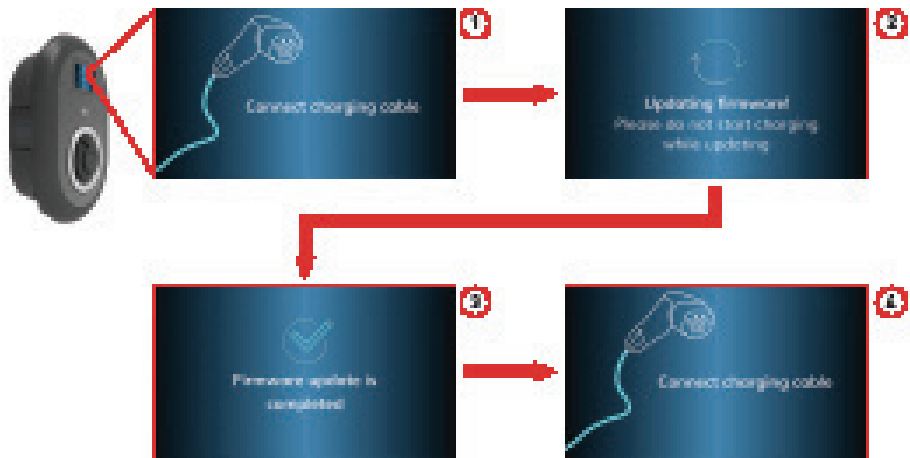


Figure.49

- 1- Firmware update is sent and devices uploads it.
- 2- When devices software is in updating status.
- 3- After 5 second screen turns back to opening screen.
- 4- Connect charging cable.

In **CONFIGURATION AND BACKUP Page**, you can backup of the sytem. If you want to restore you can click the Restore Config File button and upload the backup file. The system only accepts the .bak files.

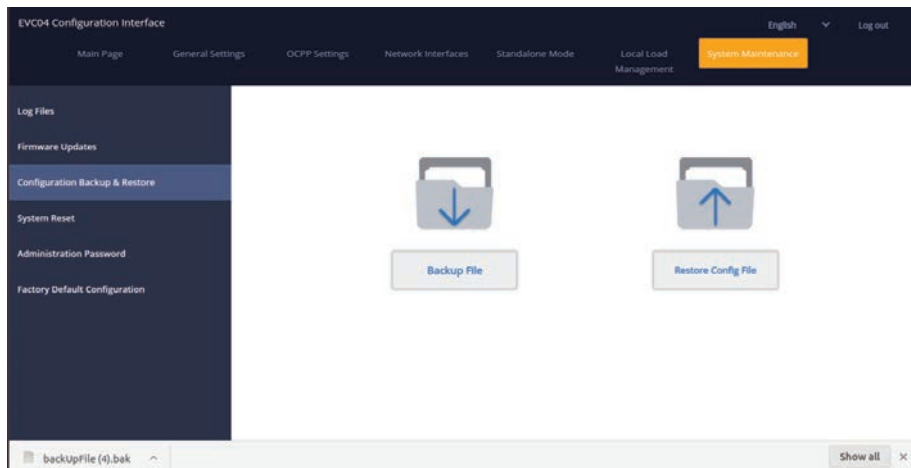


Figure.50

In **SYSTEM RESET Page**, you can make Soft Reset and Hard Reset by clicking the buttons.

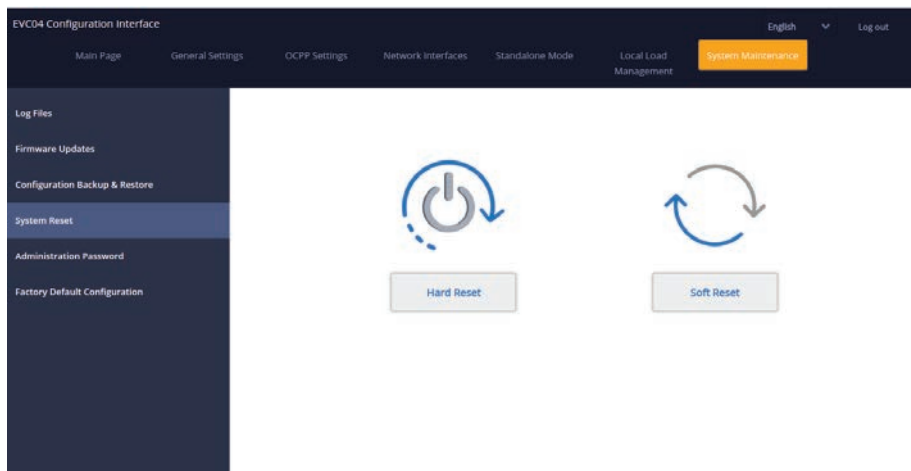


Figure.51

In **ADMINISTRATION PASSWORD** Page, you can change the web config's login password.
New password must contain at least 1 lowercase letter, 1 uppercase letter, 1 numeric character and minimum 6 characters.
All spaces are mandatory.

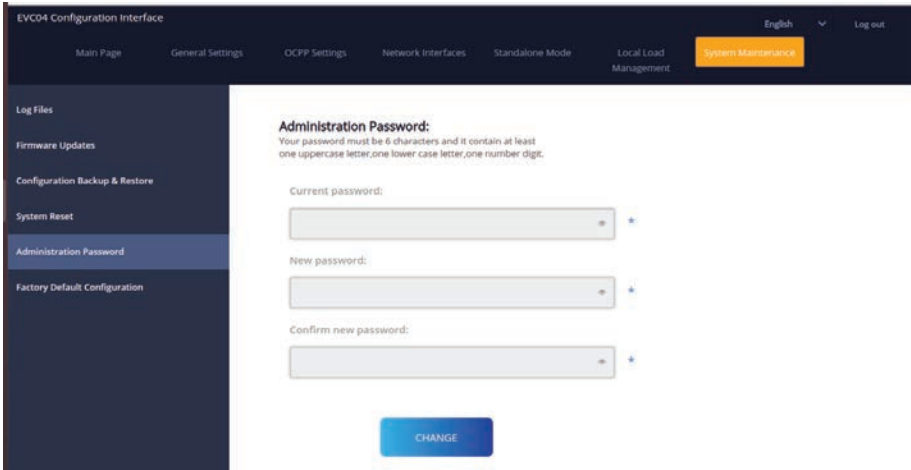


Figure.52

In **FACTORY DEFAULT CONFIGURATION** Page you can make factory reset to the device.

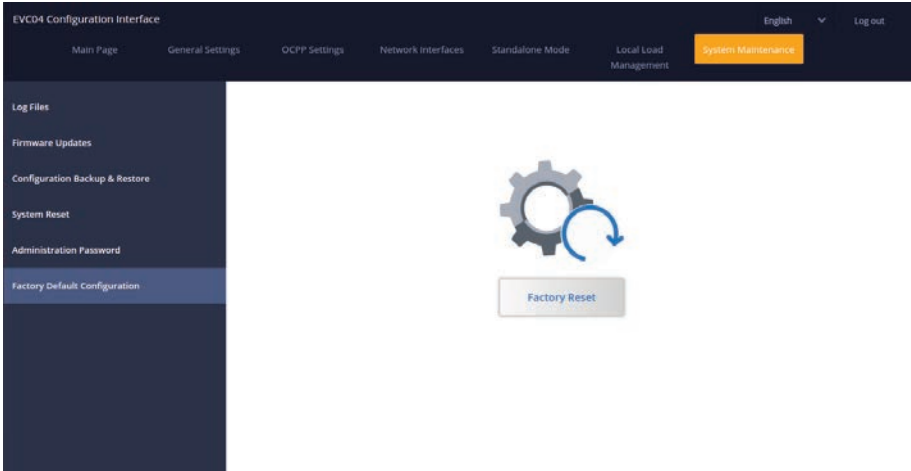


Figure.53

VESTEL

VESTEL GERMANY GMBH

Parkring 6
85748 Garching b. München / Germany

Telefon: +49 89 55295-0

Fax: +49 89 55295-5086

Mail: B2B@Vestel-Germany.de

Web: www.vestel-germany.de



50546058

Im Service- oder Garantiefall kontaktieren Sie uns bitte über:

Telefon: 089 211 29 999 (Deutschland)
0800 29 78 52 (Österreich)

eMail: service.evc@vestel-germany.de (alle Länder)

Unsere Garantiebedingungen für EV-Charger finden Sie unter:
<http://vestel-germany.de/de/page/service>