VESTEL

MOBILITY

ELECTRIC VEHICLE CHARGER

BASE EVC04 Series

User Manual

CONTENTS

1 - SAFETY INFORMATION

CAUTION

RISK OF ELECTRIC SHOCK

CAUTION: THE ELECTRIC VEHICLE CHARGER SHOULD BE INSTALLED BY A CERTIFIED OR EXPERIENCED ELECTRICIAN IN LINE WITH THE REGIONAL OR NATIONAL ELECTRICITY REGULATIONS.

CAUTION

The AC mains connection and load planning of the electric vehicle charger must be reviewed and approved by the authorities specified in the regional or national electricity regulations and the applicable standards in force.

The load plan must be specified accordingly in case of installation of multiple electric vehicle chargers. The manufacturer shall not be held liable directly or indirectly for damages or risks caused by failures due to AC mains connection or load planning.

IMPORTANT - Please read these instructions carefully before installation or operation.

1.1 - SAFETY WARNINGS

- Please keep this safety and operating manual in a safe place for future reference.
- Check the voltage indicated on the rating label and do not use this charger at mains voltages that do not conform to this value.
- Do not continue using the charger if you are not sure of its normal operation or it is damaged in any way - disconnect its power from the mains supply circuit breaker (MCB or RCCB) in the distribution panel before the system. Please refer to your local dealer.
- The ambient temperature range should be between –35 ˚C and +55 ˚C without direct sunlight and at a relative humidity of between 5 % and 95 %. Use the charging station only within these specified operating condition. If product has RCCB, the ambient temperature range should be between –25 ˚C and +50 ˚C without direct sunlight.
- Pick a suitable location that will avoid overheating of the charging station. High operating temperatures due to direct sunlight or heat sources might cause the charging current to drop or the charging process to be interrupted temporarily.
- The charging station is suitable for outdoor and indoor use. It can be used in public places.
- Do not expose this device to extreme rain, snow, storm or other adverse weather conditions to minimize the risk of fire, electric shock or damage to the product. In addition, do not pour water on the charger.
- Do not touch the electrical terminals, electric car socket and other parts of the charger with sharp metallic objects that contain dangerous electricity.
- Avoid exposure to heat sources and keep the device as far away as possible from easily flammable, explosive, corrosive and combustible substances, their chemicals and vapours.
- Risk of Explosion. This device contains arcs and spark-generating parts that should not be exposed to easily combustible vapours. Do not place in a confined space or below ground level.

- This device is only suitable for charging vehicles that do not require ventilation during charging.
- The specified Circuit Breaker and Residual-Current Circuit Breaker must be connected to the building mains to prevent the risk of explosion and electric shock.
- The lowest part of the socket must be between 0.5 m and 1.5 m above ground level.
- Do not use adapters or conversion adapters. Do not use cable extension kits.

WARNING: Physically, perceptually or intellectually deficient or inexperienced individuals (including children) should not use this electrical device without the supervision of an individual responsible for their safety.

CAUTION: This vehicle charger is designed only for charging electric vehicles that do not require ventilation during charging.

1.2 - EARTH CONNECTION WARNINGS

- The charging station must be connected to a central earthing station. The earth wire entering the charging station must be connected to the equipment earthing lug inside the charger. This should be operated with the circuit conductors and connected to equipment earthing rod or the guide in the charging station. Connections to the charging station are under the responsibility of the fitter and the buyer.
- Connect the device only to sockets with proper earthing to minimize the risk of electric shocks.
- **WARNING:** Make sure the charging station is constantly and correctly grounded during installation and use.

1.3 - POWER CABLES, PLUGS AND CHARGING CABLE WARNINGS

- Make sure the charging cable is compatible with the Type-2 socket next to the charging station.
- Damaged charging cables may cause fire or electric shocks. Do not use this product if the flexible charging cable or vehicle cable is worn out, has poor insulation or shows other signs of damage.
- Make sure that the charging cable is positioned properly; it must not be stepped on, run over by a vehicle or be subjected to damage or tension.
- Do not pull the charging cable with excess force or damage it with sharp objects.
- Never touch the electrical cable/socket or the vehicle cable with wet hands; otherwise, it might be short circuited or cause electric shock.
- Do not use this device with an extension cable to prevent the risk of fire or electric shock. If the mains cable or the vehicle cable gets damaged, it should be replaced by the manufacturer, a service representative or other similarly qualified persons to avoid danger.

1.4 - WALL - MOUNTING WARNINGS

- Please read these instructions carefully before wall-mounting your charging station.
- Do not mount your charging station to the ceiling or an inclined wall.
- Use the specified wall-mounting screws and other accessories.
- This device is classified as suitable for indoor and outdoor installation. If the device is installed outside the building, the equipment to be used for connecting the conductors to the device must be suitable for outdoor use and installation must protect the IP rating of the device.

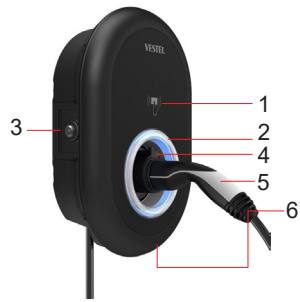
2 - GENERAL INFORMATION

2.1 - INTRODUCTION OF THE PRODUCT COMPONENTS

2.1.1 - RCD MODELS

Socket Equipped Models

Tethered Cable Models



EN **Socket Models**

1- RFID Card Reader

2- Status indicator LED

3- Access cover for residual current device (Optional)

4- Socket Outlet

5- Product Label

6- Charging station connection cable union nut

7- Charging station data cable connection gland nut

8- Charging Cable (Optional) or Out of use

EN **Tethered Cable Models**

1- RFID Card Reader

2- Status indicator LED

3- Access cover for residual current device (Optional)

4- Dummy Socket

5- Charging Plug

6- Product Label

7- Charging station connection cable union nut

8- Charging station data cable connection gland nut

9- Charging cable

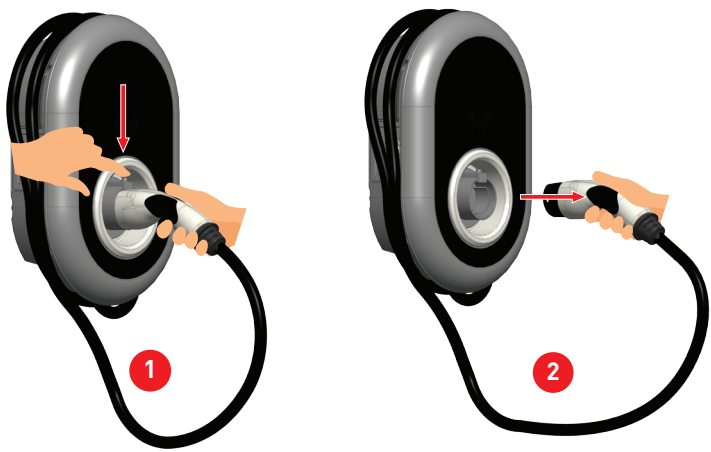
2.2 - PLUG THE CHARGER

2.2.1 - Model with Socket

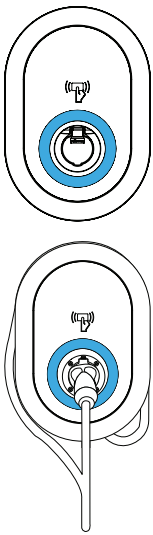
Open the front cover of the socket and plug the charging cable to the socket.

2.2.2 - Model with Cable

Press the button on the socket holder to remove the charging cable from the charger and remove the charging cable. Then, plug the charging cable to the vehicle to start charging.



2.3 - STATUS INFORMATION LED BEHAVIOUR



LED Status		Charging Station Status
	No LED Indicators	Charger is ready for charging.
4 sec	Blinks blue in 4 seconds	The Electric Vehicle is connected. Charging Station is waiting for RFID card authorization.
	Glowing Green	Charging is authorized.
	Glowing Blue	Charging
	Stable Blue	Charging stopped or ended
	Stable Red	Failure status
4 sec	Blinks red in 4 seconds	Ventilation required mode
4 sec	Blinks purple in 4 seconds	Current is limited to 16A due to overheating
	Blinks purple 2,4 seconds OFF 1,2 seconds ON	TIC Communication Error
1 sec	Blinks red and blue	Waiting in Peak Hours Mode.
	Stable Purple	Charging is not possible due to overheating or load levelling current level reached or charger disabled
1sec/20sec	Blinks RED every second for 20 seconds	RFID Configuration

3 - DESCRIPTION

Model Name	**MODEL DESCRIPTION: EVC04-AC**-*** EVC04 : Electric Vehicle AC Charger (Mechanical Cabinet 04) 1. Asterisk (*) : Rated Power 7 : 7.4kW (1 Phase Supply Equipment) 11 : 11kW (3 Phase Supply Equipment) 22 : 22kW (3 Phase Supply Equipment) 2. Asterisk (*) : The 2nd asterisk may include combinations of the following Empty : No RCCB A : Type A Charging Unit with RCCB E : EV / ZE Ready Charging unit compliance 3. Asterisk (*): 3. The asterisk may indicate any of the following Empty : Case-B Connection with normal socket T2S : Case-B Connection with protected socket T2P : Case C Connection with Type-2 socket T1P : Case C Connection with Type-1 socket
Case	EVC04

4 - SPECIFICATIONS

This product complies with EC61851-1 (Ed3.0) standard for Mode 3 use.

Model		EVC04-AC22 Series	EVC04-AC11 Series	EVC04-AC7 Series
IEC Protection class		Class - I		
Vehicle Interface	**Socket Model**	Socket TYPE 2 (IEC 62196)		
	Cable Model	Cable with TYPE 2 (IEC 62196) Female Plug		
Voltage and Current Rates		230/400V~50 Hz-3-faz 32A	230/400V~50 Hz-3-faz 16A	230V~50 Hz-1-faz 32A
AC Maximum Charge Output		22kW	11kW	7.4kW
Built-in Residual Current Sensing module		6mA		
Required Circuit Breaker on AC Mains		4P-40A MCB Type-C	4P-20A MCB Type-C	2P-40A 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	2P -40A - 30mA RCCB Type-A
Required AC Mains Cable		5x 6 mm^2 (< 50 m) External Dimensions: Ø 18–25 mm	5x4 mm^2 (< 50 m) External Dimensions: Ø 18–25 mm	3x 6 mm^2 (< 50 m) External Dimensions: Ø 13-18 mm

AUTHORIZATION

RFID / NFC Module (Only for supported models)	ISO-14443A/B and ISO-15693 NFC (ISO/IEC 18092 – ISO / IEC 21481)

MECHANICAL PROPERTIES

Material	Plastic
Size	315 mm (Width) x 460 mm (Height) x 135 mm (Depth)
Measurements (Package)	405 mm (Width) x 530 mm (Height) x 325 mm (Depth)
Weight	5 kg for model with socket, 8.9 kg for model with cable, together with packaging
AC Mains Cable Measurements	Ø 18-25 mm for 22kW version Ø 18-25 mm for 11kW version Ø 13-18 mm for 7.4kW version

ENVIRONMENTAL SPECIFICATIONS

Protection Type	Ingress Protection	IP54
	Impact Protection	IK10 (has Screen IK08 protection, optional)
Operating Conditions	Temperature	-35 ˚C and 55 ˚C (without any direct sunlight) -25 ˚C to 50 ˚C (optionally product has RCCB)
	Humidity	5% - 95% (relative humidity, without condensation)
	Altitude	0 - 4,000m
Storage Conditions	Temperature	-40 ˚C and 80 ˚C
	Humidity	5% - 95% (relative humidity, without condensation)
	Altitude	0 - 4,000m

5 - CHARGING

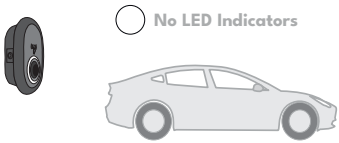
The product runs in automatic charging start mode by default. A registered Master RFID card is supplied with the accessory kit.

5.1 - AUTOMATIC CHARGING START MODE

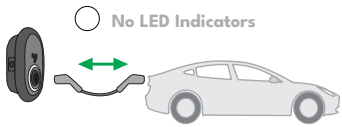
5.1.1 - MODEL WITH SOCKET

5.1.1.1 - VEHICLE CONNECTION AND CHARGING

1 - Make sure your vehicle and the charging station is ready for charging.



2 - Plug the charging cable to the vehicle inlet and the socket of the charging station.

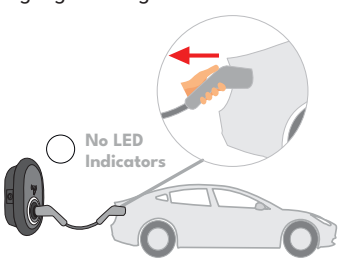


3 - Plug the charging cable to the vehicle inlet and the socket of the charging station; the status indicator LED turns green.

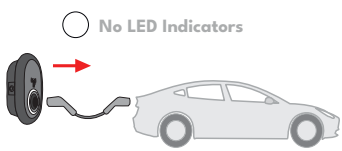
4 - Charging starts automatically and the status indicator LED turns blue.

5.1.1.2 - STOPPING CHARGING

1- Remove the charging cable from the vehicle first to stop charging. Do not try to unplug the socket from the station before removing it from the vehicle. Otherwise, the locking mechanism might get damaged.

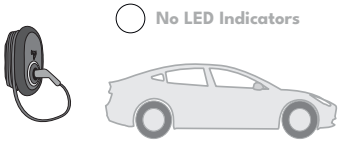
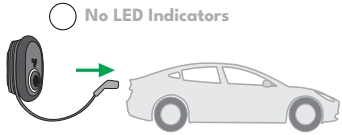
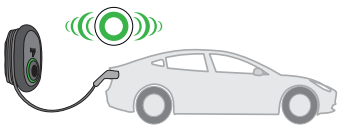


2 - Remove the charging cable from the station..

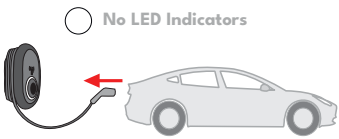
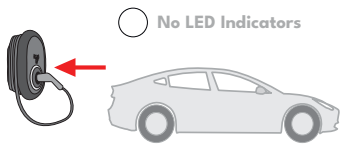


5.1.2 - MODEL WITH CABLE

5.1.2.1 - VEHICLE CONNECTION AND CHARGING

1 - Make sure your vehicle and the charging station is ready for charging. 	**2 -** Plug the charging cable to the vehicle inlet. 
3 - Plug the charging cable to the vehicle inlet; the status indicator LED turns green. 	**4 -** Charging starts automatically and the status indicator LED turns blue. 

5.1.2.2 - STOPPING CHARGING

1- Remove the charging cable from the vehicle first to stop charging. 	**2-** Place the charging cable on the socket holder of the station. 

5.2 - AUTHORIZED CHARGING MODE (RFID MODE)

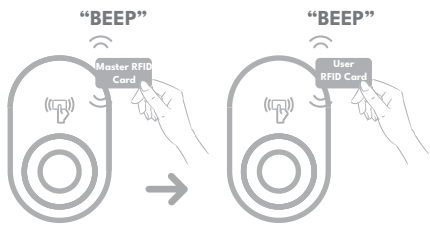
5.2.1 - RFID CARD INSTALLATION

If you want to use the station with card authorization, please follow the steps below.

Warning: Make sure that the charging station cable is not plugged during RFID card registration or deletion.

Registering RFID User Card;

Scan the Master RFID card at the RIFD reader. Scan the RFID card at the RIFD reader within 10 seconds after hearing the “BEEP” sound. Only one RFID User card can be registered after the Master RFID card is scanned. RFID User cards are registered individually to the charging station in this way and the registration is completed after hearing the “BEEP” sound. Maximum 20 user cards can be registered to one charging station.



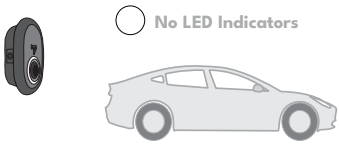
Deleting RFID User Card;

Deletion is carried out in the same way as user card registration. If you want to delete an authorized RFID user card from the station, scan the RFID User card within 10 seconds after scanning the Master RFID card.

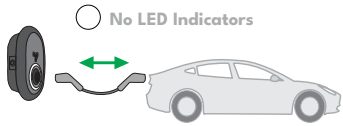
5.2.2 - MODEL WITH SOCKET

5.2.2.1 - VEHICLE CONNECTION AND CHARGING

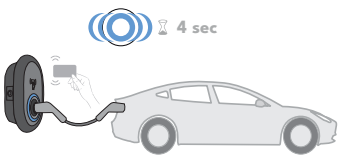
1 - Make sure your vehicle and the charging station is ready for charging.



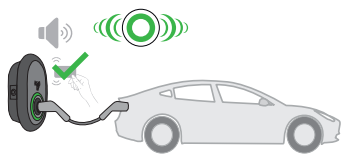
2 - Plug the charging cable to the vehicle inlet and the socket of the charging station.



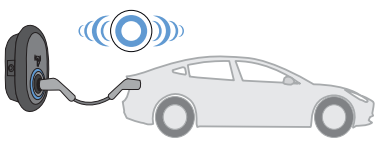
3- Scan the RFID card at the RFID reader.



4- You can start charging with a previously authorized card.



5 - Charging starts and the status indicator LED turns blue.

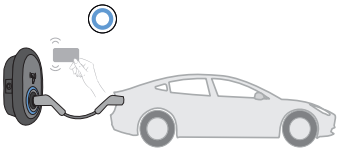


NOTE: The charging station may reject the charging operation if you try to start charging with an unauthorized card.

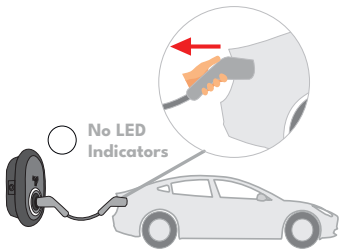
5.2.2.2 - STOPPING CHARGING

1- You can follow the alternative methods below to stop charging. Do not try to remove the charging cable station before stopping charging; otherwise, the locking mechanism might get damaged.

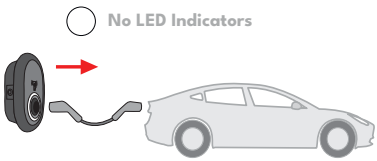
Method1. You can stop charging by scanning the RFID card you started charging with.



Method2. You can stop charging by removing the charger from the vehicle first.



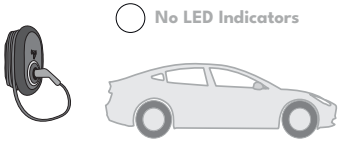
2 - Remove the charging cable from the station.



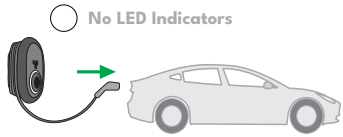
5.2.3 - MODEL WITH CABLE

5.2.3.1 - VEHICLE CONNECTION AND CHARGING

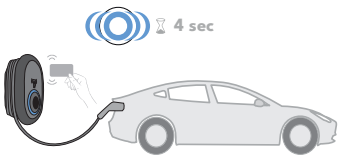
1 - Make sure your vehicle and the charging station is ready for charging.



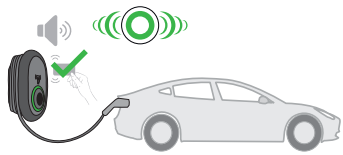
2 - Plug the charging cable to the vehicle inlet.



3- Scan the RFID card at the RFID reader.



4- You can start charging with a previously authorized card.



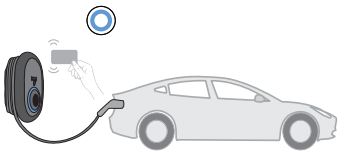
5 - Charging starts and the status indicator LED turns blue.

NOTE: The charging station may reject the charging operation if you try to start charging with an unauthorized card.

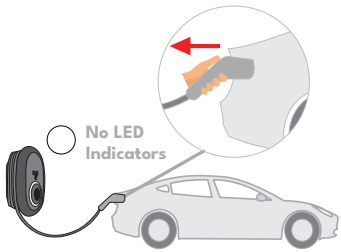
5.2.3.2 - STOPPING CHARGING

1- You can follow the alternative methods below to stop charging.

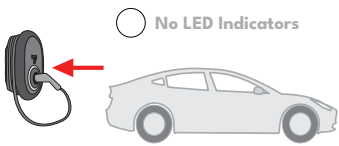
Method1. You can stop charging by scanning the RFID card you started charging with.



Method2. You can stop charging by removing the charger from the vehicle first.



2- Place the charging cable on the socket holder of the station.

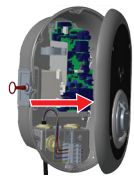


5.2.4 - LOSING THE MASTER RFID CARD

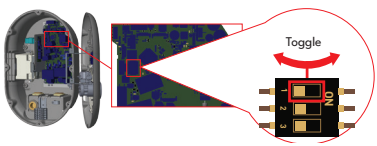
If you lose the registered master RFID card, you can register a new Master RFID card by following the steps below after making sure that your vehicle is not connected to the charging station.

1- Turn the power of the charging station off.

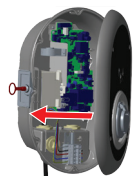
2- Open the cover of the product as specified in the installation manual.



3- Change the position of the 1st DIP Switch by using a pointy awl or a plastic pointed tool. The position of the DIP Switch is shown in the figure below.



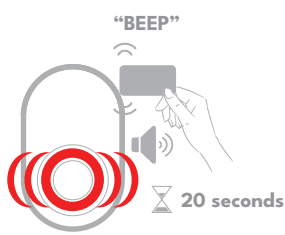
4- Close the cover of the product as specified in the installation manual.



5- Turn the power of the charging station on.

The master and user RFID cards will be deleted.

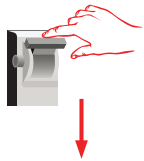
6- Status LED blinks red for 20 seconds while registering the new RFID card. You can register the new master RFID card within 20 seconds by scanning your new RFID card. (If you have not registered any cards during this period, you cannot register user cards and your station remains in the automatic charging start mode.) You can follow the steps in “Authorized Charging Mode” section for adding user RFID cards after registering the new master RFID card.



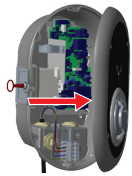
5.3 - LOCKED CABLE FUNCTION (Model with socket)

The cable gets locked and charging station with socket starts behaving like the model with cable.

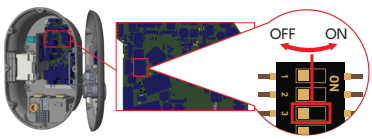
1- Turn the power of the charging station off.



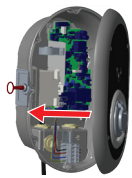
2- Open the cover of the product as specified in the installation manual.



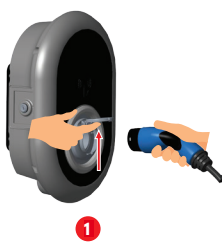
3- Turn the DIP Switch pin 3 to the ON position using a pointy awl or a plastic pointed tool to activate the lockable cable function. The position of the DIP Switch is shown in the figure below.



4- Close the cover of the product as specified in the installation manual.



5- Open the front cover of the socket and plug the charging cable to the socket.



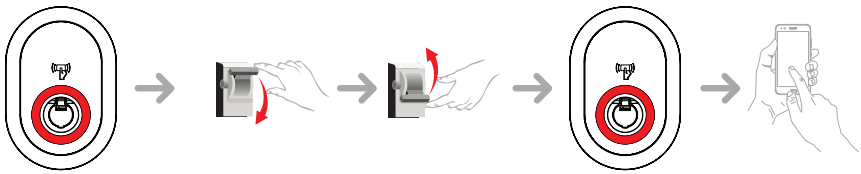
6- Turn the power of the charging station on. The cable gets locked and the charging station starts behaving like the model with cable.

Note: The charging cable cannot be removed when the function is active (PIN 3 ON). The lock of the socket will be unlocked when this function is disabled (PIN 3 OFF).

5.4 - FAULT AND FAILURE CONDITIONS

5.4.1 - GENERAL FAULT STATUS

If the status information indicator LED is red steadily, turn off and then, turn on the charging station again. If it is still red, contact an authorized service.



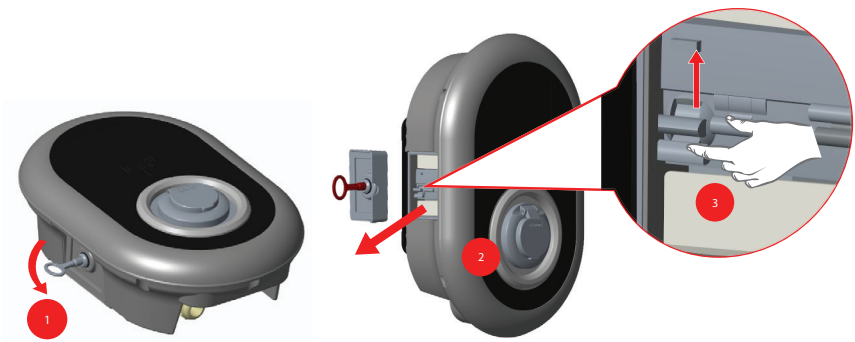
5.4.2 - OTHER FAULT STATUS

Status Indicator	Problem	Possible Causes	Recommended Solutions
	Steady LED.	The AC mains voltage might not be in the range specified in the operating manual, there may not be an earthing connection in place and/or phase/neutral connections might be reverse or there might be a charging station failure.	Please make sure the voltage is within the specified range and the earthing connection is made. If the button is still red, please contact an authorized service.
	It will not be possible to start charging the electric vehicle or locking the socket to the charging station if the status information indicator LED blinks blue every four seconds.	The charging socket might not be properly inserted to the charger or the electric vehicle.	Make sure the charging cable is properly connected on all sides. Please make sure that your electric vehicle is in charging mode.
	The status information LED is flashing red.	You will get this fault notice if your vehicle has a battery that requires ventilation.	This charging station is not suitable for charging these types of vehicles.

5.4.3 - FLUCTUATION AT RESIDUAL CURRENT CIRCUIT BREAKER (For integrated RCD Models)

⚠ CAUTION

- The residual current device can be accessed by opening the lock on the side cover as in the first part of the figure. Insert the triangle key into the lock of the side cover and turn the key 90 degrees counter clockwise.
- Before resetting the fluctuating residual current device, make sure there are no failures that might cause a residual current in your vehicle or the charging socket.
- After making sure that there are no problems with your vehicle or the charging socket, remove the charging cable from the charging station. Then re-activate your charging station by resetting the key shown in the third part as shown below.
- Contact your authorized service if the problem continues. If the problem is resolved, there might be a problem with your vehicle or the charging cable. Please refer to your service.



5.4.4 - DC 6mA RESIDUAL CURRENT SENSOR BEHAVIOUR

The charging station is equipped with a DC residual current sensor that reacts to a residual DC current higher than 6mA.

If the charging station switches to fault mode due to DC residual current, the AC power inlet must be turned off to reset the charging station from the fault mode.

6 - CLEANING AND MAINTENANCE

DANGER:

• Do not wash the electric vehicle charger while charging your car.

• Do not wash the device with pressurized water.

• Do not use abrasive cloths or detergents.

Failure to follow these warnings may result in death or serious injury. Moreover, it may damage your device.

VESTEL

MOBILITY

CE