VESTEL
MOBILITY

ELECTRIC VEHICLE CHARGER
EVC12 VESPER SERIES

User Manual

CONTENTS

1 - 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.

CAUTION: FOR DEVICES WITHOUT EMERGENCY BUTTON;

If any suspicious or emergency situation arises at the charging station aside from normal operation, start by halting the charging process through the vehicle (using the appropriate switch or button, which may vary depending on the model), and then disconnect the socket. As an alternative option, consider switching off the MCB or RCCB in the panel where the product is energized by the installer.

IMPORTANT - Read these instructions fully before installing or operating

1.1 - 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 RCD) in upstream distribution panel. Consult your local dealer.
- The ambient temperature range during charging should be between –35 ˚C and +50 ˚C (without direct sunlight) and at a relative humidity of between 5 % and 95 %. Use the charging station only within these specified operating parameters.
- The device location should be best 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.
- To prevent risk of explosion and electric shock, ensure that the specified Circuit Breaker and RCD are connected to building grid.
- Charging Station bottom must be at (or above) the 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.

1.2 - INSTRUCTIONS FOR DEALING WITH A FIRE AT CHARGING STATION

- Personal Safety: If you notice a fire or signs of danger, your own safety is the most important. Do not take risks.
- Immediate Notification of Emergency Services: Contact the appropriate emergency services in your region. Dial 998 or 112 the emergency number.
- Discontinuing Charging: If safe to do so, disconnect the charging cable from the vehicle and the charging station.
- Use of Fire Extinguishing Agents: If a fire extinguisher or other fire-fighting equipment is nearby and you are trained to use them, attempt to extinguish the fire. However, never risk your own safety.
- Avoid Direct Contact with the Fire: Do not attempt to extinguish the fire if you do not have the appropriate equipment or knowledge, or if the fire is too large or dangerous.
- Move Away from the Station: If the fire is uncontrolled or growing in strength, move away from the charging station while maintaining a safe distance.
- Avoid Inhaling Smoke: Try to avoid inhaling smoke. If possible, cover your nose and mouth with a damp cloth or clothing.
- Warn Others in the Area: Inform others in the vicinity about the fire hazard and encourage them to leave the area.
- Wait for Emergency Services: After safely leaving the area, wait for the arrival of emergency services at a location that is safe for you.
- No Return to the Station Premises: Do not return to the charging station premises until the emergency services have completed their operation.
- Reporting the Incident: Contact customer support to report the incident.

Remember, safety is paramount. In the event of a fire, always consult with local emergency services and follow their instructions.

1.3 - 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.

1.4 - POWER CABLES, PLUGS and CHARGING CABLE WARNINGS

- Be sure that plugs and sockets are 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.
- Use appropriate protection when connecting to the main power distribution cable.

2 - DESCRIPTION

Model Name	**EVC12-DC40**** 1st Asterisk (*) : Rated Power 40 : 40 kW DC Power Output 2nd Asterisk (*) : DC output combination 1 C : CCS Output 3rd Asterisk (*) : Meter Option Blank : No MID meter -MID : MID meter -EICH : Eichrecht Meter
Cabinet	EVC12-DC40

3 - ELECTRICAL SPECIFICATIONS

IEC Protection class		Class I
Power Input	**Input Rating**	230/400 Vac ±10% , 50/60 Hz, 61 A / 3 Phase
	Connection	3L – N - PE
	Residual Current Monitoring	230Vac RCBO 1P+N, Type A, 30mA
	Power Factor	> 0.98
	Efficiency	> % 95
Output CCS	**Max Power**	40 kW
	Voltage Range	200 – 920 V
	Maximum Current	133A
	Interface Compliance	IEC 62196-1 / 3 IEC 61851-1 / 23 / 24 ISO 15118-1 / 2 / 3 DIN 70121
Internal Protections		Residual current device, Insulation monitoring, Over current / Over voltage / Under voltage / Short circuit / Over Temperature / Surge Protection

4 - USER INTERFACE & AUTHENTICATION

Display	7” Color TFT LCD without Touch Screen (16:9)
RFID Reader Module	ISO-14443A/B and ISO-15693
User Interface	Illuminated buttons
Payment module	Optional Contactless module
Plug&Charge	ISO15118
DC MID Meter	MID Meter Certified Eichrecht Conformity (Optional)

5 - CONNECTIVITY

LAN Connectivity	10/100 Mbps Ethernet
WLAN Connectivity	2.4GHz/5GHz: 802.11 a/b/g/n/ac
Mobile Connectivity	GSM 900/1800 UMTS 900/2100 LTE Band 1/3/7/8/20/28A
OCPP Specification	OCPP 1.6 J

6 - MECHANIC SPECIFICATIONS

Material	Sheet Metal	
Protection Degree	Ingress Protection Impact Protection	IP54 IK10
Cooling	Forced Air Cooling Fan	
Cable Length	CCS2: 3,5m(default) or 5m(option)	
Dimensions (Product)	Height:635 mm Width:630 mm Depth:250 mm	
Dimensions (with packing)	1000 x 850 x 560 mm (H x W x D)	
Weight (Product)	80kg	
Weight with Package	135kg	

7 - ENVIRONMENTAL TECHNICAL SPECIFICATIONS

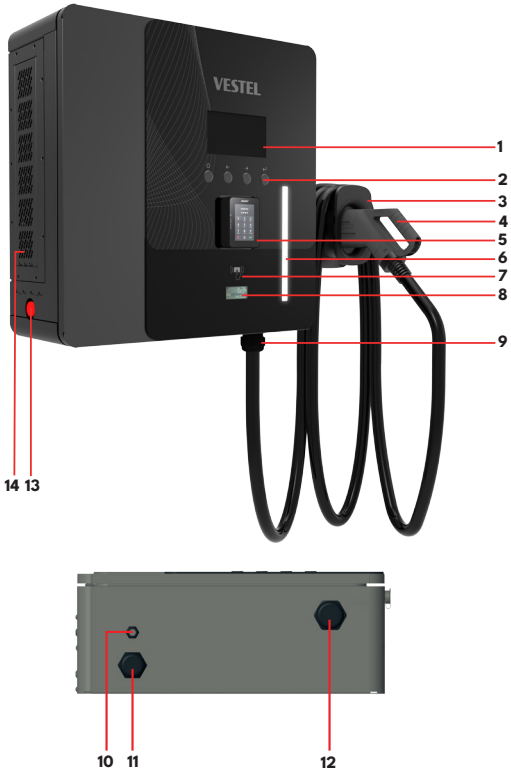
Operating Condition	Temperature	-35˚C to + 50 ˚C (Derating is applied over + 40 ˚C to 50 ˚C) For products with credit card option -20˚C to + 50˚C
	Humidity	5 % - 95 % (Relative humidity, non-condensing)
	Altitude	0 - 2000m

8 - BEHAVIOR OF STATUS INFORMATION LED

STATUS OF LED		MODE
	White Glowing	When the product is initialized.
	Green Illuminates Steadily	While the product is in standby. (No charge).
	Blue Illuminates Steadily	When the cable is inserted to EV.
	Charge percentage is according to the number of leds, one led blinks.	While Charging.
	Blue Illuminates Steadily	Charging is suspended or finished.
	Red Illuminates Steadily	Error.
	Blue until plug is removed.	Charging is finished.

9 - GENERAL INFORMATION

9.1 - INTRODUCTION OF THE PRODUCT COMPONENTS



1- Information Display

2- Buttons

3- CCS Dummy Socket

4- DC Outlet

5- Payment Terminal (Optional)

6- Status Indicator LED

7- RFID Card Reader

8- MID Meter Display (Optional)

9- Charging station connection cable union nut

10- Charging Station Ethernet connection cable gland nut

11- AC Input Socket

12- DC Output Socket

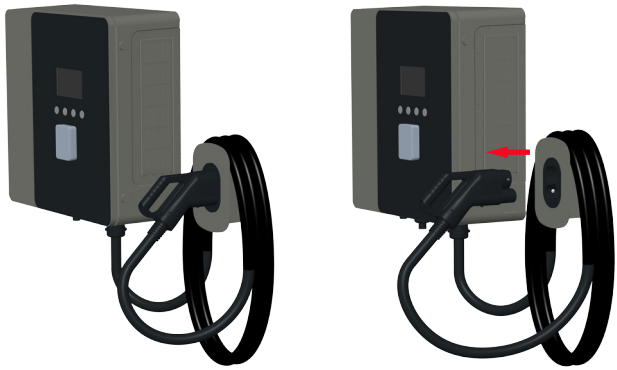
13- Emergency Button

14- Air filter and Access cover for Power Module

All products' images are given for representative purpose only

9.2 - CCS Outlet

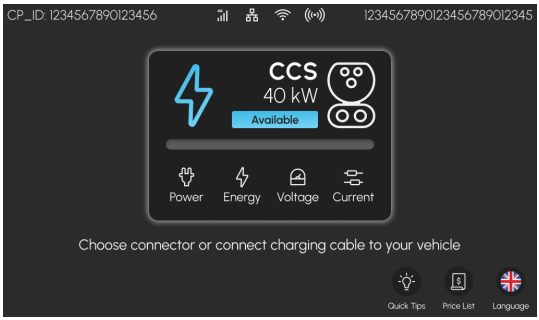
Unplug the charging plug to remove it from the device.Then plug it into the vehicle to start charging.



10 - CHARGING SCENARIOS (INCLUDES ALL SCENARIOS)

Connect the charging cable to the socket plug/pull out the charging plug from the socket plug.

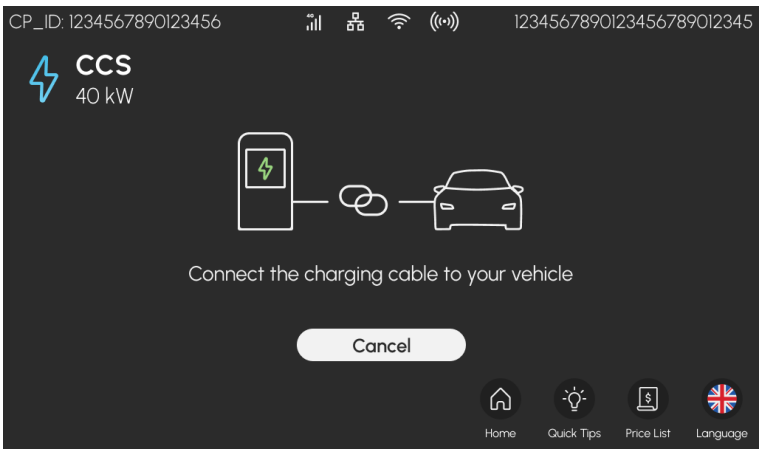
In the main screen on the charging station display, you may either tap the plug you want to use or simply connect the plug to the vehicle.



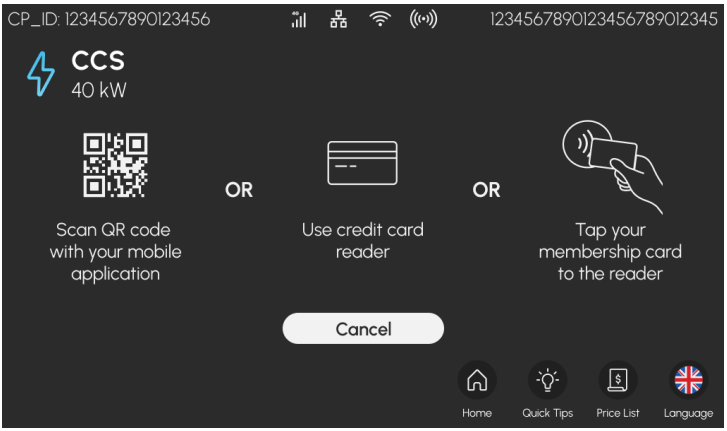
10.1 - DC CCS Outlet

10.1.1 - VEHICLE CONNECTION & CHARGING

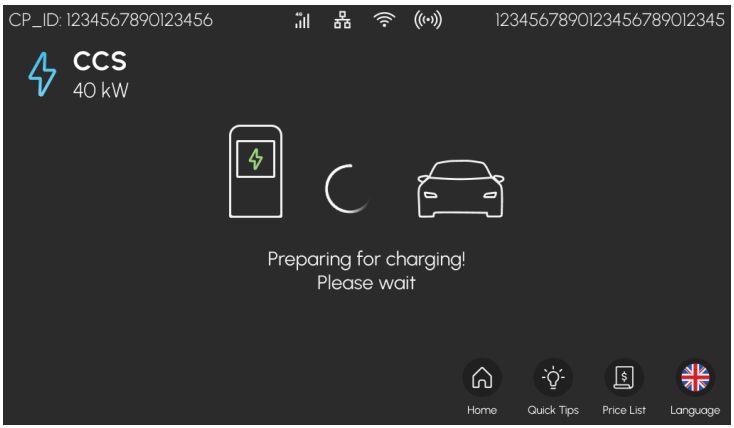
1- Connect charging cable to move to payment screen.



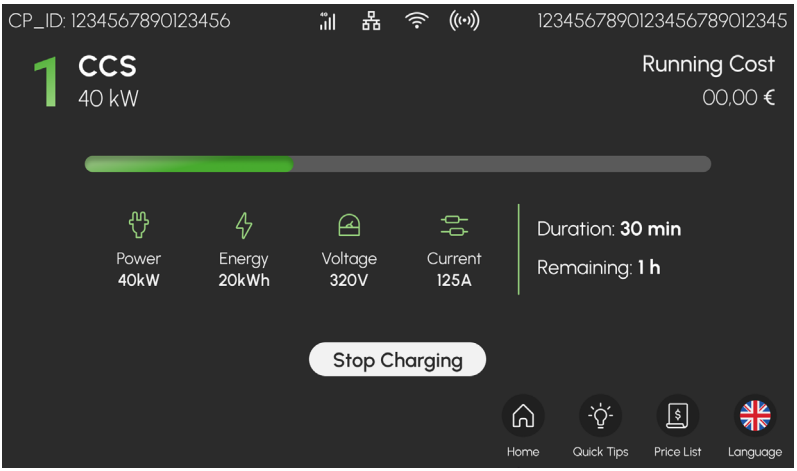
2- Tap your RFID card or scan QR Code to start charging. (If AutoCharge is set in Webconfig and vehicle registration is available in the system, charging starts without reading the RFID card)



3- It may take a few seconds for charging session to start. Charging state can be seen in charging page.



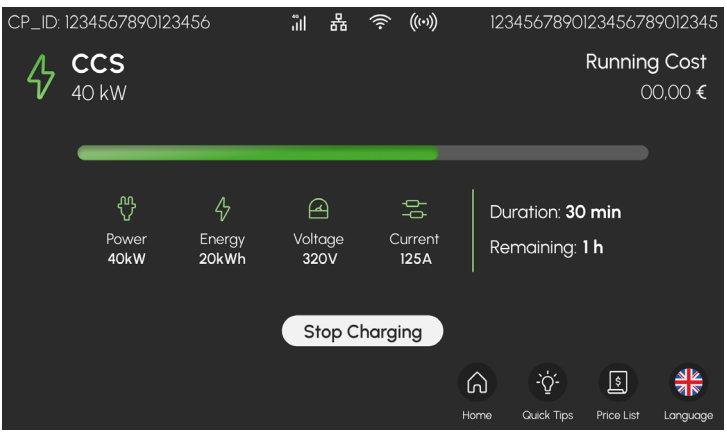
4- While charging, charging state can be seen in the main menu.



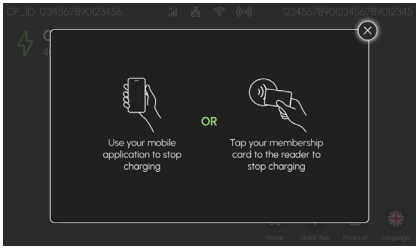
All products' images are given for representative purpose only

10.1.2 - STOP CHARGING

1- Click "Stop Charging" to end the charging session.

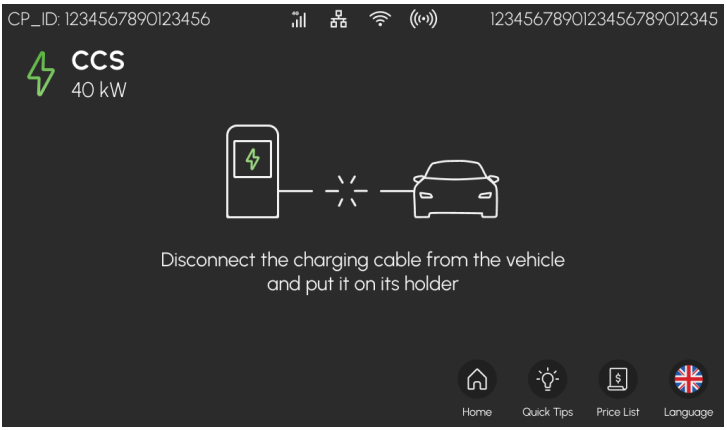


2- Scan your RFID card or scan QR Code to stop charging.



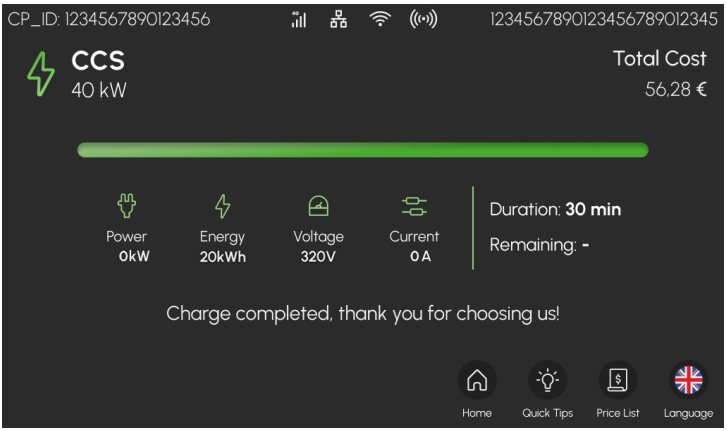
3- Disconnect the charging cable.

After disconnection, you will automatically move to the main screen.



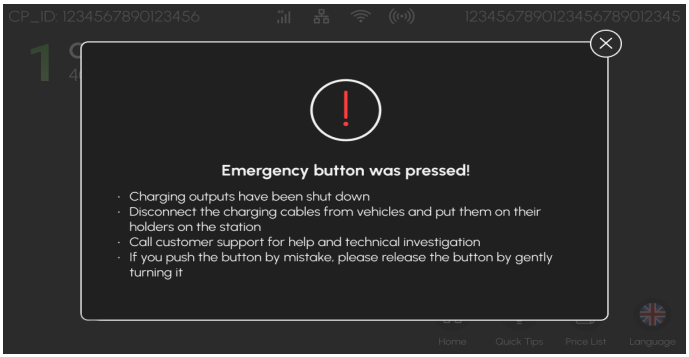
10.1.3 -CHARGING COMPLETED

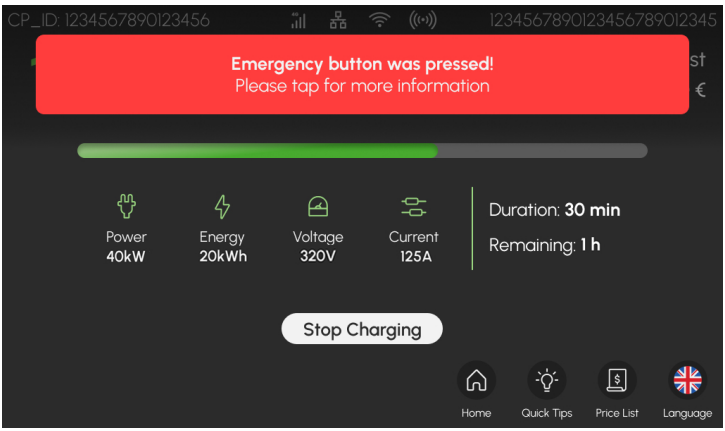
The charging process is successfully completed.



10.1.4 - EMERGENCY STOP (Optional)

Please follow screen when emergency stop pressed.





11 - PRODUCTS WITH CERTIFIED ENERGY METER (OPTIONAL)

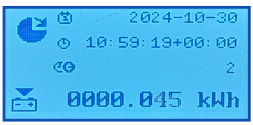
RFID/Autocharge and credit card (optional) authentication methods have different information on the meter display energy register at the beginning of the transaction.

RFID/Autocharge

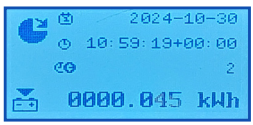
Credit card

Date and time on site at the beginning of the transaction Total duration of the transaction

RFID/Autocharge



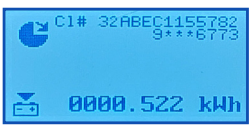
Credit card



Customer RFID/Autocharge ID

Customer credit card ID

Prefix of the charging station operator, followed by the first 6 digits and the last 4 digits of the credit card ID



Cable compensation, EVSE identification input and charging point ID_Sw-Version_Tariff (chargepointid_Sw version_tariff) with currency

RFID/Autocharge

Credit card

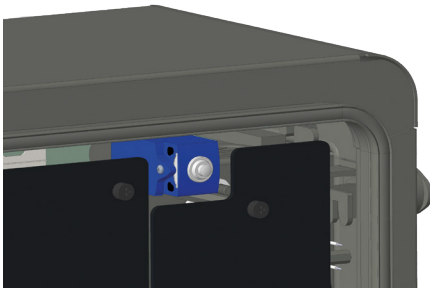
Energy register at the end of the transaction.

RFID/Autocharge

Credit card

12 - DOOR SWITCH

The behaviour of the door position can be monitored with 2 different conditions set as normally open or normally closed given via the terminal. When the doors are opened, the breaker can be controlled over the main panel outside the station with a control lead to be taken over the dry contact. This information is also transmitted to the service via OCPP.

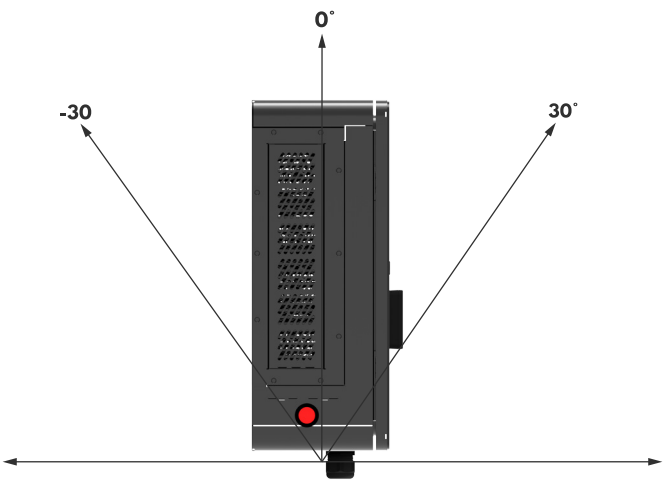


13 - TILT SENSOR

When the product reaches the predefined tilt angle in either the forward or reverse direction, the tilt sensor detects this condition and transmits the tilt angle information via OCPP. As a result, the sockets are disabled and the message “Out of Order” is displayed on the screen. However, the product remains energized.

In such cases, the charging station operator must manually disconnect the power from the energy panel to which the product is connected.

Note: The dafault tilt angle is set to 30 degrees. This value can be modified via the WEB UI interface.



14 - ERROR AND MALFUNCTION CONDITIONS

• There are two type of errors or faults:

• **General Errors**: This fault or error effects all two outputs.

• **Charging Output Errors:** Only one socket or plug effected by this fault or error condition.

14.1 - ERROR CONDITIONS

Problem	Possible Causes	Recommended Solutions
Power Failure	Power outage or the grid voltage is not in specified range.	Check input circuit breakers are not tripped and input voltage range and rotation is as specified in installation guideline.
CCS output unavailable	RCBO is tripped	Check cable isolation first. Turn on RCBO. (See section “CIRCUIT BREAKER LOCATIONS FOR CHARGING OUTPUTS“) Check functionality for the station output.
All outputs unavailable	General error	Please check if there is a power outage. Then, check the upstream distribution box circuit breaker. If the outputs are still unavailable please contact authorized service.

15 - CLEANING AND MAINTENANCE

⚠ ⚠ DANGER

• Do not clean your electric vehicle charging device while charging your vehicle.

• Do not wash the device with water.

• Do not use abrasive cloths and detergents. Microfiber cloth is recommended.

16 - PERIODIC MAINTENANCE LIST

	Maintenance Period (years)									
	1	2	3	4	5	6	7	8	9	10
Air filters	R	R	R	R	R	R	R	R	R	R
Plugs	I	I	I	I	I	I	I	I	I	I
Screen	C	C	C	C	C	C	C	C	C	C
Distribution elements (MCB, RCBO)	T	T	T	T	T	T	T	T	T	T
AC input terminals	T	T	T	T	T	T	T	T	T	T
DC relay terminals	T	T	T	T	T	T	T	T	T	T
DC output cable and terminals	T	T	T	T	T	T	T	T	T	T
Body	C	C	C	C	C	C	C	C	C	C
Earthing resistance	M	M	M	M	M	M	M	M	M	M

C : Clean

I : Inspect (check, confirm, clean, tighten or replace if necessary)

M : Measure

T : Tighten

R : Revise

Air filters

Air filters should be changed every year when going for maintenance.

Plugs

All Plugs should be checked when going for maintenance. If the plug is broken or cracked, it should be replaced. In addition, a charge attempt should be made with all Plugs.

Display

During maintenance, the screen should be checked using the physical buttons, as the screen is nontouch. All functions can be controlled through these buttons. If there is no issue with the button operations, the screen should be cleaned.

Distribution elements (MCB, RCBO)

Distribution elements (MCB, RCBO) should be checked and tightened when going for maintenance. It can be tightened with a screwdriver with a torque of 2 Nm.

AC input terminals

When going for maintenance, AC input terminals should be checked and tightened. It should be tightened with 8 Nm for metric 8 bolts and 10 Nm for metric 10 bolts.

DC relay terminals

When going for maintenance, DC relay terminals should be checked and tightened. The tightening process should be applied with 6.5 Nm.

DC output cable and terminals

DC output cable and terminallet should be checked when going for maintenance. It should be checked for any damage.

Body

When going for maintenance, the outer cabinet should be cleaned.

Earthing resistance

When going for maintenance, a mechanism should be set up like measuring with meger. After the piles are driven, the voltage between the two piles should be less than 1V

17 - WIRELESS LAN TRANSMITTER SPECIFICATIONS

Frequency Ranges	Max Output Power
2400 - 2483,5 MHz (CH1 - CH13)	< 100 mW
5150 - 5250 MHz (CH36 - CH48)	< 200 mW **(*)**
5250 - 5350 MHz (CH52 - CH64)	< 200 mW **(*)**
5470 - 5725 MHz (CH100 - CH140)	< 200 mW **(*)**

(*) '< 100 mW' for the Ukraine

Country Restrictions

This Wireless LAN equipment is intended for home and office use in all EU countries, the UK and Northern Ireland (and other countries following the relevant EU and/or UK directive). The 5.15 – 5.35 GHz band is restrictions indoor operations only in in all EU countries, the UK and Northern Ireland (and other countries following the relevant EU and/or UK directive). Public use is subject to general authorisation by the respective service provider.

Country	Restriction
Russian Federation	Indoor use only
Israel	5 GHz band only for 5180 MHz-5320 MHz range

The requirements for any country may change at any time. It's recommended that user checks with local authorities for the current status of their national regulations for both 2.4 GHz and 5 GHz wireless LANs.

Hereby, Vestel Mobilite SAN. VE TİC. A.Ş., declares that the radio equipment type EVC is in compliance with Directive 2014/53/EU and Radio Equipment Regulations 2017. The full text of the EU declaration of conformity is available at the following address: doc.vosshub.com.

VESTEL

MOBILITY

VESTEL MOBİLİTE SANAYİ VE TİCARET A.Ş. EGE SERBEST BÖLGE ŞUBESİ

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