

30kW DC Charger



30kW THREE PHASE:

EVPDCW30BGR (4G / WI-FI / LAN)

EVPDCW30BGRP (4G / WI-FI / LAN / PAYMENT TERMINAL)

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Introduction

This guide is intended for use by competent electrical installers to explain basic requirements and options to be considered when installing a Sync Energy charger. The unit is designed for installations outside and the advanced safety technology within the unit ensures its safe usage. This guide provides information to assist when installing the Sync Energy 30kW DC Charger and should not be used with other EV chargers.



Box contents

- **DC Charger**
- **Accessories pack containing:**
 - » 1 × Connector holster
 - » 1 × Key
 - » 2 × IC card
 - » 3 × Lock off tabs
 - » 8 × Expansion bolt M6
 - » 1 × WiFi antenna
- **Power Module Accessories pack containing:**
 - » 4 × Screw M4
- **Additional Contents:**
 - » Payment Terminal
 - » Mounting Stand

Tools required

Hex bit holder, PZ2 screwdriver, suitable drill bit and fixings, Torx Screwdriver.

Abbreviations

AC	Alternating Current
CCS2	Combined Charging System (type 2)
CMS	Cable Management System
CP	Control Pilot
DC	Direct Current
EV	Electric Vehicle
EVSE	Electric Vehicle Supply Equipment
IMD	Insulation Monitoring Device
LED	Light Emitting Diode
MCB	Miniature Circuit Breaker
MCCB	Molded Case Circuit Breaker
OCPP	Open Charge Point Protocol
PDU	Power Distribution Unit
PSU	Power Supply Unit
RCBO	Residual Current Circuit Breaker with Overcurrent Protection Device
RFID	Radio Frequency Identification
SPD	Surge Protective Device
SECC	Supply Equipment Communication Controller

Safety information

Warning: The Pro Charger DC supplied by Sync Energy charger is manufactured to be safe without risk providing they are installed correctly, used, and maintained in accordance with the manufacturers recommendations and installed by a competent electrical installer in accordance with national and local regulations and legislation applicable at the time of installation, e.g. BS7671:2018 amendment 4.

The EV Charger is suitable for use with a three phase (for up-to 30kW charging) 400 - 415V nominal AC Supply.

The DC Charger is suitable for outside installation on a solid structure. It is recommended the charger is installed flush to the ground and not on a raised plinth to conform with PAS:1899 regulation heights.

It is recommended the charger is installed at a height of 500mm-1500mm as per building regulations BS8300:2018.

Ensure suitable fixings are used depending on the mounting surface. To avoid unnecessary dust inside the enclosure, it is recommended to use the wall mount separated from the charger as a template to drill the surface.

Ensure installation fixing locations has been checked for electric cabling or pipework with a suitable detector.

Earthing requirements

System is suitable for installation on TT and TN-S earthing systems without additional considerations, if connecting to a TN-C-S (PME) earthing system, or unsure on if TN-S then external PEN Fault protection or additional earth rod systems may be required.

Where certain conditions dictate an earth electrode must be used it shall be independent from the distributors earth system with no direct interconnection (the incoming supply SWA protective earth should be isolated from the housing and/ or earth electrode). The electrical installer shall install a suitable electrode complete with termination housing and covers where appropriate, warning labels should be visible and close to the unconnected SWA protective earth, e.g. inside the charger.

The earth connection shall be made from the electrode to the charger via copper conductor earth wire of an appropriate CSA for the installation. The earth wire shall be installed in conduit where there is a risk of mechanical damage or UV exposure. Recommended Earth electrode impedance to be <100 ohms.

Safety Symbols



Electric hazard: This symbol indicates that there is a danger of electric shock.

Failure to pay attention to the procedures, practices or improper implementation may cause injuries or death. Only perform operations with this symbol if you fully understand and meet all of the requirements.



Caution: This symbol indicates that there is a hazard that could damage the product.

Only perform operations with this symbol if you fully understand and meet all of the requirements.



Tips: This symbol indicates that the information is helpful or provides useful advice.

It does not contain any information about danger or harm.



Disposal: This symbol indicates that the electrical and electronic equipment and their accessories should be disposed of separately from household waste.

They can be reused, recycled, or disposed of in a safe and environmentally friendly way.

Installer Requirements

Requirements for installation, operation, commissioning, and maintenance:

- Be properly trained and suitably certified
- Follow local regulations and installation manual
- Understand electrical safety, first aid, and emergency response procedures
- Follow all operating procedures and job specifications
- Wear the required PPE

Responsibility Requirements

Installers are responsible for:

- Understanding how EVs and EVSEs work, how to troubleshoot common problems, how to maintain EVSEs, how to handle emergencies, and safety knowledge.
- Be familiar with the relevant local safety production rules and regulations, and know about charging safety and emergency methods.
- Ensuring the EVSE is safe to use
- Improving and maintaining EVSE safety systems

Isolation and switching

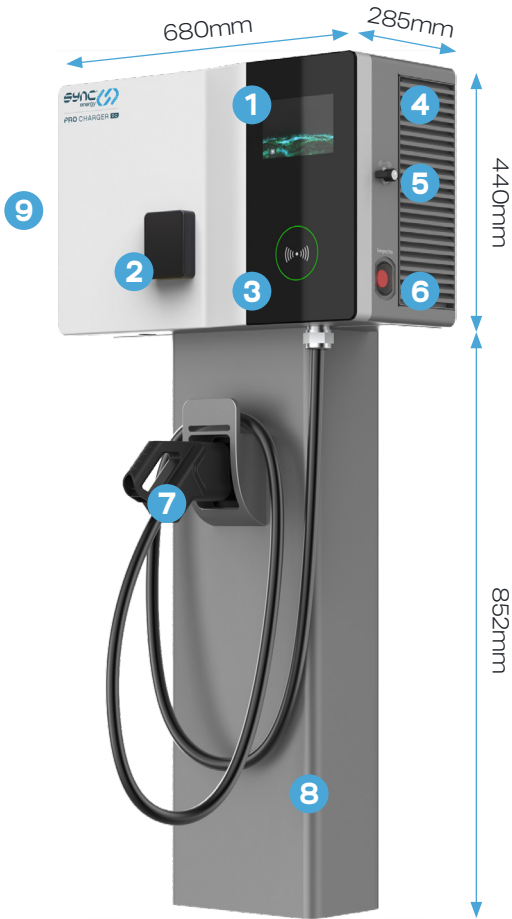
Isolation and switching for safety and maintenance. To ensure the DC charger can be "turned off" to enhance security and enable maintenance activities, a four pole isolator or RCD or RCBO suitably rated must be installed within the customer's property.

An isolator switch is a mandatory requirement for "new builds", but optional for existing dwellings (at customer's request), the switch should be mounted between 500mm and 1500mm above finished floor level to comply with regulations. The switch should be rated at 63 Amps. All installations must comply to BS7671: 2018.

Emergency stop

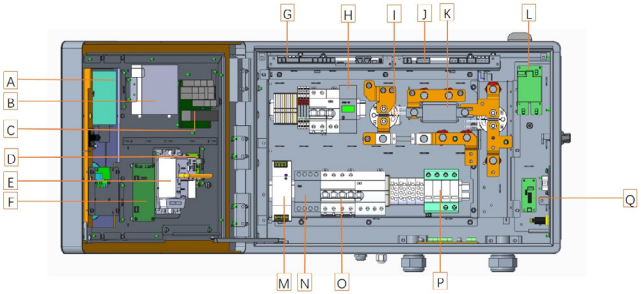
When you press the emergency stop, the screen will show a warning message that says "Emergency Stop," and the LED status indicator will turn red.

- After you press the emergency stop, the EVSE will not work properly.
- To reset the emergency stop; turn the stop button.



1. 7-inch touch screen
2. Payment terminal (optional)
3. LED status indicator and card reader
4. Air vent
5. Door lock
6. Emergency stop
7. Charging holster
8. Floor Stand (Optional - Sold separately)
9. Power Module access (left side)

Internal view



- A** Touchscreen
- B** ROUTER
- C** CAPACITOR BOARD
- D** ENVIRONMENTAL MONITORING BOARD
- E** PAYMENT TERMINAL (OPTIONAL)
- F** SECC BOARD
- G** A7 MAIN BOARD
- H** DC METER
- I** DC CONTACTOR
- J** M4 BOARD
- K** FUSE
- L** IMD
- M** POWER SUPPLY UNIT (PSU)
- N** AC CONTACTOR
- O** MCB
- P** SPD
- Q** PRECHARGE BOARD

Product overview

- A TOUCHSCREEN :** To control and monitor the charging process.
- B ROUTER :** To provide network connection to EVSE.
- C CAPACITOR BOARD :** To supply power to internal components of the EVSE in case of unexpected power outage, ensuring order transmission.
- D ENVIRONMENTAL MONITORING BOARD :** To acquire temperature values, humidity values, and tilt sensor status.
- E PAYMENT TERMINAL (OPTIONAL) :** To make payment and start/stop charging process.
- F SECC BOARD :** To allow the EVSE to communicate with the vehicle.
- G A7 MAIN BOARD :** Main Charger PCB Board.
- H DC METER :** To measure and display the cumulative amount of power used.
- I DC CONTACTOR :** To control the flow of DC power.
- J M4 BOARD :** Obtain data from the energy meter and monitor the temperature of the charging connector.
- K FUSE :** To break a circuit when the current is abnormal by fusing it.
- L IMD :** To continuously monitor the insulation resistance.
- M POWER SUPPLY UNIT (PSU) :** To convert AC power from the grid to DC power for charging the battery of an EV.
- N AC CONTACTOR :** To control the flow of AC power.
- O MCB :** To protect from overcurrent and prevent electrical hazards.
- P SPD :** To quickly divert excessive current in the event of a electrical surge.
- Q PRECHARGE BOARD :** Connect EVSE with EV Battery comms.

Charging connector type

The EVSE is supplied with a combined charging system 2 (CCS2) connectors on the charging cables.

The length of the charging cable outside of this EVSE is 5m.



Troubleshooting

For further information, or to refer to our FAQs, please visit our website: www.sync.energy

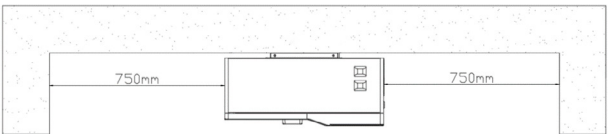
The status of the EV charger can be identified by referencing the colour shown on the LED indicator:

- **Solid Green** – Available
- **Flashing Green** – RFID card detected
- **Solid Yellow** – Warning, but can normal charge
- **Solid Blue** – Charging
- **Solid Red** – Failure
- **Flashing Red** – RFID card verification failed

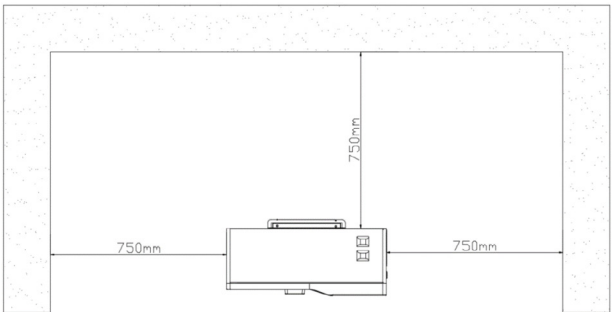
Space requirements between EVSE and obstacles

If the back or side of the EVSE you are installing is near a wall or other obstacle, you must leave enough space for maintenance. See the diagram below for details.

- The maintenance distance requirement for the wall mounted EVSE:



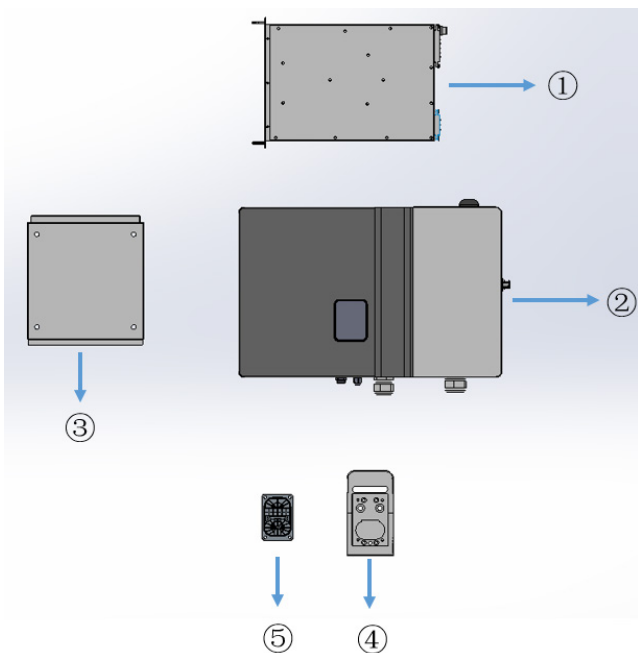
- The maintenance distance requirement for the stand mounted EVSE:



Electrical Installation

Wall Mounted

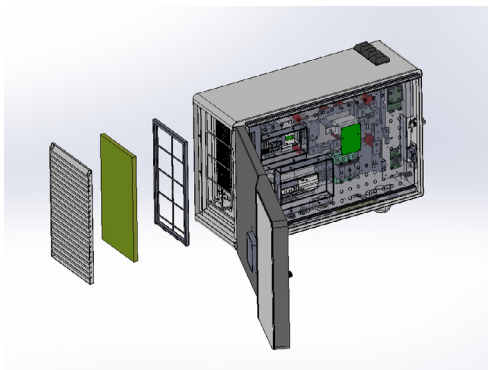
The general accessories of wall mounting are shown in the figures below:



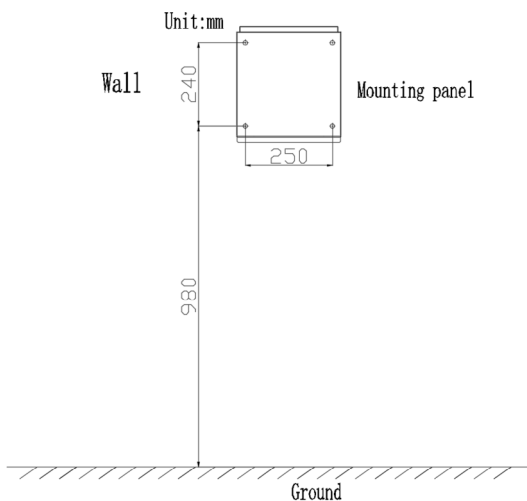
1. 30kW power module
2. Charger main body
3. Mounting bracket
4. Connector holster

1

Open the front door of the EVSE main body, remove the left shutter and dust proof filter.

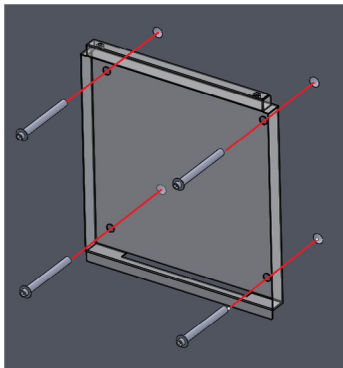
**2**

Confirm the installation position. Place the mounting panel in a suitable position on the wall and confirm the levelness of mounting panel with a spirit level. Then mark the drill holes with a pencil.



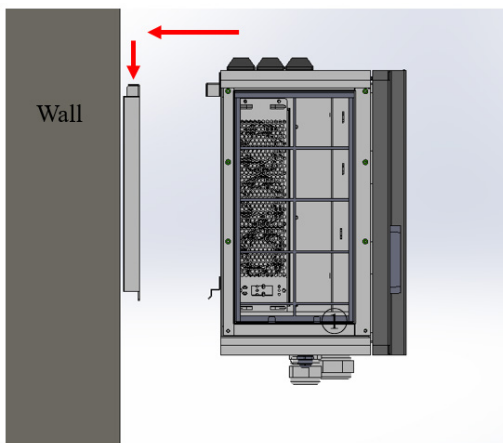
3

Drill suitable holes to mount the bracket, We recommend 10mm fixings to a depth of at least 100mm. Ensure any fixings used are suitable for the expected weight.



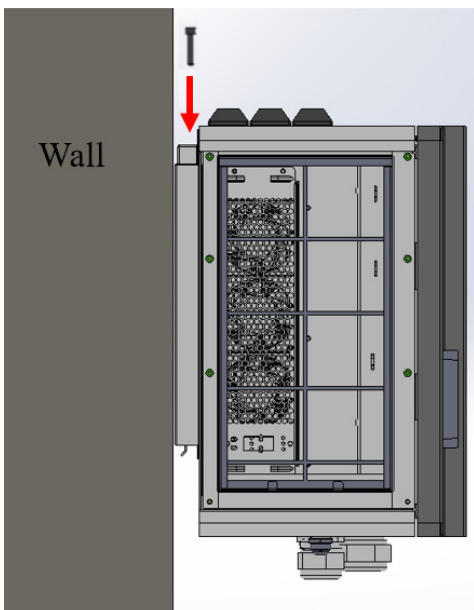
4

Attach the EVSE main body to the mounting panel.



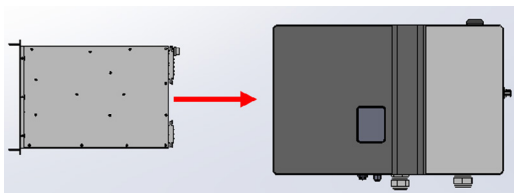
5

Secure the EVSE main body with two M6 screws from the top.



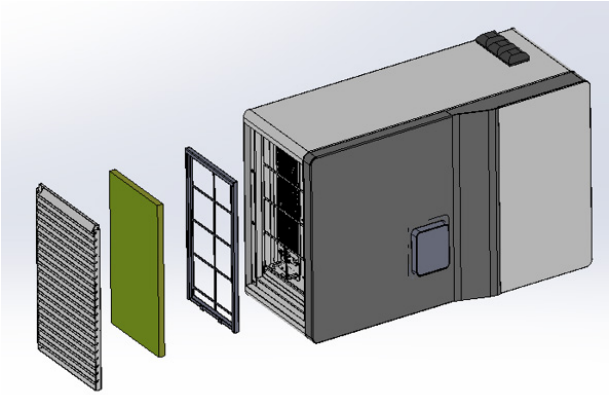
6

Insert the power module into the EVSE main body from the left side and then secure it with four screws.



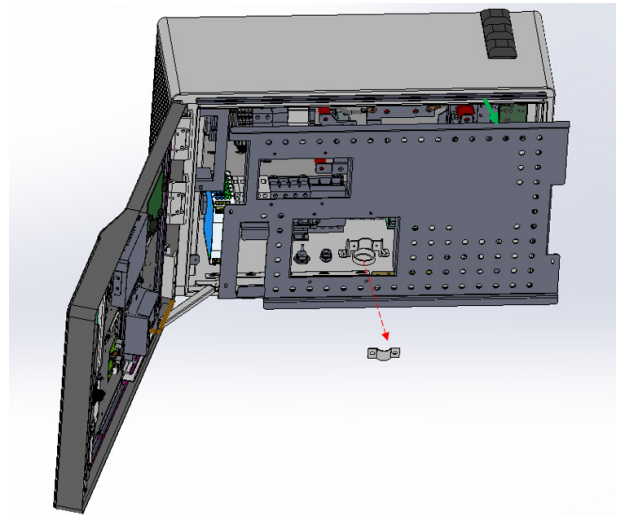
7

Re-fit air filter and side panels.



8

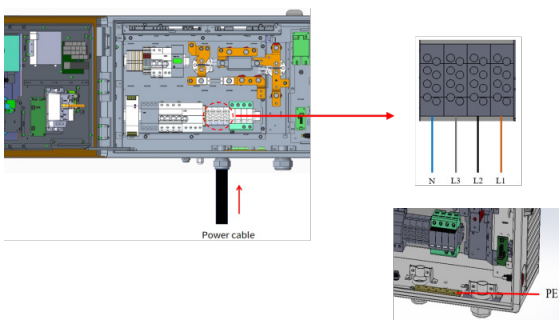
Open the front door and remove the cable clamp and protective cover.



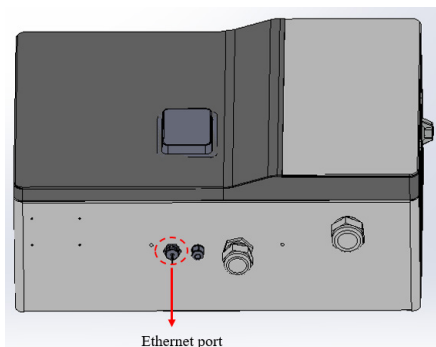
9

Connect the wires

1. Lead the power cable into the EVSE through the cable gland.
2. Connect the PE wire to the PE copper busbar.
3. Connect the three phases (L1, L2, L3) and the N line to their corresponding terminals.
4. Secure the removed cable clamp with screws and reinstall the protective cover.



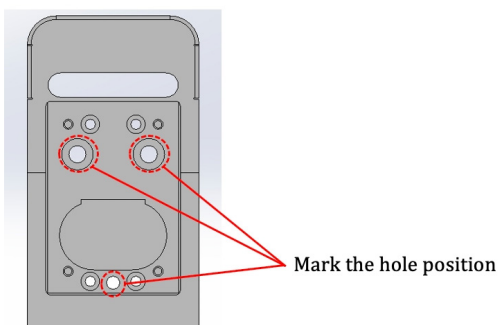
The network cable shall be connected when the Ethernet communication is required. Crimp the RJ45 connector and connect it to the corresponding Ethernet port.



Charging Holster Wall Mounted

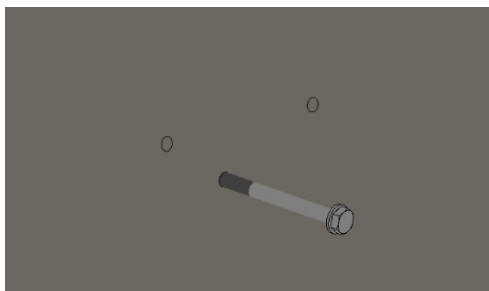
1

Install the charging cable connector holder after installing the charger main part. Select the appropriate position on the wall (It is recommended that the lower edge be 900mm away from the ground to facilitate the use), and mark the punching position according to the three holes on the connector holder assembly1.



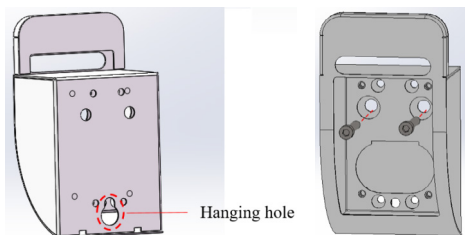
2

Drill suitable holes to mount the bracket, We recommend 10mm fixings to a depth of at least 100mm. Ensure any fixings used are suitable for the expected weight.



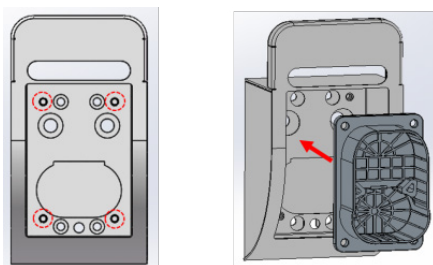
3

Hang the connector holder assembly 1 on the expansion screw inserted into the wall hole through the hanging hole, then insert expansion screws into the two other holes, and tighten the two expansion screws completely.



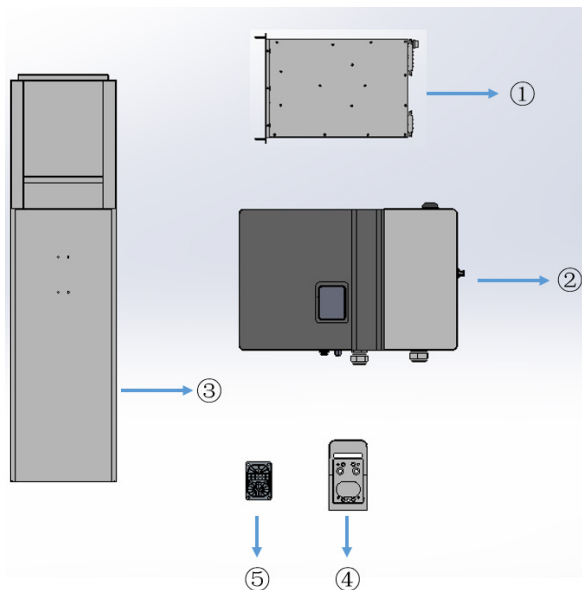
4

Secure charging holster assembly 2 onto assembly 1



Electrical Installation Mounting Stand

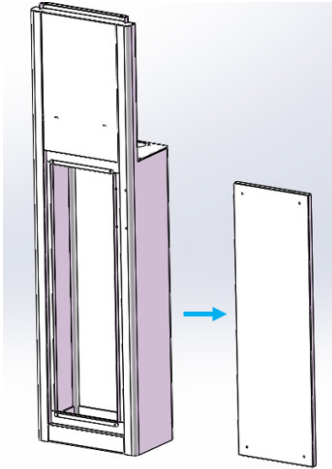
The general accessories of mounting stand are shown in the figure below:



1. 30kW power module
2. Charger main body
3. Mounting stand
4. Charging holster

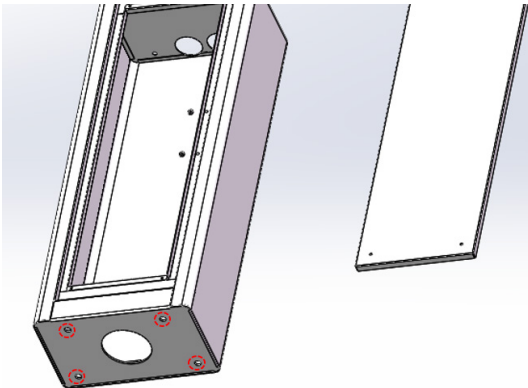
1

Refer to the wall mounting steps to remove the shutter and dust proof cotton. Then remove the back cover of the stand.



2

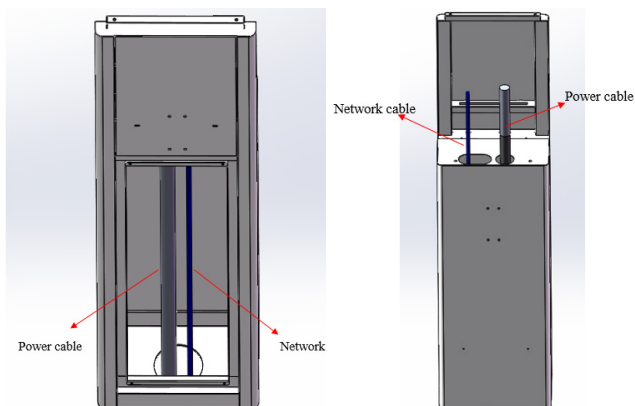
Place the stand on the concrete foundation, make the anchor bolts on the concrete foundation pass through the four installation holes at the bottom of the stand, and fix them with nuts.



Installation holes

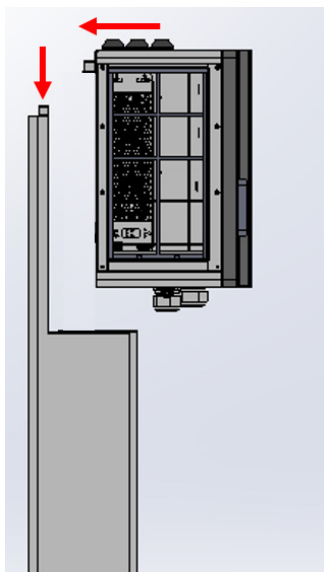
3

The cables are led into the stand through the hole at the bottom of the stand. The cables are then inserted through the upper hole of the stand.



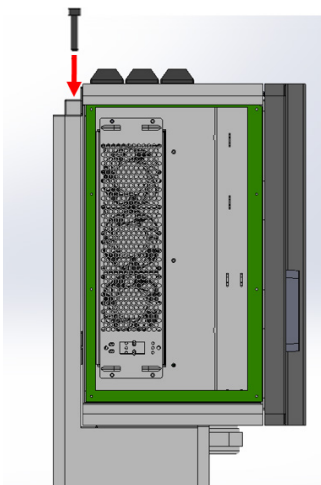
4

Fix the main body with the stand. Please refer to the wall mounting installation for the steps of fixing.



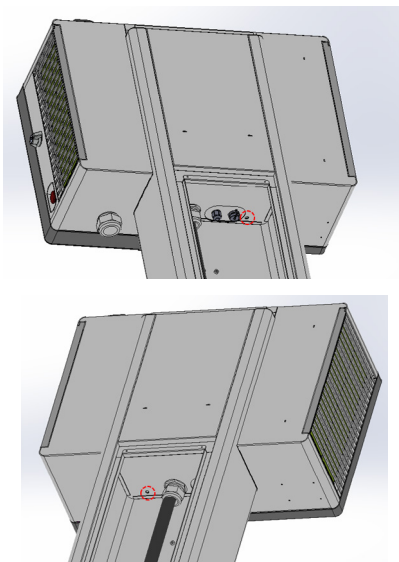
5

Secure the EVSE main body with screws from the top.



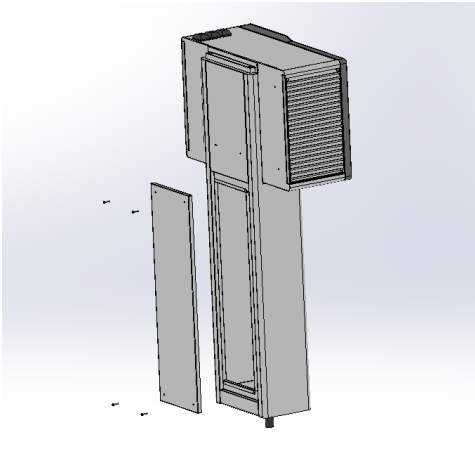
6

Secure the EVSE main body with M6x16 screws from the bottom.



7

Reinstall the back cover onto the stand.

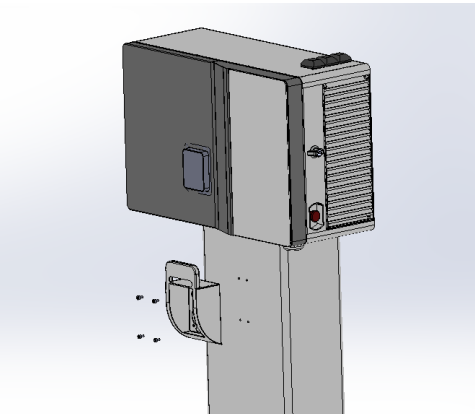


8

Refer to the wall mounting for module installation and wiring.

9

Fix the connector holder assembly1 to the stand with supplied screws.





Before powering on - After installation checks

Installation and wiring check

Before the EVSE is turned on, a qualified installer should inspect it. This section describes what to look for when inspecting the EVSE and its mounting:

- The EVSE should be clean and tidy, without any dents or damage. It should also be firmly attached to the base and not wobbly.
- The EVSE should be installed in the correct orientation, and all parts should be present. The installation should also be level.
- The cables should be laid and connected correctly.
- The insulation on the cables should not be scratched or damaged.
- The power cable terminals should be tight.
- There should be no hanging cables, and the bending radius of the cables should meet the requirements.
- The ground wire should be connected to the grounding grid for the device.

Check before power on the EVSE

- **Short circuit check:** Make sure there is no short circuit between the three phase wires, the neutral wire, and the ground wire in the EVSE of the low-voltage distribution cabinet that is connected to the EVSE.
- **Power voltage check:** Make sure the power voltage at the top of the MCCB in the low-voltage distribution cabinet is normal. There should be no problems such as missing phases, overvoltage, undervoltage, or incorrect phase sequence.

After checks - Power On

The EVSE can only be turned on after all the wiring is complete and correct. Here are the steps to turn on the EVSE:

1. Close all MCCBs in the upstream power distribution cabinet.
2. Measure whether the voltage of the output terminal of the MCCBs in the power distribution cabinet is 400 Vac ($\pm 10\%$).
3. Measure whether the voltage of the inlet AC copper busbars in the EVSE are approximately 400 Vac ($\pm 10\%$).
4. If the above conditions are met, power on the EVSE.

Monta Commissioning

Follow commissioning steps for ' /MON ' codes only, as these codes are pre-set for the Monta app.

If you have a different product code please follow the relevant onboarding guide, provided by each back office and app.

1. Download the Monta smart app:

[Apple app store](#)
[click here](#)



[Google play store](#)
[click here](#)



or search for '**Monta EV charging**' on Apple app store or Google Play

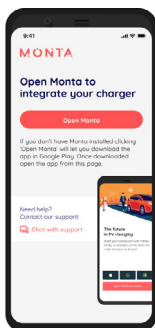
2. Using your smart-phone scan the unique Monta QR Code on the '**Quick Start Guide**' sheet supplied with the EV Charger.
If you're unable to use the QR, open a web browser on your smart-phone and manually type the URL on the sticker

3. Open the Monta app

iOS



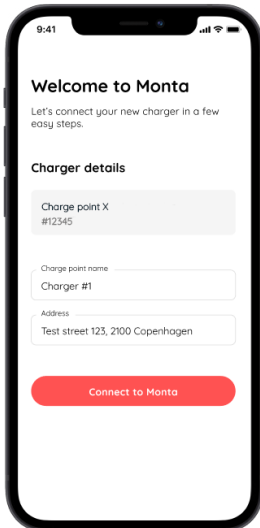
Android



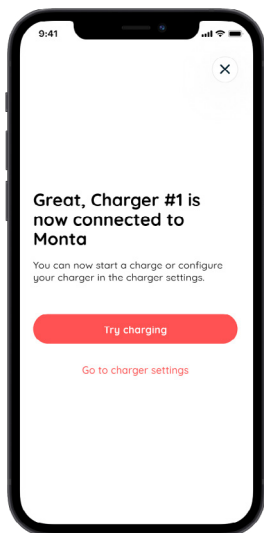
4. Create an account using your customers phone number or social logins (Apple/Google/Microsoft)



5. Connect the EV charger to Monta – name the charge-point and set the location



6. Successful connection – When you reach this step, your charge-point is connected and you can use Monta to start charging



Need help with the app?

Contact Monta customer support through the app or via the website [Monta.com](https://www.monta.com)

Need help with the charge-point?

Contact Sync Energy technical support at: support@sync.energy or via the website at www.sync.energy

Troubleshooting

Issue: EVSE is offline.

Analysis:

- » No power to EVSE.
- » The EVSE is not connected to the network successfully.

Solution:

- » Check whether the EVSE is powered on. If not, check whether there is no power.
 - » Check the network connection.
 - » Check the OCPP backend and the ID configuration.
-

Issue: Power module fault.

Analysis:

- » The main breaker is broken or tripped.
- » The AC contactor is broken.
- » The power module address is not set correctly.

Solution:

- » Check whether some of the power modules' fault light is on.
 - **Solid Yellow** – Power derates due to missing phase of AC input and temperature, irregular current sharing.
 - » Check if the input wiring and power distribution switch of the charger or the charging stack cabinet are normal. If the input wiring and power distribution switch of the charger or the charging stack cabinet are normal, but the alarm still exists, replace it
 - **Flashing Yellow** – Operating under manual mode
 - **Solid Red** – EEPROM Fault, fan drive fault, AC Input over/undervoltage, missing phase for AC input, over temperature inside, irregular communication for primary and secondary side, output over/under voltage, AC over voltage separation, serial number duplication
 - » Replace the power module
 - **Flashing Red** – Fans don't work
-

Issue: No response after plug in

Analysis:

- » Something wrong with the charging connector.
- » Abnormal CP voltage.
- » Abnormal wire connection of the SECC board.

Solution:

- » Check whether there is water, stone, or something inside the charging connector. If so, clean or dry it.
 - » Measure the voltage between CP and PE when the charging connector is standby, the normal voltage is 12V. Measure the voltage between CP and PE inside of the EVSE when plug in the charging connector into the EV, the normal voltage is 9V. If the voltage is normal, check the wiring on the SECC board. Correct it or replace the SECC boards.
-

Issue: "Meter fault" is shown on the display.

Analysis:

- » Meter itself is broken.
- » The M4 board is broken.
- » The communication line between the meter and the M4 board is unstable.

Solution:

- » Check whether the meter is power on. If not, check the input power.
 - » Check the communication line between the meter and the M4 board.
-

Issue: "Input under-voltage" is shown on the display.

Analysis:

- » The input voltage is under 400V-10%.
- » The power module is broken.

Solution:

- » Measure the input voltage of the EVSE.
 - » Monitor whether there are any errors with the power modules during charging. If so, try to replace them.
-

Issue: "Door is open" is shown on the display.

Analysis:

- » The door is open when the door sensor is enabled.
- » The door sensor is broken.
- » Structure issue.

Solution:

- » Check if doors are closed and locked correctly.
- » Check the wiring on the door sensor.



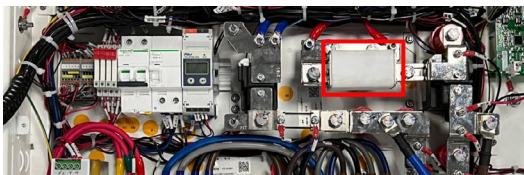
Issue: The charger is receiving the required voltage and current, but there is no output current of the charging connector.

Analysis:

- » The fuse protector is broken.
- » The power module is broken.
- » There is an issue with the EV.

Solution:

- » Check the wiring on the output relays.
- » Use a multimeter to check whether the fuse is conducting. If not, replace the fuse.



- » Monitor the status of power modules during charging and replace the abnormal one.
- » Find another EV for testing.

Issue: No response after swipe the RFID card.

Analysis:

- » UID of the RFID card is not uploaded in the backend.
- » Incompatible format of the card.

Solution:

- » Make sure the UID of the RFID card is uploaded in the backend by the backend supplier.
- » Swipe the RFID card on the card reader for 2 seconds and then remove it.
- » If the issue still exists contact Sync Energy with the specification of the RFID card for analysis.

Guarantee

Sync Energy products are guaranteed against faulty materials and workmanship for a period of 5 years except the power modules from date of delivery.

Power modules are covered under a 3 year or 10,000 hour, which ever is first, use warranty. Products will be repaired or (at Sync Energy's discretion) replacements will be supplied or (at Sync Energy's discretion) a credit note will be issued.

This guarantee is subject to Sync Energy's conditions of sale and in particular to the following conditions being met:

1. Notification of any defect is given to Sync Energy as soon as reasonably practicable after becoming apparent, and the products then returned to Sync Energy.
2. The products have only been operated under normal operating conditions and have only been subject to normal use.
3. No work (other than normal and proper maintenance) has been carried out to the products without Sync Energy's prior written consent.
4. Correct maintenance procedures has been followed, with air filters swapped and product inspected as per Sync Energy instructions.

5. The products have been assembled, or incorporated into other goods, by a qualified and recognised electrician and only in accordance with any instructions issued by Sync Energy.

6. The defect has not arisen from an item manufactured or supplied by a person other than Sync Energy.

7. 5 Year warranty as standard, optional product registration can be completed on the Sync Energy website.

Technical data

CODES :	EVPDCW30BGR/x (4G / WI-FI / LAN) EVPDCW30BGRP/x (4G / WI-FI / LAN / PAYMENT TERMINAL)
RATED INPUT VOLTAGE :	400Vac±10%, 50/60 Hz, L1+L2+L3+N+PE
POWER GRID CAPACITY :	≥35kVA when the EVSE is running at full load
INPUT CURRENT :	Rated at 50A
POWER FACTOR :	≥98%
TOTAL HARMONIC CURRENT :	≤5%
RECTIFICATION EFFICIENCY :	≥95%
RECOMMENDED UPSTREAM MCCB :	Class A MCCB, U _e = 400V, I _n = 63A, I _{cu} ≥ I _{cs} ≥ 10kA, 4P
EARTHING SYSTEM :	TN / TT
OUTPUT INTERFACE :	CCS2
OUTPUT CURRENT :	Max DC100A
OUTPUT VOLTAGE :	DC 150 to 1000V
OUTPUT POWER :	30kW
OPERATING TEMPERATURE :	-30°C to 50°C
STORAGE TEMPERATURE :	-40°C to 70°C
RELATIVE HUMIDITY :	5% to 95% (No condensation)
ALTITUDE :	≤2000m (above sea level)
DUST LEVEL :	≤1 mg/m ³

FIRE PREVENTION :	Do not stack flammable and explosive substances around
NETWORK INTERFACE :	4G / WI-FI / Ethernet
COMMUNICATION PROTOCOL :	OCPP1.6J / DIN SPEC 70121
DISPLAY SCREEN :	7-inch touch screen
LANGUAGE SUPPORT :	English/Other language versions Required by charger users
MECHANICAL BUTTON :	Emergency button
RFID :	ISO/IEC14443A/B Mifare RFID reader 13.56MHz for RFID: far less than 20mW
START METHOD :	QR code /RFID/OCPP/Credit card(optional)/Auto charge
PROTECTION LEVEL :	IP55/IK10(IK08 screen)
COOLING METHOD :	Forced air cooling
DIMENSIONS (WxDxH) / WEIGHT :	Wall mounted: 680x285x440mm/ Approx. 57kg (with power modules) Stand mounted: 680x320x1310mm/ Approx. 77kg (with power modules)
CERTIFICATES :	CE/CB/TR25/RCM/WPC/NTC
STANDARDS & APPROVALS :	EN IEC 61851-21-2:2021, EN 301511V12.5.1:2017, EN IEC 61000-6-2:2019, EN 301908-2V13.1.1:2020, EN IEC 61000-6-4:2019, EN 301908-13V13.1.1.2019, EN 301489-1V2.2.3:2019, EN 300330V2.1.1:2017, EN 301489-3V2.3.2:2023, EN 301908-1V15.1.1:2021, EN 301489-17V3.2.4:2020, EN 62479:2010, EN 301489-52V1.2.1:2021, EN IEC 61851-1:2019, EN 300328V2.2.2:2019, EN 61851-23:2014, EN IEC 62311:2020, EN 61851-24:2017

Error Codes

You can quickly identify different types of errors and anomalies that occur in your software, system, or device based on the following error codes table to help you locate and resolve problems more accurately.

Fault Code	Fault	Fault action
100001	Dispenser touch screen touch fault	Check if the touch screen is malfunctioning
100002	Dispenser touch screen light sensor fault	Check if the touch screen is malfunctioning
100003	Sensor communication fault	Check sensor wiring
100004	Update failed	Update again
100005	Card reader Offline	Check if the card reader communication line is normal
100006	Fail to reset	Reset
100007	Insulation warning	Check Insulation board
100008	Weak wireless signal	Check whether the 4G module antenna is connected properly
100009	Dispenser SD card fault	Check whether the dispenser control board is faulty
10000A	Dispenser input surge protection alarm	Check dispenser input surge protection
10000B	Dispenser fan control failure	Check small fan
10000C	SECC socket connection warning	Check SECC network wiring harness connections
10000D	SECC Update failed	Update again

10000F	Environment detection board offline	Check Environment detection board
100010	Self Check Processing	Wait for the device self-check to end
100011	Self Check Fail	Reset
100012	Communication failure of top light belt	Check top light belt
100013	Electric cable receiver force sensor fault	Check the force sensor of the electric cable receiver
100014	Electric cable receiver switch signal lost	Check the switch signal of the electric cable receiver
100015	Electric cable receiver servo driver fault	Check the servo driver of the electric cable receiver
100016	Cable collector winding resistance too high	Check the winding resistance of the electric cable collector
100017	"Electric cable receiver communication fault"	Check the electric cable receiver
100018	Output relay adhesion warning	Check the output relay
100019	Voltage detection board communication failure	Check the Voltage detection board
10001A	Input ac meter communication failure	Check the input ac meter board
10001B	PowerLink Offline(Not all slaves are online)	Check the network or configuration of the slave device
100101	Over-temperature fault inside the dispenser	The output power of the charger will decrease
100102	Cable joint over-temperature alarm	The output power of the charger will decrease

100103	Cable joint temperature difference alarm	The output power of the charger will decrease
100104	High atmospheric pressure warning	The output power of the charger will decrease
100105	Mainboard over temp	Check the mainboard temp
100106	Positive contact sensor short	Check the positive contact sensor
100107	Negative contact sensor short	Check the negative contact sensor
100108	Positive contact sensor open	Check the positive contact sensor
100109	Negative contact sensor open	Check the negative contact sensor
10010A	Positive contact temperature mutation	Check the positive contact sensor
10010B	Negative contact temperature mutation	Check the negative contact sensor
10010C	Contact temperature mutation	Check the positive/negative contact sensor
10010D	OCP Offline Warning	Contact Sync Energy Technical Support
10010E	OCP Disable OMC Warning	Contact Sync Energy Technical Support
100201	Expiration of product trial period	Contact sales to activate
100202	Dispenser emergency stop is pressed	Reset dispenser emergency stop button
100203	Auxiliary power control fault	Check auxiliary power wiring
100204	PLC communication timeout	Try again, If not success, contact the service number
100205	Gun lock control fault	Try again, If not success, contact the service number
100206	Ground Fault	Check whether the ground wire is well connected

100207	Insulation board fault (communication, hardware)	Check whether the communication line of the insulation monitoring board is connected normally
100208	Output relay control fault	Check whether the connection of the relay control line is normal
100209	Discharge resistance fault	Check whether the power module is faulty
10020A	Insulation fault	Vehicle insulation failure, please check the vehicle
10020B	Dispenser liquid level alarm	Check if the dispenser is immersed in water
10020C	Dispenser door open	Check if the dispenser door is open
10020D	High humidity alarm	Check if the local humidity exceeds the standard
10020E	Dispenser impact warning	Check if the pile is inclined
10020F	Meter fault (communication, data error)	Check whether the communication line of the meter is normal
100210	Communication fault with the subboard	Check whether the communication line between the power cabinet and the dispenser is normal
100211	Power loss fault	Check incoming power
100212	Communication fault with the power cabinet	Check the communication line between the dispenser and the rectifier cabinet
100213	Over-current fault	Check whether the vehicle end is faulty
100214	Output over-voltage	Check power modules/input AC
100215	RCD warn/fault	Check the AC input power/RCD module
100216	PLC board offline	Check PLC board

100217	Communication fault with the AC-subboard	Check AC-subboard
100218	AC gun mismatch	Check AC gun
100219	Communication fault with EV Car	Check the connection to the EV Car
10021A	Communication fault with A7-Board	Check the connection to the A7 Board
10021B	Get EV message timeout	Check the connection to the EV Car
10021C	Breaker off	Check Breaker
10021D	Response to PLC board timeout	Check the connection to the EV Car
10021E	Discharger timeout	Check power modules
10021F	Precharge timeout	Check power modules
100220	Gun disconnection	Check the connection to the EV Car
100221	Dispenser fuse alarm	Check dispenser fuse
100222	Gun unavailable	Check gun sts
100223	Over-temperature fault inside the dispenser	Check temperature inside the dispenser
100224	The end of the liquid cooled gun is too warm	Check the gun tail temperature
100225	Open circuit of fuse	Check the fuse
100226	DC reverse fault	Check whether the DC reverse fault
100227	CP Connect Error	Contact Sync Energy Technical Support
100228	The wire of Gun error	Contact Sync Energy Technical Support
100229	Communication fault with LED Board	Contact Sync Energy Technical Support
10022A	Communication fault with LCD	Contact Sync Energy Technical Support

10022B	Over-temperature fault with core board	Contact Sync Energy Technical Support
10022C	Over-temperature fault with relay	Contact Sync Energy Technical Support
10022D	CP-12V ERROR	Contact Sync Energy Technical Support
10022E	No effective current	Contact Sync Energy Technical Support
10022F	ROTATION ERROR	Contact Sync Energy Technical Support
100230	LN reverse fault	Contact Sync Energy Technical Support
100231	Output short-circuit fault	Contact Sync Energy Technical Support
100232	Third-party device offline	Contact Sync Energy Technical Support
100233	Dispenser input surge protection fault	Contact Sync Energy Technical Support
100290	Power module is not enough	Contact Sync Energy Technical Support
100291	Two contact sensors short	Check the positive/negative contact sensor
100292	Two contact sensors open	Check the positive/negative contact sensor
100293	Positive contact over temp	Contact Sync Energy Technical Support
100294	Negative contact over temp	Contact Sync Energy Technical Support
100295	Insulation voltage rised timeout	Contact Sync Energy Technical Support
100296	EV parameter timeout	Contact Sync Energy Technical Support
100297	EV insulation req timeout	Contact Sync Energy Technical Support
100298	Dispenser fault	Contact Sync Energy Technical Support

100299	External meter failure (communication, data error)	Contact Sync Energy Technical Support
10029A	Standby state bus DC+/- voltage greater than safe voltage (60V)	Contact Sync Energy Technical Support
10029B	CP -12V Fault	Contact Sync Energy Technical Support
10029C	Leakage detect fault	Contact Sync Energy Technical Support
10029D	Charging Cable Theft Fault	Contact Sync Energy Technical Support
10029E	Electronic lock unlock fault	Contact Sync Energy Technical Support
200001	Power module communication fault	Check whether the power module is installed in place or damaged
200002	Power module fault	Check whether the power module is installed in place or damaged
200003	PDU relay control fault	Contact the service number
200004	PDU communication fault	Check whether the PDU communication cable is connected normally
200005	Power cabinet touch screen touch fault	Check if the touch screen is malfunctioning
200006	Power cabinet touch screen light sensor fault	Check if the touch screen is malfunctioning
200007	Power cabinet SD card fault	Check whether the control panel of the power cabinet is faulty
200008	Input surge protection alarm	Check whether the surge protector alarms
200009	AC meter fault (communication, data error)	Check whether the front-end AC meter communication cable is properly connected

20000A	Communication fault with dispenser	Check the network connection between the rectifier cabinet and the dispenser
200101	Power module over-temperature fault	The output power of the charger will decrease
200102	PDU over-temperature fault	The output power of the charger will decrease
200103	Power cabinet fan communication failure	The output power of the charger will decrease
200104	Power control fan fault (alarm)	The output power of the charger will decrease
200105	Power cabinet over-temperature alarm	The output power of the charger will decrease
200106	Mix power module	When the CSMS sets the power limit to 0kW and the CSMS is offline, it will not allow any charging behavior
200201	Power control output fault	Check whether the power control board is faulty
200202	Power cabinet emergency stop is pressed	Reset power cabinet emergency stop button
200203	Power cabinet liquid level alarm	Check if the power cabinet is immersed in water
200204	Power cabinet door open	Check if the power cabinet door is open
200205	Output short circuit	Check the output for short circuit
200206	Input over-voltage fault	Check the input voltage of the pile
200207	Input relay control fault	Check if the input relay control line is normal
200208	Input under-voltage fault	Check the input voltage at the pile end
200209	Circuit breaker is disconnected	Check Circuit breaker
20020B	Power Cabinet impact warning	Check angle transducer

20020C	Fusing Warning	Check the fuse
20020D	Smoke Warning	Check smoke transducer
20020E	Communication failure of all power modules	Check whether the power module is installed in place or damaged
20020F	Input surge protection alarm	Power cabinet input surge protection alarm
200210	Rectifier cabinet upgrading	Contact Sync Energy Technical Support
200211	Mixed insertion of different power modules	Check power module type
200212	Three-phase Voltage Over and Under Fault	Check whether the three-phase voltage input is normal
200213	Failure Of The External Grounding Of The Pile	Whether the grounding wire outside the pile is normal
200214	Power cabinet SD card fault	Check whether the SD card is available
200215	Offline power cabinet power is Okw	When the CSMS sets the power limit to OkW and the CSMS is offline, it will not allow any charging behavior
200216	The power modules are mixed up	When the CSMS sets the power limit to OkW and the CSMS is offline, it will not allow any charging behavior
200218	Charging station has no available module assigned to a certain gun	Contact Sync Energy Technical Support
200219	Abnormal door access in the system	Check if the terminal door is open
300101	HPC-cooler over-temperature warning	The output power of the charger will decrease
300102	HPC-cooler liquid level warning	The output power of the charger will decrease

300103	HPC-cooler low liquid temperature warning	Check the liquid cooling equipment
300104	HPC-cooler over temperature fault	Check the liquid cooling equipment
300105	HPC-cooler liquid level fault	Check the liquid cooling equipment
300106	HPC-cooler low liquid temperature fault	Check the liquid cooling equipment
300107	HPC-cooler mainboard offline	Check the liquid cooling equipment
300108	HPC-cooler liquid pump outlet pressure warning	Check the liquid cooling equipment
300109	HPC-cooler fan failure	Check the liquid cooling equipment
30010A	HPC-cooler temperature sensor failure	Check the liquid cooling equipment
30010B	HPC-cooler pressure sensor failure	Check the liquid cooling equipment
30010C	HPC-cooler 24V overvoltage	Check the liquid cooling equipment
30010D	HPC-cooler 24V undervoltage	Check the liquid cooling equipment
30010E	HPC-cooler pump failure	Check the liquid cooling equipment
30010F	HPC-cooler Insufficient flow warning	Check the liquid cooling equipment
300201	HPC-cooler fault	Check the liquid cooling equipment
300202	HPC-cooler door open	Check the liquid cooling equipment
300203	HPC-cooler pipe jam	Check the liquid cooling equipment
300204	HPC-cooler pump failure	Check the liquid cooling equipment
300205	HPC-cooler liquid shortage alarm	Check the liquid cooling equipment
300206	HPC-cooler oil pump failure	Check the liquid cooling equipment

310100	Power cabinet cooler system other warning	Check the liquid cooling equipment
310101	Power cabinet cooler system fan fault	Check the liquid cooling equipment
310200	Power cabinet cooler system other error	Check the liquid cooling equipment
310201	Power cabinet cooler system pump error	Check the liquid cooling equipment
310202	Power cabinet cooler system offline	Check the liquid cooling equipment
310203	Power cabinet cooler system low level fault	Check the liquid cooling equipment
0x70020100	Power module AC over voltage	Contact Sync Energy Technical Support
0x70020101	Power module AC under voltage	Contact Sync Energy Technical Support
0x70020102	Power module AC over voltage close	Contact Sync Energy Technical Support
0x70020103	Power module PFC over voltage	Contact Sync Energy Technical Support
0x70020104	Power module PFC under voltage	Contact Sync Energy Technical Support
0x70020105	Power module PFC not balance	Contact Sync Energy Technical Support
0x70020106	Power module output over voltage	Contact Sync Energy Technical Support
0x70020107	Power module output over voltage close	Contact Sync Energy Technical Support
0x70020108	Power module output under voltage	Contact Sync Energy Technical Support
0x70020109	Power module fan not run	Contact Sync Energy Technical Support
0x7002010B	Power module fan driver broken	Contact Sync Energy Technical Support
0x7002010C	Power module over temp	Contact Sync Energy Technical Support
0x7002010D	Power module low temp	Contact Sync Energy Technical Support

0x7002010E	Power module PFC over temp	Contact Sync Energy Technical Support
0x7002010F	Power module output relay fault	Contact Sync Energy Technical Support
0x70020110	Power module DC over temp	Contact Sync Energy Technical Support
0x70020112	Power module PFC & DCDC fault	Contact Sync Energy Technical Support
0x70020114	Power module PFC fault	Contact Sync Energy Technical Support
0x70020115	Power module DCDC fault	Contact Sync Energy Technical Support
0x70020119	Power module DCDC not run	Contact Sync Energy Technical Support
0x7002011C	Power module DC output not balance	Contact Sync Energy Technical Support
0x7002011D	Power module same sn	Contact Sync Energy Technical Support
0x7002011F	Power module Discharge fault	Contact Sync Energy Technical Support
70020120	Power module fault	Contact Sync Energy Technical Support
70020220	Power module fault	Contact Sync Energy Technical Support
70020320	Power module fault	Contact Sync Energy Technical Support
70020420	Power module fault	Contact Sync Energy Technical Support
70020520	Power module fault	Contact Sync Energy Technical Support
70020620	Power module fault	Contact Sync Energy Technical Support
70020720	Power module fault	Contact Sync Energy Technical Support
70020820	Power module fault	Contact Sync Energy Technical Support
70020920	Power module fault	Contact Sync Energy Technical Support
70020A20	Power module fault	Contact Sync Energy Technical Support
70020B20	Power module fault	Contact Sync Energy Technical Support
70020C20	Power module fault	Contact Sync Energy Technical Support

71020100	PDU board comminucate failed	Contact Sync Energy Technical Support
71020200	PDU board comminucate failed	Contact Sync Energy Technical Support
71020300	PDU board comminucate failed	Contact Sync Energy Technical Support
71020400	PDU board comminucate failed	Contact Sync Energy Technical Support
71020500	PDU board comminucate failed	Contact Sync Energy Technical Support
71020600	PDU board comminucate failed	Contact Sync Energy Technical Support
71020101	PDU relay broken	Contact Sync Energy Technical Support
71020201	PDU relay broken	Contact Sync Energy Technical Support
71020301	PDU relay broken	Contact Sync Energy Technical Support
71020401	PDU relay broken	Contact Sync Energy Technical Support
71020501	PDU relay broken	Contact Sync Energy Technical Support
71020601	PDU relay broken	Contact Sync Energy Technical Support
71020701	PDU relay broken	Contact Sync Energy Technical Support
71020801	PDU relay broken	Contact Sync Energy Technical Support
71020901	PDU relay broken	Contact Sync Energy Technical Support
71020A01	PDU relay broken	Contact Sync Energy Technical Support
71020B01	PDU relay broken	Contact Sync Energy Technical Support
71020C01	PDU relay broken	PDU relay broken

Technical support

Need help with the app?

Contact Monta customer support through the app or via the website Monta.com

Need help with the charge-point?

Contact Sync Energy technical support at:

support@sync.energy

or via the website at www.sync.energy

**Sync Energy (previously BG Sync EV)
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