



Charging Infrastructure

# Athena 60kW

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**User Manual**



## Legal Notice

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## 1 Important Information

### 1.1 Safety Tips

#### Meaning of Related Symbols





Symbol	Meaning
	<b>"Warning" indicates danger</b> Pay attention to the possible personal injury or death caused by operation steps, practices or incorrect execution. Only when the conditions referred to are fully understood and met can the operation after "Warning" be performed.
	<b>"Caution" indicates danger</b> Pay attention to the possible damage or destruction of the product caused by operation steps, experiments or incorrect execution. Only when the conditions referred to are fully understood and met can the operation after "Caution" be performed.
	<b>"Tips" indicates use skills or useful information</b> Use skills and useful information are marked with "Tips", but they do not contain information that warns of dangerous or harmful functions.
	Pay attention to the possible damage or destruction of the product caused by operation steps, experiments or incorrect execution. Only when the conditions referred to are fully understood and met can the operation after "Caution" be performed.

Table 1 Related Symbols and Meanings

### 1.2 Intended Use

- This product is a DC integrated charging equipment that can charge electric vehicles in both indoor and outdoor areas.
- The DC integrated charging equipment shall be installed and connected in compliance with the regulations of all countries.
- The intended use of the equipment shall be in compliance with the environmental conditions established for the equipment under all circumstances.

- The storage of the charging equipment shall meet the following requirements:  
Before installation after receiving the equipment, it is necessary to store the charging equipment and its supporting components in a dry and ventilated indoor warehouse within which the temperature shall be from - 40°C to + 70°C , the monthly average relative humidity shall be no more than 90% and there shall be no corrosive and explosive gases. During storage, it is necessary to avoid rain, exposure, condensation or frost, etc.  
After the equipment is installed, the cabinet door of the charging equipment shall be kept normally closed to prevent from soaking in rain.
- The equipment shall be developed, produced, inspected and filed in accordance with relevant safety standards. Therefore, if you follow the instructions and technical safety tips for the intended use, the product shall not cause property damage or endanger the health of personnel under normal circumstances.
- The instructions contained in the Manual must be strictly followed. Otherwise, there may be potential safety hazards or failure of safety devices. Although the relevant safety instructions are described in the Manual, attention must be paid to the safety regulations and accident prevention regulations of the corresponding application.

### 1.3 About the Manual

The Manual applies to DC integrated charging equipment  
The Manual applies to the following customers:

- Terminal customer.
- Technical personnel of commissioning, service and other teams.

## 2 Product Overview

### 2.1 Appearance Overview

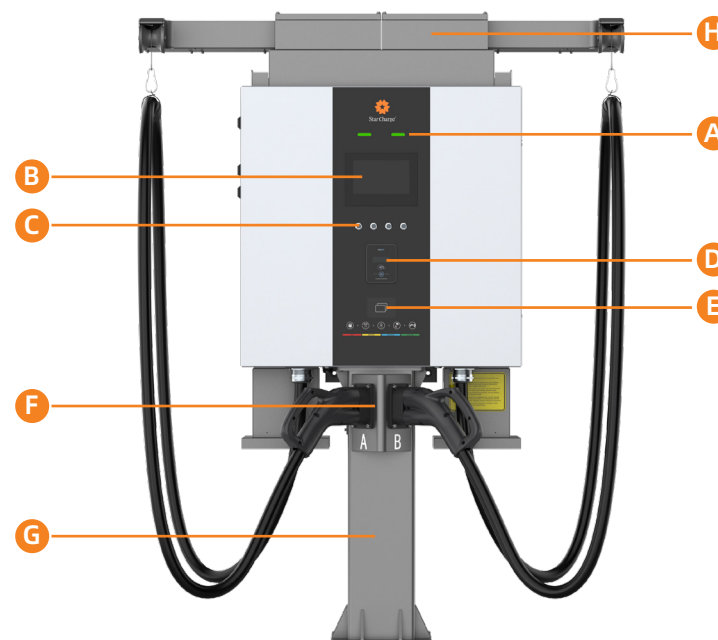


Fig. 2-1 Appearance of Charging Equipment with Stand Pedestal

- [A] — LED status indicator
- [B] — 7-inch touch screen
- [C] — Display mechanical buttons
- [D] — POS
- [E] — RFID
- [F] — Charging connector
- [G] — Pedestal
- [H] — Charging Cable Management system



Fig. 2-2 Appearance of Charging Equipment with Stand Pedestal

- [E] — RFID
- [F] — Charging connector
- [G] — Pedestal
- [H] — Charging Cable Management system



Fig. 2-3 Appearance of Advanced Charging Equipment, Wall-mounted



- The picture is for reference only and the actual product shall prevail.
- When the charging operation is not performed, the charging cable shall be rolled up and put back on the support, and the charging gun shall be inserted into the specified position for safe storage.

## 2.2 Specification parameters

<b>General parameters</b>	Product brand	Star Charge
	Product name	Athena 60
	Product model	DH-DC0600HG58
<b>Input parameters</b>	Rated input	400Vac±10%, three-phase, 50/60 Hz, L1+L2+L3+PE
	Power factor	0.99 @ normal load
	Total harmonic current	≤ 5% @ normal load
	Rectification efficiency	95% @ normal load
<b>Output parameters</b>	Output interface	CCS2+CHAdeMO/CCS2+CCS2
	Output voltage	DC 200V~1000V
	Output current	CCS2: 200A max. CHAdeMO: 125A
	Output power	One EV up to 60kW Two EVs each up to 30kW
<b>User interface &amp; control</b>	Display screen	7-inch touch screen
	Language support	Simplified Chinese/English/Other language versions required by customers
	Mechanical button	Emergency stop button + 4 Mechanical buttons
	RFID card reader	ISO/IEC 14443 A/B Mifare
	Payment	credit card (optional)
	Start method	APP code scanning start/card swiping start

<b>Communication</b>	Network interface	4G/Wi-Fi/Ethernet
	Communication	OCPP1.6J
<b>Environment</b>	Operating temperature	-30°C -55°C , use with derating above 50°C , shutdown when above 55°C
	Storage temperature	-30°C -70°C
	Operating humidity	5%-95%
	Operating altitude	≤ 2,000m
<b>Machinery</b>	Ingress Protection	IP54/IK10 ( Screen IK08)
	Cooling method	Forced air cooling
	Dimensions (WxHxD)/weight	750*750*310mm/approx. 125kg 322x270x740mm (Stand Pedestal)
	Installation method	Wall-mounted/ Pedestal-mounted
	<b>Regulatory requirement</b>	Certificate

Table 2 Specification parameters

### 3 Operating Instructions

The charger operation is divided into two parts as charging connection operation and starting charging operation. The user must first connect the charging equipment to the vehicle, and then perform related operations to start charging through the touch screen interface. In addition to the scheme that supports the direct control of the touch screen interface, the charger is also provided with the control support of physical buttons. Each physical button corresponds to the function of the respective button on the touch screen. For specific use, please refer to the picture displayed in the charging operation.

#### 3.1 Charging Connection Operation

Step 1 First confirm that the charging equipment is in the normal state and that the status indicator light is steady green.

Step 2 Confirm that the vehicle meets the charging conditions, remove the charging gun from the socket, and insert it into the corresponding charging port of the vehicle.

Step 3 Confirm that the above connection is intact and move on to the next step.

#### 3.2 Start Charging Operation

##### 3.2.1 Swipe to Start

Step 1 :  
Click anywhere on the main interface board of the touch screen to enter, as shown in Fig. 3-1.

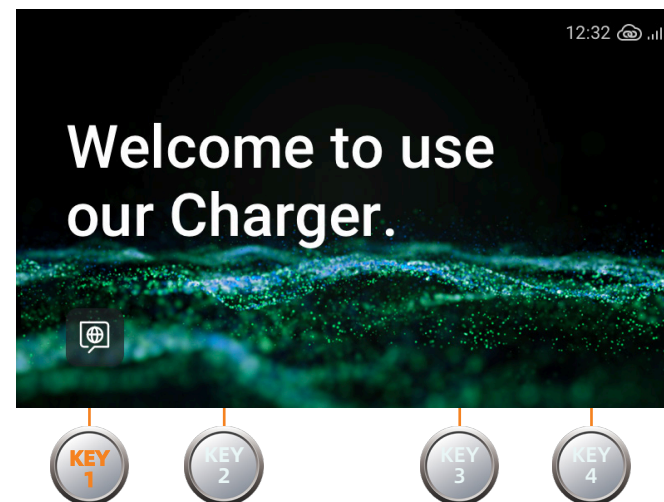


Fig. 3-1 Charging Main Interface

Step 2:

Step 2 Enter the charging mode selection interface and choose the card swiping mode, as shown in Fig. 3-2.

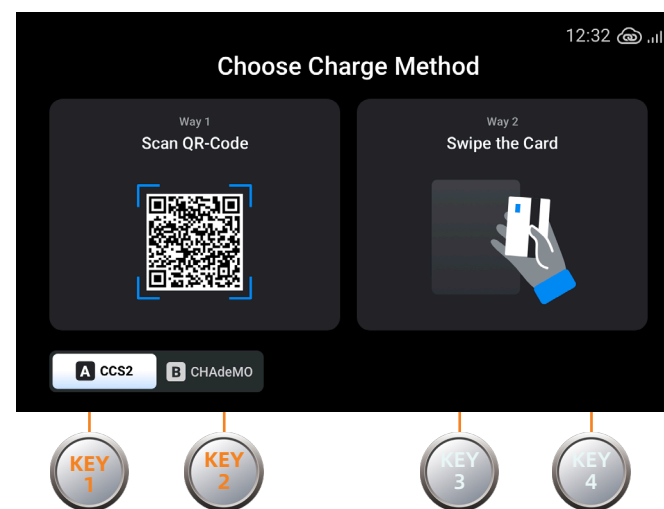


Fig. 3-2 Charging Method Selection Interface

**Step 3:**

Swipe to start charging: place the card in the swiping area to start charging.

**Step 4:**

During charging, the charging equipment screen displays the charging status. At this time, click "Charging Details", as shown in Fig. 3-3, 3-4 to view the charging details.

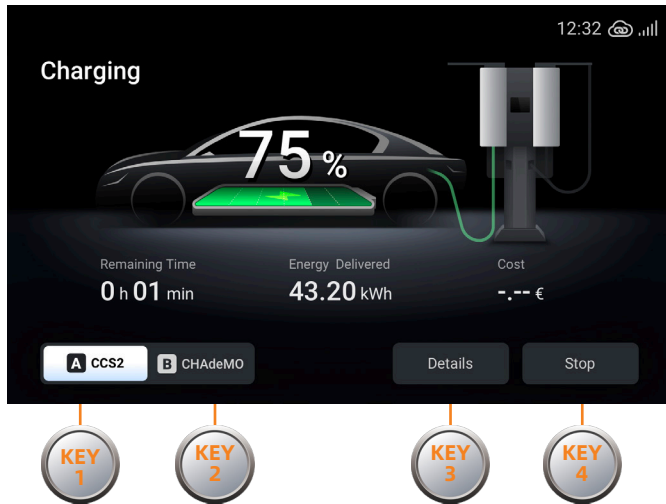


Fig. 3-3 Charging Interface

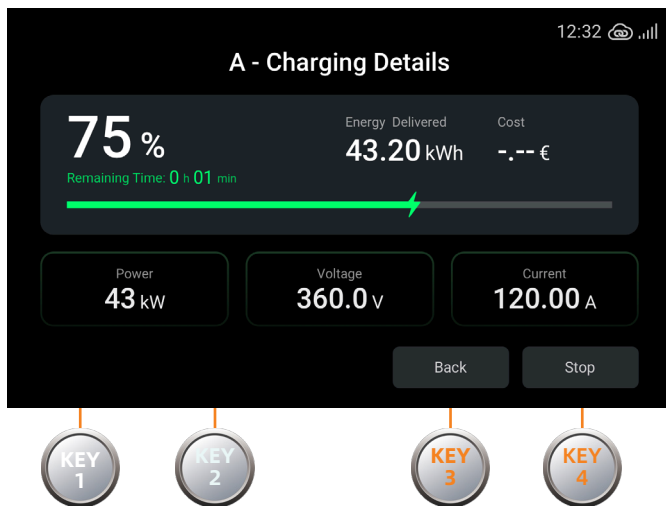


Fig. 3-4 Charging Details Interface

**Step 5:**

Swipe the card to stop charging: click "Stop", as shown in Fig. 3-3, enter the stop charging interface, select the card swiping mode, and swipe the card again to stop charging, as shown in Fig. 3-5.



Fig. 3-5 Stop Charging Interface



**Step 6:**

After charging completion or charging termination, the screen displays the charging result, as shown in Fig. 3-6.

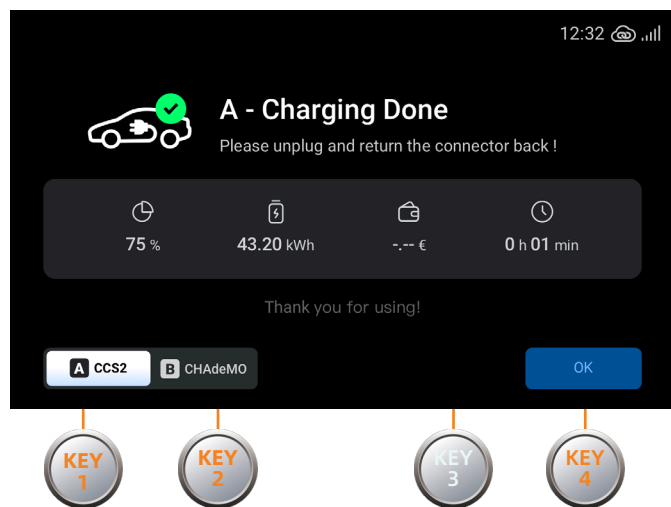


Fig. 3-6 Charging Details Interface

**Step 7:**

Pull out the charging gun in the vehicle, put away the charging cable and re-place it on the equipment support.

**Step 8:**

When the LED status indicator of the charging equipment is red, it indicates a malfunction of the charging equipment, and an exclamation mark will appear in the lower right corner of the charging main interface, as shown in Fig. 3-7.

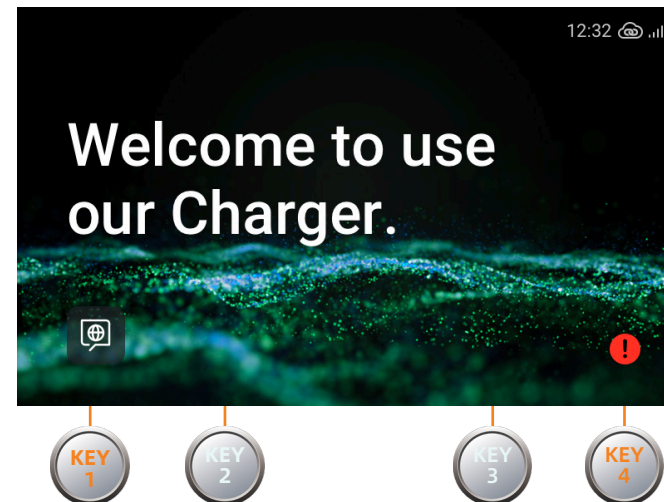


Fig. 3-7 Abnormal Charging Interface

**Step 9:**

Click the exclamation mark to view the malfunction information and contact the after-sales technical service personnel for maintenance, as shown in Fig. 3-8.

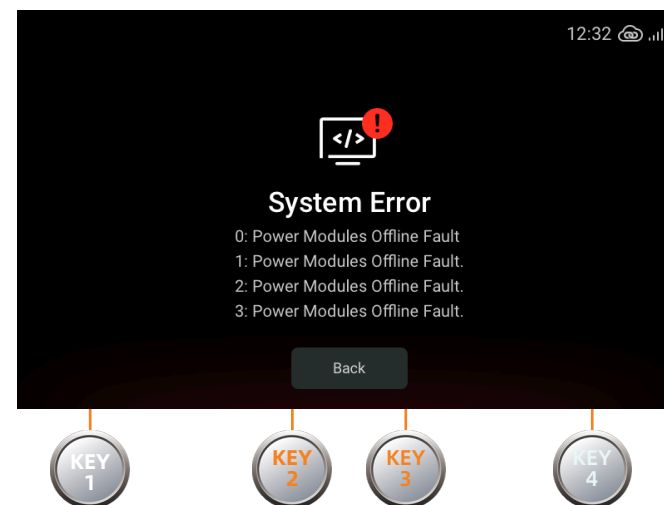


Fig. 3-8 Malfunction Details Interface

### Step 10:

Charging will stop due to abnormalities of the charging equipment or vehicle, and a malfunction window will pop up as shown in Fig. 3-9 below. At this time, contact the after-sales technical service personnel for maintenance.

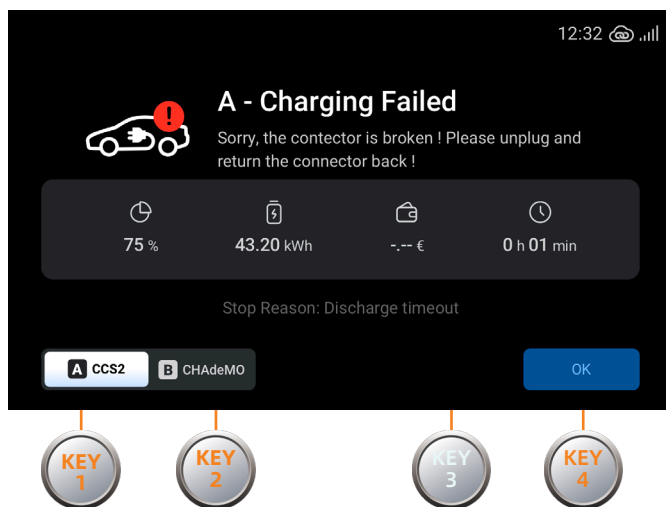


Fig. 3-9 Abnormal Charging Interface

### 3.2.2 Scan Code to Start

#### Step 1:

Click anywhere on the main interface board of the touch screen to enter, as shown in Fig. 3-10.

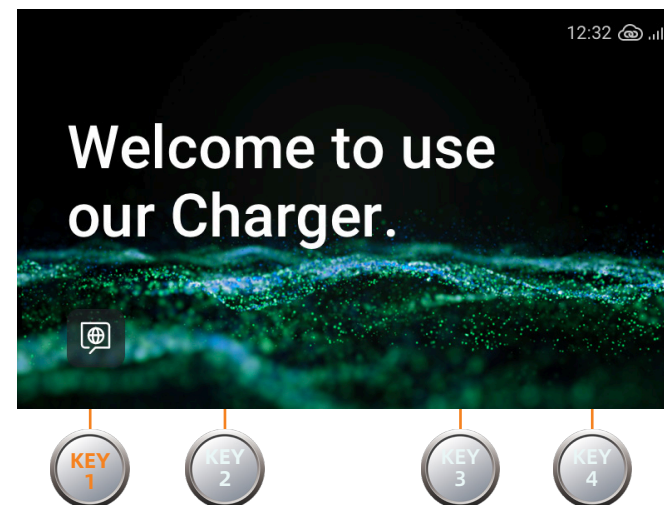


Fig. 3-10 Charging Main Interface

### Step 2:

Enter the charging mode selection interface and select the code scanning mode, as shown in Fig. 3-11.

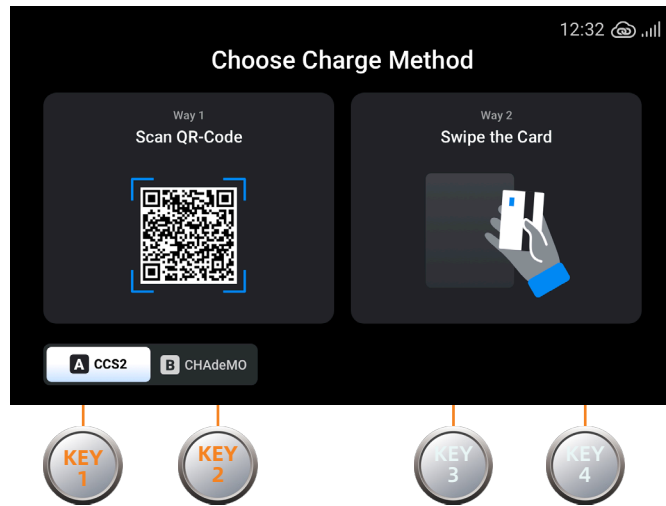


Fig. 3-11 Charging Method Selection Interface

### Step 3:

During charging, the charging equipment screen displays the charging status interface. At this time, click “Charging Details” to view the charging details of the equipment. You can also view the charging details in the mobile phone APP, as shown in Fig. 3-12 and 3-13.

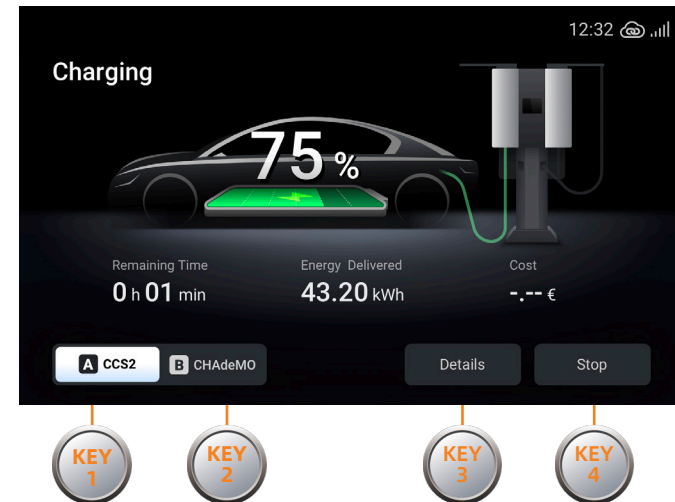


Fig. 3-12 Charging Interface

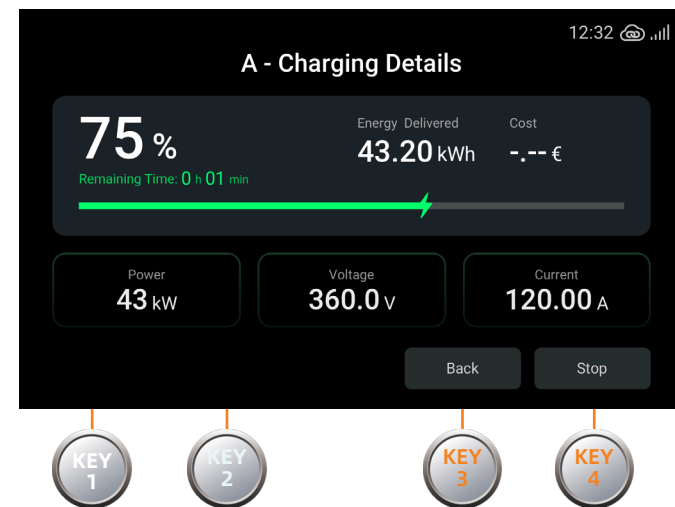


Fig. 3-13 Charging Details Interface

**Step 4:**

If you need to stop during charging, click “Stop” to enter the stop charging interface, select “Via Star Charge App”, as shown in Fig. 3-16 and click the stop button on the mobile phone interactive interface to stop charging, as shown in Fig. 3-14.

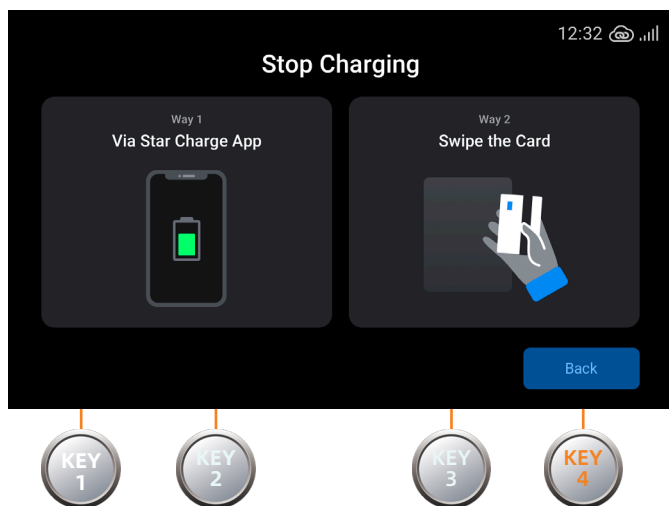


Fig. 3-14 Stop Charging Interface

**Step 5:**

After charging completion or charging termination, the charging equipment screen displays the charging result, as shown in Fig. 3-15.

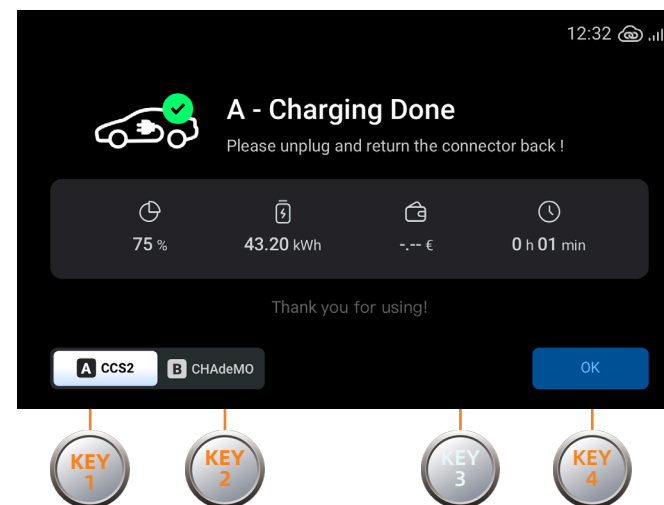


Fig. 3-15 Charging Details Interface

**Step 6:**

Pull out the charging gun in the vehicle, put away the charging cable and re-place it on the equipment support.

**Step 7:**

When the LED status indicator of the charging equipment is red, it indicates a malfunction of the charging equipment, and an exclamation mark will appear in the lower right corner of the charging main interface, as shown in Fig. 3-16.

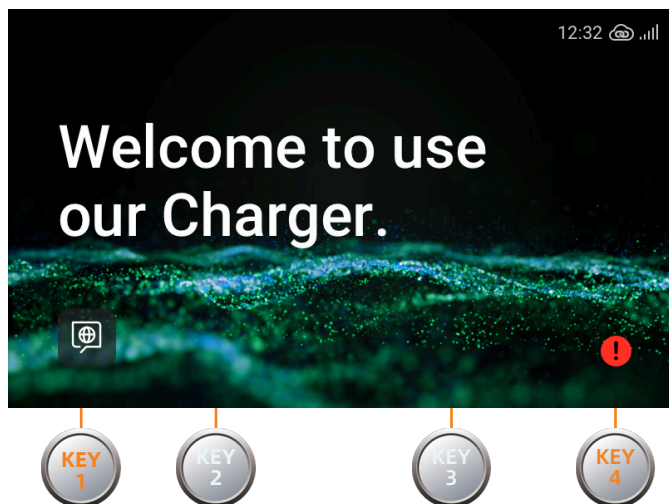


Fig. 3-16 Abnormal Charging Interface

**Step 8:**

Click the exclamation mark to view the malfunction information and contact the after-sales technical service personnel for maintenance, as shown in Fig. 3-17.

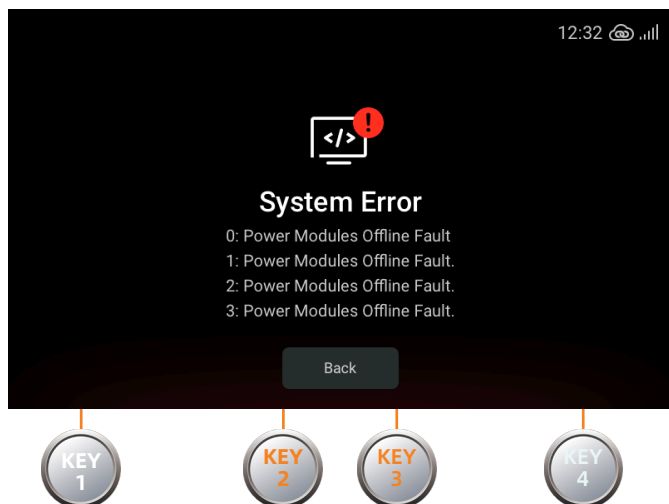


Fig. 3-17 Malfunction Details Interface

**Step 9:**

Charging will stop due to abnormalities of the charging equipment or vehicle, and a malfunction window will pop up as shown in Fig. 3-18 below. At this time, contact the after-sales technical service personnel for maintenance.

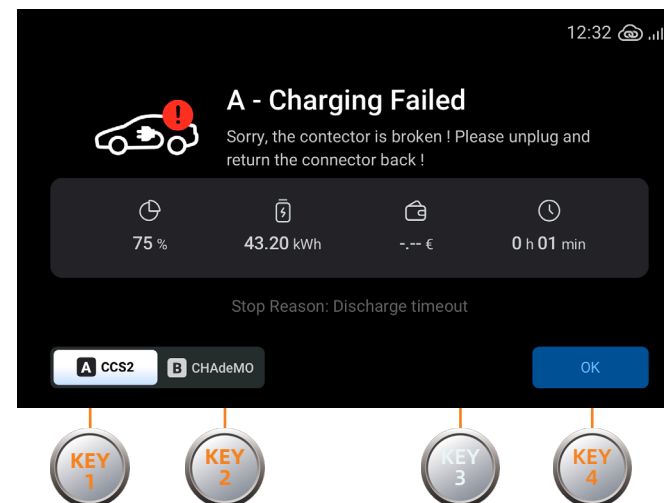


Fig. 3-18 Abnormal Charging Interface

## 4 Troubleshooting

In case of abnormal conditions of the charging equipment, please follow the following tips for troubleshooting. If the malfunction cannot be eliminated, please contact your local service partner or the product manufacturer with reference to the < Customer Service >.

Abnormal performance	Possible causes and troubleshooting methods
LED status light is not on	<ul style="list-style-type: none"> <li>◆ No power supply                             <ul style="list-style-type: none"> <li>• Please check whether the upper switch of the charging equipment is closed. If not, please close.</li> <li>• Please contact the installation or operation and maintenance personnel.</li> </ul> </li> </ul>
The LED status light is on in red	<ul style="list-style-type: none"> <li>◆ Charging equipment malfunction                             <ul style="list-style-type: none"> <li>• Please check whether the emergency stop button is pressed. If it is pressed, please rotate it and pop it up according to the tips.</li> <li>• Please check whether the operation door is closed correctly. If not, please close it.</li> <li>• Please contact the operation and maintenance personnel.</li> </ul> </li> </ul>
The screen shows that the gun cable is not connected	<ul style="list-style-type: none"> <li>◆ The charging gun is not inserted correctly                             <ul style="list-style-type: none"> <li>• Please reinsert the charging gun.</li> </ul> </li> <li>◆ There is a foreign object in the charging gun                             <ul style="list-style-type: none"> <li>• Please clean up after power off and try again.</li> </ul> </li> <li>◆ Communication fault                             <ul style="list-style-type: none"> <li>• Please contact the operation and maintenance personnel.</li> </ul> </li> </ul>
The screen shows that the equipment is offline	<ul style="list-style-type: none"> <li>◆ Communication fault                             <ul style="list-style-type: none"> <li>• Please confirm the signal status of the venue. If the signal is not good, please optimize the signal environment.</li> <li>• Please contact the operation and maintenance personnel.</li> </ul> </li> </ul>

Table 3 Troubleshooting

## 5 Routine Maintenance

The following table is the recommended maintenance cycle. In case of discrepancy in the environment or relevant laws and regulations of the country where the charging equipment is located, the cycle needs to be changed. For details, please refer to *Maintenance Manual for 30kW EN DC Integrated Charging Equipment*.

Inspection items	Cycle	Treatment method
Fan	Monthly	Clean-up
Dustproof cotton	Quarterly	Replacement
Charging gun	Monthly	Clean-up
Module	Monthly	Clean-up
Line inspection	Quarterly	Tightening
Emergency stop	Monthly	Test
Mainboard	Monthly	Tightening

Table 4 Maintenance Schedule

## 6 Customer service

### 6.1 Preparation

If you have any doubts or questions, please contact the installation unit or the customer service department of the equipment manufacturer.

Before contacting the customer service department of the equipment manufacturer:

- Please check the troubleshooting measures in Chapter “Troubleshooting” .
- Please check the troubleshooting measures in the vehicle manufacturer’s manual.
- Please record the model and serial number of the equipment (the nameplate of the equipment).

### 6.2 Contact Information of Equipment Manufacturer

Company address: No.39 Longhui Road, Wujin District, Changzhou, Jiangsu, China

Company Website: <http://www.starcharge.com>

Company E-mail: [starcharge@wanbangauto.com](mailto:starcharge@wanbangauto.com)

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