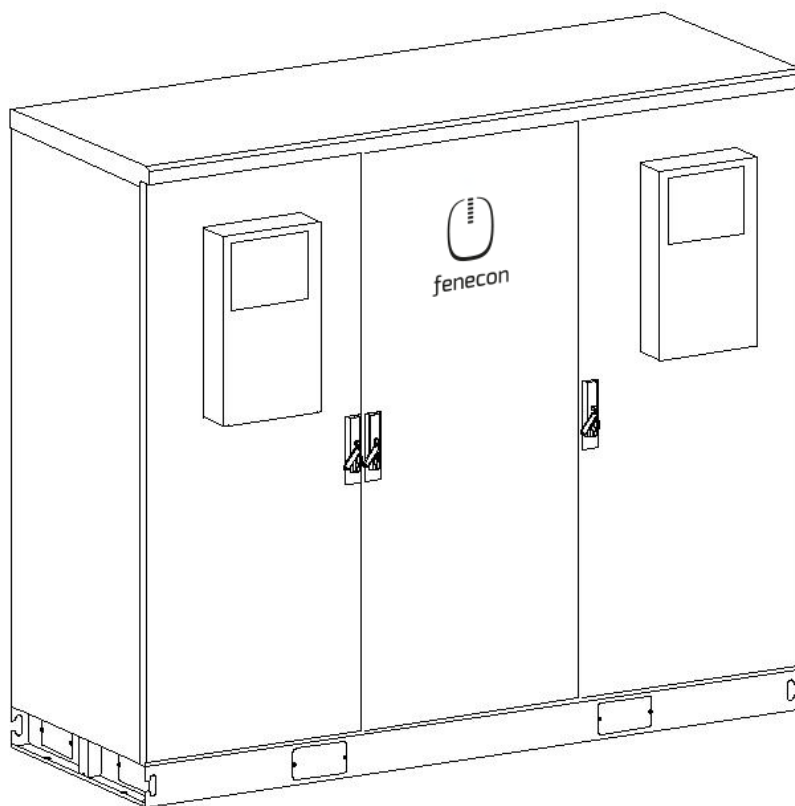


XC-A1SD07A Outdoor Cabinet

User Manual

Version V1.0
Revision date Nov 18, 2019



Dear users, we would like to thank you for purchasing our product. Before using this product, please read this manual carefully and keep it readily.

Safety Precautions

To reduce the chance of accident, please read the safety precautions very carefully before operation. The Caution, Notice, Warning, Danger in this book do not represent all the safety points to be observed, and are only supplement to various safety points. Therefore, the installation and operation personnel must be strictly trained and master the correct operations and all the safety points before actual operation.



Danger/ Warning

Electrical

The electrical power system in some units contains hazardous voltage, directly or in directly contact with these units can be fatal.

Please strictly distinguish the polarity among cables. Electrical faults such as short circuits to the cables may damage the equipment or even cause harm to people.

The connection and arrangements of alternating-current wires must be in compliance with local regulations. Licensed installers are required to operate high-voltage and alternating-current power supplies. Special tools for operating high-voltage and alternating-current power supplies are also required.

Installer should not wear or put on conductive objects, such as watches, bracelets, finger rings, etc.

Power must be cut off immediately if water or moisture is detected inside the body of the equipment. Precautionary measures must be taken when working in the humid environment.

Do not operate the equipment during a thunderstorm. Equipment shall have a proper ground connection to avert thunder strikes.

Battery

Non-standard operation on the battery will cause danger. In operation, precautions should be taken to prevent battery short circuit and overflow of electrolyte. The overflow of electrolyte will erode the metal objects and PCB, thus causing equipment damage and short circuit of PCB.

Before any operation on battery, pay attention to the following points:

Remove the watch, bracelet, bangle, ring, and other metal objects on the wrist.

Use special insulated tools.

Use eye protection device, and take preventive measures.

Wear rubber gloves and apron to guard against electrolyte overflow.

In battery transportation, the electrode of the battery should always be kept facing upward. Never put the battery upside down or slanted.

"Prohibit" warning label must be attached to the switches and buttons that are not permitted to operate during installation.



Warning / Notice

When moving equipment by hand, protective gloves should be worn to avoid injury by sharp object.

Please verify the compliance of the cable and cable label with the actual installation prior to cable connection.

Signal lines and power lines shall be arranged separately.



Notice

The static electricity generated by the human body will damage the static sensitive elements on PCB, such as large-scale IC. Before touching any plug-in board, PCB or IC chip, ESD wrist strap must be worn to prevent body static from damaging the sensitive components. The other end of the ESD wrist strap must be well earthed.

Contents

Safety Precautions.....	1
1 Cabinet Overview.....	4
1.1 Cabinet Overview.....	4
1.2 Product Structure.....	4
1.3 Temperature Control Principle.....	6
1.4 Main Performance Parameters.....	6
1.5 Executive Standards.....	7
1.6 Operating Requirements.....	7
2 Packing List.....	8
3 Preparatory Tools.....	8
4 Installation.....	8
4.1 Cabinet Installation.....	8
4.2 Lifting and Moving the Cabinet.....	10
5 Operation and Maintenance.....	11
5.1 Cabinet Door Operation.....	11
5.2 Cable inlet.....	12
5.3 Use and Maintenance of Other Equipment.....	12
6 Precautions and Daily Maintenance.....	12
7 Troubleshooting.....	13
8 Warranty Descriptions.....	13
9 Abandonment.....	14

1 Cabinet Overview

1.1 Cabinet Overview

- External dimension 1850x2100x750mm(H*W*D), The body of this cabinet is made of 1.5 mm thickness high-quality hot-dip Al-Zn alloy steel sheets. PEF 20mm is used as its thermal insulation material.
- The entire cabinet is mainly composed of a case frame, a top cover, battery rack, door components and a plinth.
- The cabinet is to be directly installed outdoors, three compartment, have left,center and right doors , two EC air conditions are mounted on the left and right doors respectively. IP 55 protection level.
- The model information of this outdoor cabinet is shown in Figure 1-1.



Figure 1-1 Model information

1.2 Product Structure

The structure of the XC-A1SD07A outdoor cabinet is shown in Figure 1-2

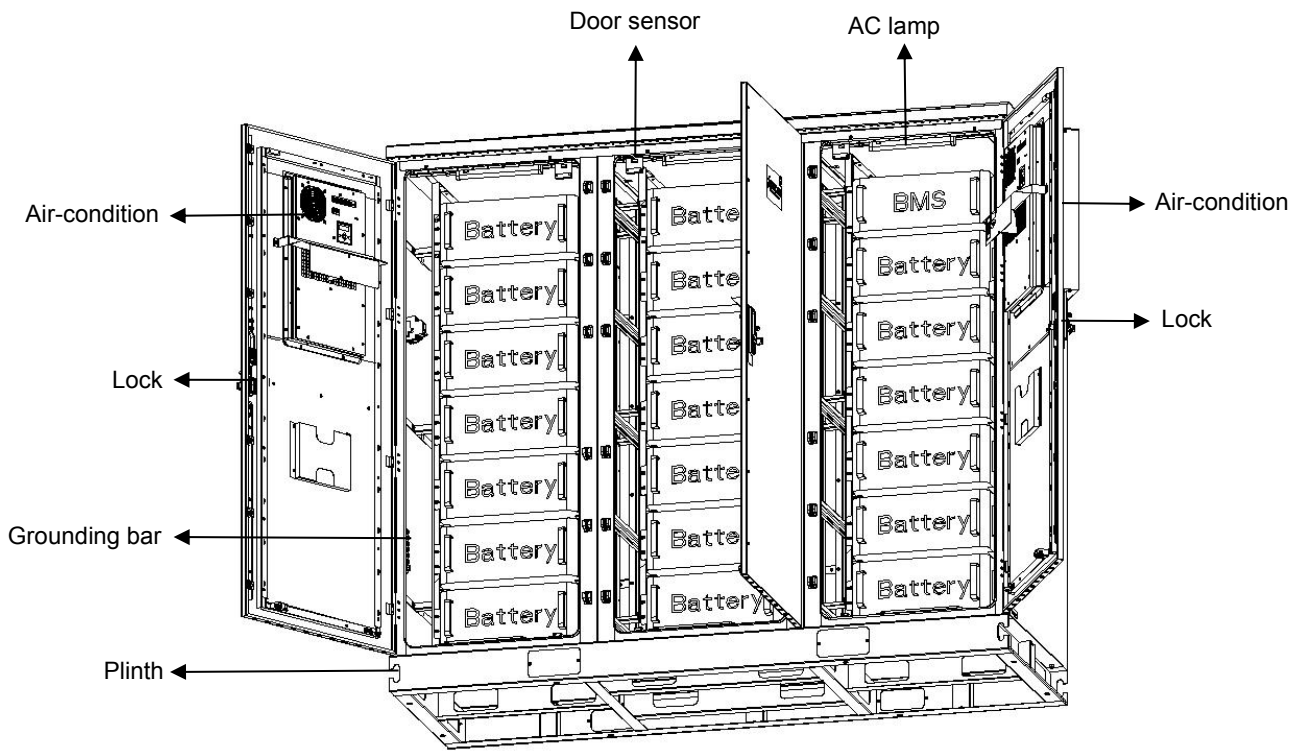


Figure 1-2

1.3 Temperature Control Principle

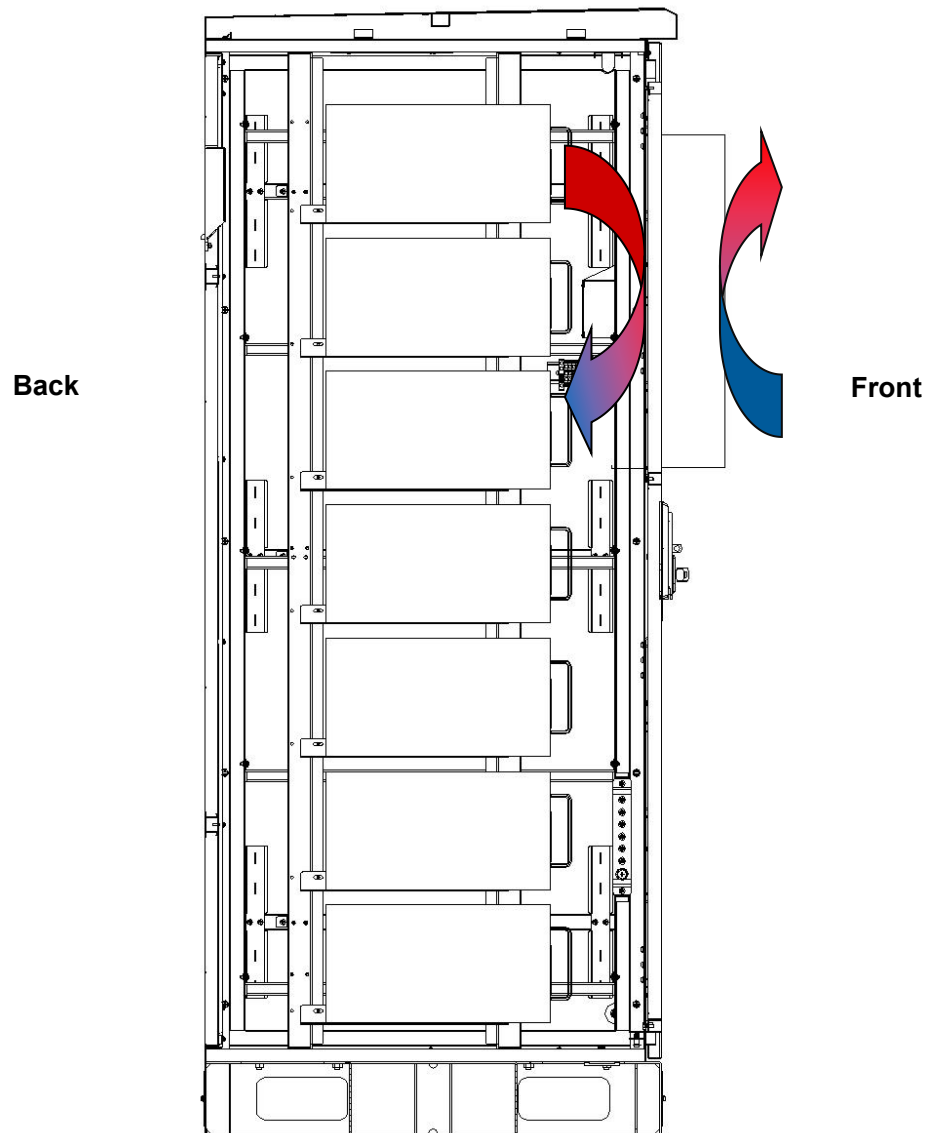


Figure 1-3

1.4 Main Performance Parameters

Item	Spec	Remark	Item	Spec	Remark
Dimensions	H*W*D=1850x2100 x750mm	Refer to Figure1-4	Protection Level	IP55	
Compartment Number	Three Compartment		Fire rating	UL94V-0	
Input Voltage	AC220V		Noise Level	60dB(A)	
Insulation Strength	>1000MΩ/500VDC		Withstand Voltage Strength	>3000VDC /min	



Figure1-4 Dimension drawing

1.5 Executive Standards

- YD T1537-2006 General Requirements for Outdoor Cabinet in Communications System
- IEC 60529-2001





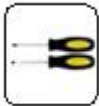
1.6 Operating Requirements

- Environment Temperatures: $-35^{\circ}\text{C} \sim +55^{\circ}\text{C}$
- Relative Humidity: 5%~95%
- Atmospheric Pressure: 62~101Kpa
- Solar Radiation Intensity: $1,120\text{W}/\text{m}^2$
- Altitude: $\leq 3000\text{m}$

2 Packing List

No.	Type	Model	PN	QTY	Note
1	Cabinet	XC-A1SD07A		1PCS	
2	Door key			3PCS	
3	Expansion blot	M12x80		8PCS	
4	Seal Paste			3PCS	0.5KG/PCS
5	User Manual			1PCS	
6	Desiccant			3PCS	0.25KG/PCS

3 Preparatory Tools

Tool Name	Picture	Functionality
Crane or forklift		For lifting or moving the cabinet
Percussion drilling		For drilling installing holes on the cabinet
Hammer		For strengthening bolts on the cabinet.
Monkey wrench		For disconnecting bolts connecting the cabinet body and the wooden pedestal
Screwdriver		For disconnecting bolts connecting other parts of the cabinet

4 Installation

4.1 Cabinet Installation

This cabinet is to be installed and fixed directly on the ground. Specific installation steps are as follows:

- A concrete foundation is recommended in order to install this cabinet. However, the building of a concrete foundation for this cabinet is merely one of the workable ideas, actual scheme for installing this cabinet is subject to construction needs.

- Upon fixing the cabinet onto the ground, drill 8- ϕ 20, 80 mm deep holes on the foundation according to the sizes shown on Figure4-1. And then, fix 8- M12*80 (Figure4-2) bolts to the foundation. After this is done, aim the holes of cabinet to their corresponding bolts. Finally, fasten the cabinet (Figure4-3).

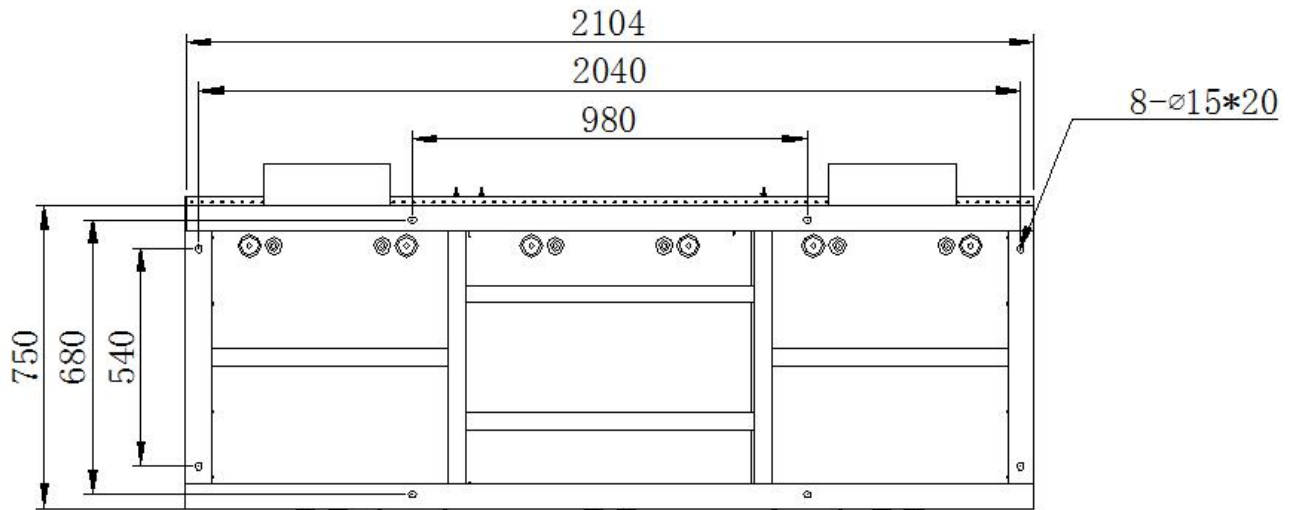


Figure4-1



Figure4-2

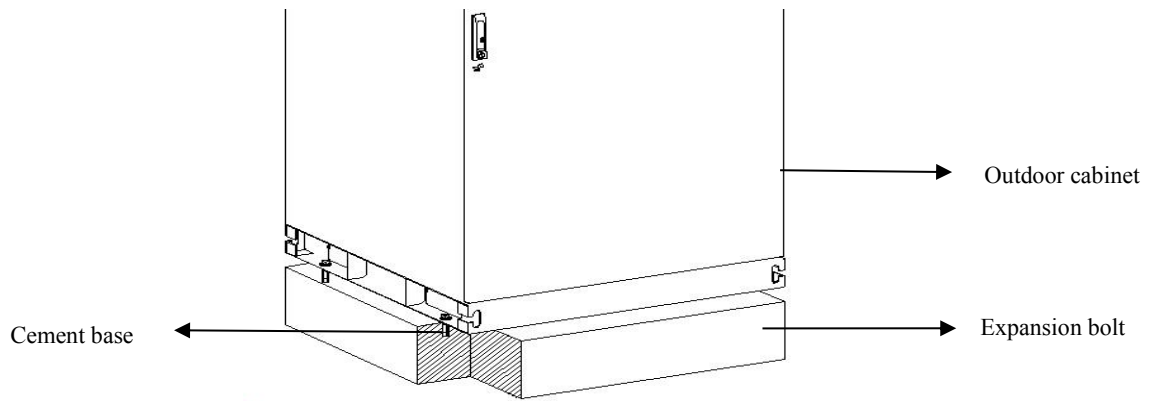


Figure4-3



It is recommended to determine the installation position in compliance with the clearance requirements given in Table 4-1.

Table 4-1 Installation clearances

	Front	Top	Left	Right	Back
Clearances	1200mm	700mm	100mm	400mm	100mm

4.2 Lifting and Moving the Cabinet

- Method to lift the cabinet: Lift the cabinet with a crane by putting the wire ropes through the pedestal (as Figure4-4). Avoid tilting or turning over the cabinet during lifting.
-



Figure4-4



Please avoid tilting or turning over the cabinet during lifting or moving.

5 Operation and Maintenance

5.1 Cabinet Door Operation

Procedures for opening and closing the cabinet door are as follows:

5.1.1 Insert the key into the keyhole, and turn the key clockwise until the door handle pops out.

5.1.2 Turn the handle clockwise 90°, as shown in Figure 5-1. Pull the handle until the door opens.



Figure 5-1 Turn the handle

5.1.3 Adjust the door stay bar to the position shown in Figure 5-2 to prevent the door from closing automatically, the opening angle is 120° (center door only 90°).



Figure 5-2

5.1.4 To close the door, restore the door stay bar to its original position and close the door; finally, turn the handle to its original position and press it down until a click is heard.

5.2 Cable inlet

The external cable shall be through the sealing ring, to ensure good dust and waterproof effect, please note the following points when inletting the cables.

a) Cutting the suitable sealing rubber, the cutting diameter should less than cable diameter, see Figure 5-3.

b) Put sealing glue on the cutting sealing to ensure the sealing performance, see Figure 5-4.



Figure 5-3

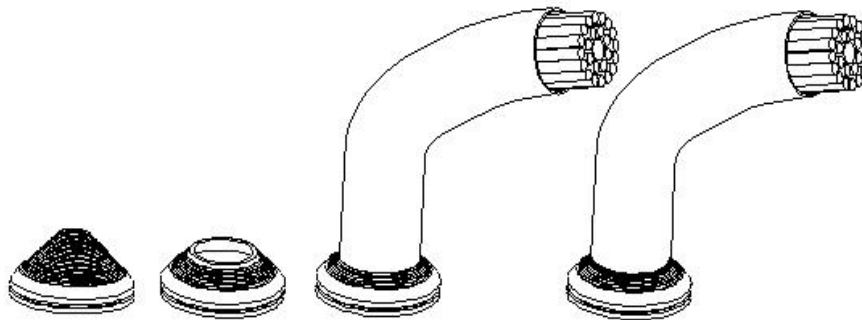


Figure 5-4

5.3 Use and Maintenance of Other Equipment

Refer to the Manual for use and maintenance of other equipment in the cabinet.

6 Precautions and Daily Maintenance

Cleaning and inspection are the main element for maintaining the equipment. It is suggestive that the equipment be maintained once every month. As to places where environment is bad for installation and dust is hugely gathered, the period required for maintenance can be shortened.

- ✓ To prevent unexpected objects, such as rats and moisture, from entering into the cabinet, close the door immediately after the maintenance.
- ✓ When cleaning, keep an eye on the lines, especially optical fibers and cables, to try to prevent them from being squeezed and folded.
- ✓ The air intake opening and the air outlet opening of the cabinet are vulnerable to duct. Therefore, they shall be cleaned once every month to keep air flowing in and out freely.
- ✓ Visual inspection is crucial to inspection. In order to prevent accidents, such as electric

shocks or disrupting the operation of the machine, from happening, do not use hands or other metal tools to knock or pry open the parts of the equipment.

- ✓ Inspect the ground connectivity of internal ground-connecting points and the general ground copper bar. Measures should be taken to repair the damage if bolts used for ground wires are loosed or rusting.

7 Troubleshooting

No.	Symptom	Suggestion
1	Water inflow on the bottom of the cabinet	Check if the door is fully closed.
2	Dust accumulated inside the cabinet	Check if the door is fully closed; Check if the entrance holes on the bottom or the side face of the cabinet are sealed.
3	Abnormal noises inside the cabinet	Check if the internal parts or the joints were installed loosely.
4	Noises in the cabinet increasing	Check if the air filter screens in the air-conditioner and new air units are clogged.



Please contact our company's service staff in a timely manner if malfunctions to the cabinet that are beyond your ability to fix.



Please refer to relevant equipment information and contact equipment manufacturers if other main devices are out of order.

8 Warranty Descriptions

Our company provides warranty for the whole machine and its parts. Details are as follows:

- ✓ Quality warranty for vulnerable parts, one year.
- ✓ Quality warranty for non-vulnerable parts, three years.

Fans, filter screens and anti-lighting modules inside this machine are regarded as vulnerable parts.



The scope of warranty does not include damaged devices that are refit by the customers without our company's permission, repaired by staff not certified by our company, operated in violation of instructions prescribed in the Manual.

9 Abandonment

Protecting Environment, Preventing Pollution is our company's target and principle for environmental management. Below are warnings about the impact on the environment in the process and after the use of our company's products that our company wants to share with you:

1. Wasted cartons and wasted plastic materials can be recycled. Please dispose of these objects in classified containers after use.
2. Waste batteries are recyclable hazardous wastes. Improper disposal may cause serious environmental pollution. Please dispose of them in classified containers after use.
3. While being operated, this product may produce hazardous gases such as H₂, SO₂, etc. Please keep the installation and operating places well-ventilated.
4. Any products have their service life. Whether it meets its expiration date or it's time for a renewal, this product should be delivered to the local waste disposal institution for disposal.