INSTALLATION & OWNER'S MANUAL

Protocol Conversion Kit

MA3-PCK (KA3-PCK)

Original Manual
Thank you for purchasing our product.
Before using the unit, please read this manual carefully and keep it for future reference.

Contents

Safety Precautions

Precautions

The Operation and Installation Manual of this product describes how to properly handle the product, how to prevent harm to others and prevent property losses, as well as how to use the product correctly and safely. Read the following carefully, make sure you understand the content (symbols and marks), and observe the precautions below.

⚠ Caution

Read the safety warnings carefully prior to installation.
Be sure to observe the important safety precautions provided below.
Meanings of labels:

⚠ Warning	Indicates that improper handling may lead to personal injury or material loss.
⚠ Caution	Indicates that the operations will be affected due to ignoring a precaution.

After the installation is completed, confirm that no errors occur during the trial run, and hand over the manual to the customer for safekeeping.

Icon description

Icon view	Name	
	Prohibited. Information about what is specifically prohibited is provided using graphs or texts in the icon or nearby.	
	Mandatory. A specific mandatory requirement is provided using graphs or texts in the icon or nearby.	
 Warning	Commissioned installation	Ask your local dealer or professionals to install the product. Installation personnel must have relevant professional knowledge. Incorrect installation by non-professionals may lead to a fire, electric shock, or injury.
 Warning of Use	Prohibited	Do not use combustible paints to spray directly on the data converter as this may cause a fire.
	Prohibited	Do not handle the product with wet hands, and prevent water from seeping into the device. Otherwise, an electric shock may occur.

⚠ Warning

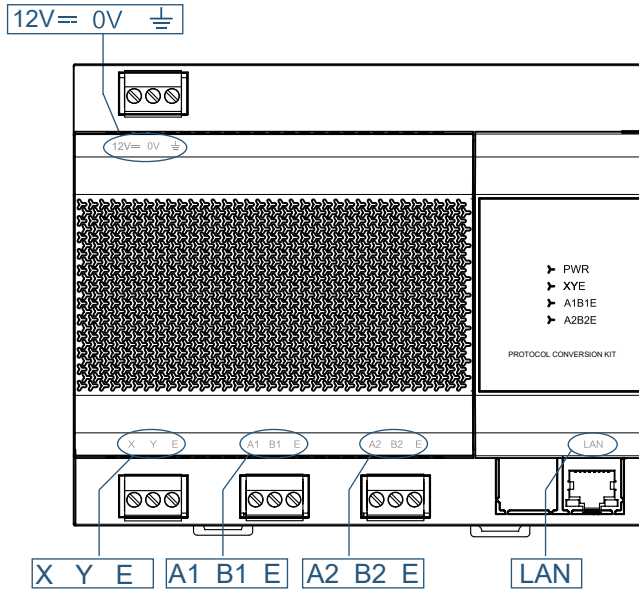
- This unit must be installed by professional technicians. Users are not allowed to install the unit themselves; otherwise, personal injury or damage to the controller may occur.
- Other electrical wiring work must be carried out by a professional technician according to the circuit diagram. All wiring work must comply with electrical safety specifications.
- It is prohibited to modify the use and function of the product without permission.

⚠ Caution

- Do not install the product in a location where flammable gas can easily leak. Any leakage within the vicinity of the device may cause a fire.
- The wiring must be compatible with the controller current.
  Be sure to check the wiring before powering on the product. Never install the machine while the power is on.
- In the event of any malfunction, please contact a professional technician.
  Do not disassemble or repair the unit without authorization.
  This equipment is not suitable for places where children gather.

Product Description

The protocol conversion gateway (here in after referred to as "gateway") converts the V6/S6 series VRF protocol into the V8/S8 series VRF protocol, enabling the V6/S6 series VRF system to connect to the V8/S8 centralized control gateway.

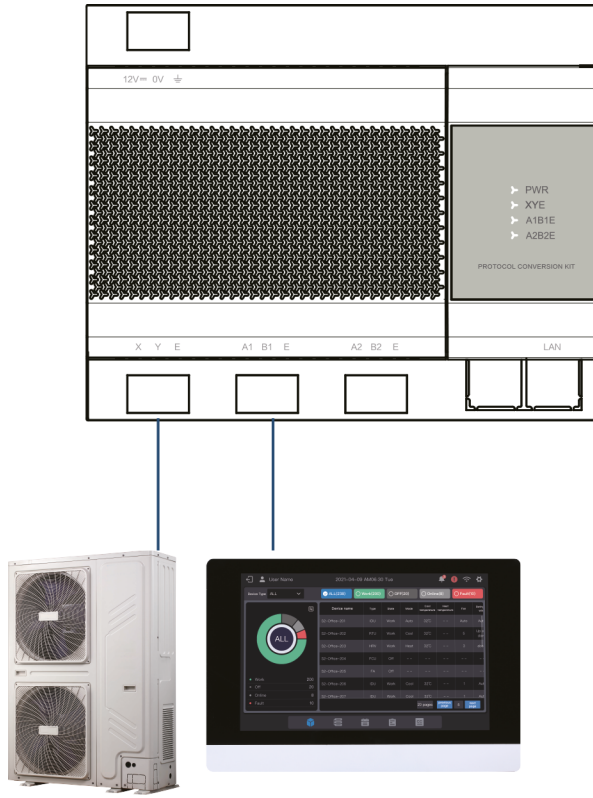


Port	Function
Power	Power supply 12 V DC
X Y E	Connected to V6/S6 VRF ODUs, with up to 8 refrigerant systems supported (up to 64 IDUs)
A1 B1 E	Connected to the V8/S8 10.1 centralized controller
A2 B2 E	Reserved

Indicator	Type	Status	Function
PWR	Power supply	Off	Gateway powered off
		Steady on	Gateway powered on
X Y E	X1Y1E communication status	Off/steady on	Abnormal communication
		Blink	Normal data
A1 B1 E	A1B1E communication status	Off/steady on	Abnormal communication
		Blink	Normal data
A2 B2 E	A2B2E communication status	Off/steady on	Abnormal communication
		Blink	Normal data

Operating ambient temperature	-10 °C to +50 °C
Operating ambient humidity	RH 25 % - RH 90 %

Wiring Diagram



1 Debugging and Solutions

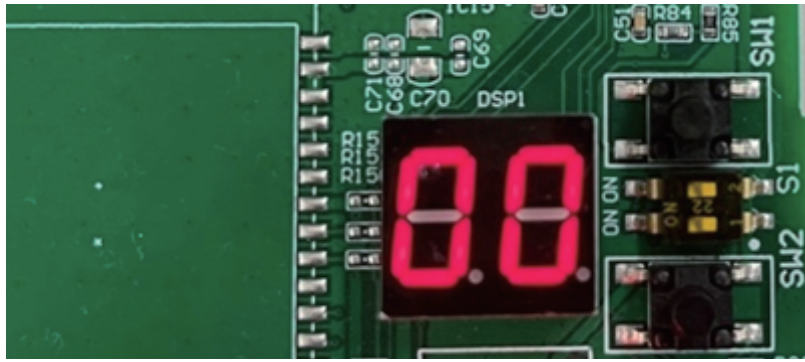
1.1 Debugging

Connect the X, Y and E ports on the ODU to those on the gateway. Power on the gateway. (*1)

(*1) When the refrigerant system is powered on, system detection will take some time. During this period, the gateway may obtain incorrect information about the refrigerant system. You are advised to connect with the gateway after the refrigerant system is stable (about 15 minutes after power-on, depending on the actual refrigerant system).

The A1, B1, and E ports are connected to the centralized control gateway. Debug the gateway according to its user manual.

Open the top cover of the gateway. You can see a digital display:



Once powered on, the digital display shows the software version. After the software runs properly, the numbers of IDUs and ODUs are displayed alternately.

When the number of IDUs is displayed, the dot in the lower right corner of the digital display lights up. When the number of ODUs is displayed, the dot in the lower right corner of the digital display lights up.

Number of IDUs (Dot in the lower right corner of the digital display on)	Number of ODUs (Dot in the lower right corner of the digital display off)
	

1.2 Solutions

If the gateway does not detect the refrigerant system (with the displayed number of IDUs and that of ODUs being 0), follow these steps to check the communication between the gateway and the refrigerant system:

1. Check whether the refrigerant system is just powered on. After the refrigerant system stabilizes (approximately 15 minutes after the power-on, depending on the refrigerant conditions), check whether the gateway can detect the IDUs and ODUs.
2. Check whether the ports between the gateway and the refrigerant system are correct. The gateway should be connected to the ODUs through the X, Y, and E ports.
3. Check whether the wiring between the gateway and the refrigerant system is correct, and whether the X/Y/E port of the gateway is connected to the X/Y/E port of the ODU, respectively.
4. When multiple refrigerant systems are connected, check whether the IDUs use different addresses and whether the ODUs use different addresses.

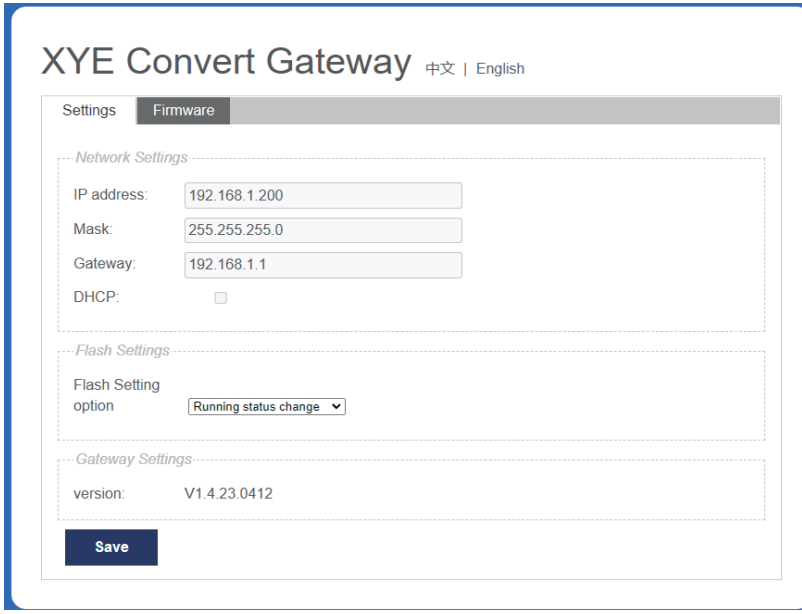
If the gateway detects the refrigerant system, but the centralized control platform connected with the gateway fails to detect the system, please follow these steps to check the communication between the gateway and the centralized control platform:

1. Check whether the gateway has just detected the refrigerant system. The centralized control platform can detect the refrigerant system some time after the gateway detects the system. Try waiting a bit. (Approximately 5 minutes, depending on the number of connected refrigerant systems)
2. Check whether the ports between the gateway and the refrigerant system are correct. The gateway should be connected to the ODUs through the X, Y, and E ports.
3. Check whether the wiring between the gateway and the refrigerant system is correct, and whether the X/Y/E port of the gateway is connected to the X/Y/E port of the ODU, respectively.
4. When multiple refrigerant systems are connected, check whether the IDUs use different addresses and whether the ODUs use different addresses.

Web Configuration

1 System Settings

The IP address of the gateway is 192.168.1.200. The IP address for accessing the PC on the Web page of the gateway must be on the same subnet segment as the gateway. Upon gateway setting, enter "192.168.1.200" in the address bar in Google Chrome (recommended). The Web page of the gateway is displayed, as shown in the figure below.



The table below describes the parameters.

Parameter page		Description
Power failure memory mode setting	Operating status change	During startup, the gateway records real-time operating status of key parameters such as mode, set temperature, and automatic heating temperature. In case any status change is detected, the gateway will automatically update data to the Flash.
	Control parameter change	The gateway records control command parameters from the upper computer, including set mode, set fan speed, set temperature, automatic heating temperature, and swing control. In case any status change in these parameters is detected, the gateway will automatically update data to the Flash.
Gateway information	Version	Software version of gateway firmware

2 Firmware Upgrade

To update the gateway firmware, click "Upload" and select the upgrade package.

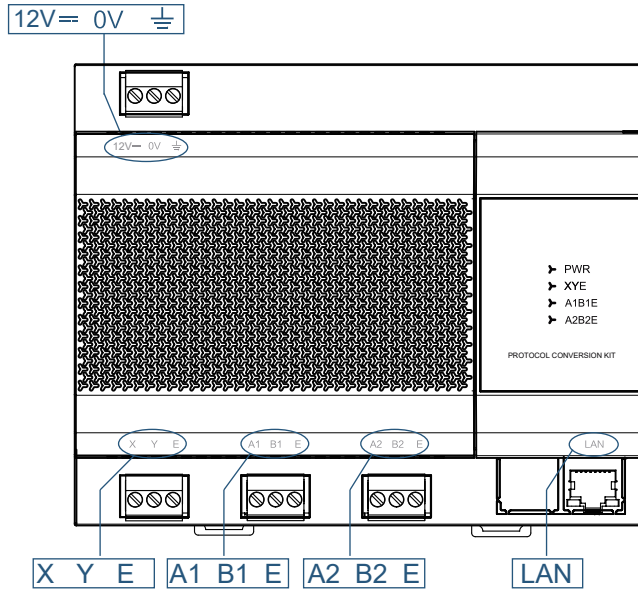
Once the progress bar reaches 100%, the upgrade package has been successfully uploaded. Following the restart of the gateway, the firmware will be automatically updated.

⚠ Caution

- Only professionals can use this function. Otherwise, the gateway may be damaged and cannot be used.

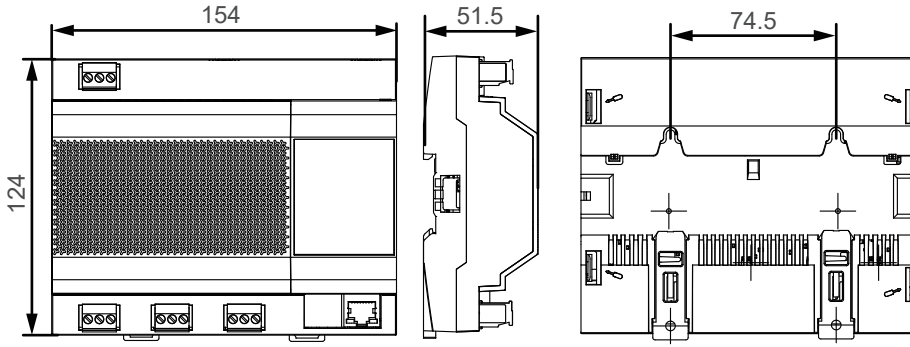
Installation Instructions

1 Product Overview



2 Product Dimensions

Unit: mm



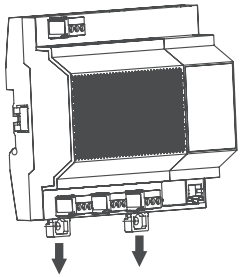
3 Installation Accessories

Please check that you have all the following parts.

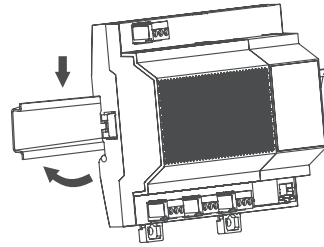
No.	Name	Quantity	Remarks
1	Self-tapping screw	4	ST4*20
2	Plastic expansion pipe	4	For installing the controller onto the wall
3	3-pin black terminal	3	For communication
4	3-pin gray terminal	1	For connecting the power supply

4 Installation Method

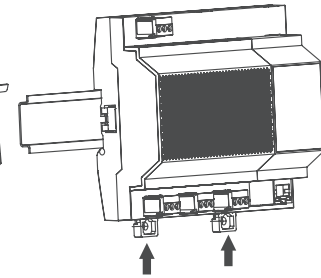
I. Mounted on Guide Rails



Pull open the handle buckle

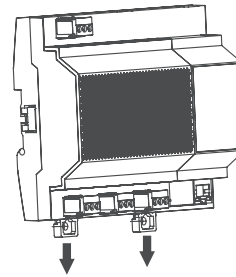


Snap fit the product on the guide rail



Close the handle buckle

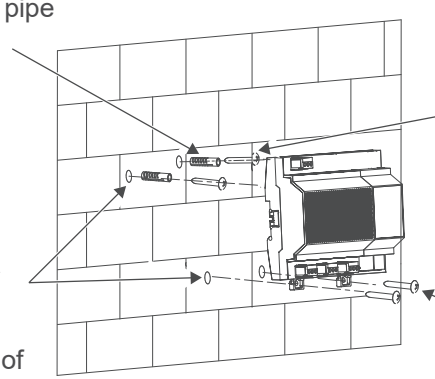
II. Wall-mounted



Pull open the handle buckle

Plastic expansion pipe

Phillips head screw ST4*20 (This screw is pre-inserted into the wall and the distance from the highest position of the nut to the wall is 5.5mm)



Drill with a 6mm drill bit, with a drill depth of no less than 30mm

Phillips head screw ST4*20

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