

Technical Specification

(ROOFTOP Unit Series 2)

Bare Electric Heater

For electric heating

Zhenjiang Dongfang Electric Heating Technology
Co., Ltd.

January 3, 2025

I. Precautions:

Read these operation instructions carefully to become familiar with and properly use this product before it is installed and used. The following instructions are specifically provided to achieve the intended operation effect regarding proper installation and use of our product:

- (1) This product is not suitable for anyone with deteriorated physical performance, sensory ability or mental capacity, or those with little experience and knowledge (including children), unless they are supervised or instructed by their guardians who are responsible for their safety regarding how to use it. Children should be properly supervised to ensure that they will never play with this equipment.
- (2) Select a model properly based on the actual operating environment; otherwise, the accessibility in its use may be affected.
- (3) This product cannot be installed in any environment with corrosive, flammable or explosive substances, or any place with special requirements (such as kitchen). Otherwise, the normal operation of the unit will be affected or the service life will be reduced, or even a fire hazard or serious injury will occur. For those special places above, use special air conditioners with the corrosion or explosion protection function.
- (4) If this product requires installation, removal or maintenance, contact a dealer designated by us or our local service center for professional support. The user shall not carry out any unit removal or maintenance without permission; otherwise, this may result in related damages for which we will assume no liability whatsoever.
- (5) All the illustrations and information contained in these operation instructions are for reference only. We will make our product better through continuous improvement and innovation. This product is subject to adjustment. Please refer to the actual product.

Exceptions

The manufacturer assumes no liability whatsoever for any personal injury or property damage arising from any of the following causes:

- (1) Any damage to this product due to improper use or misuse;

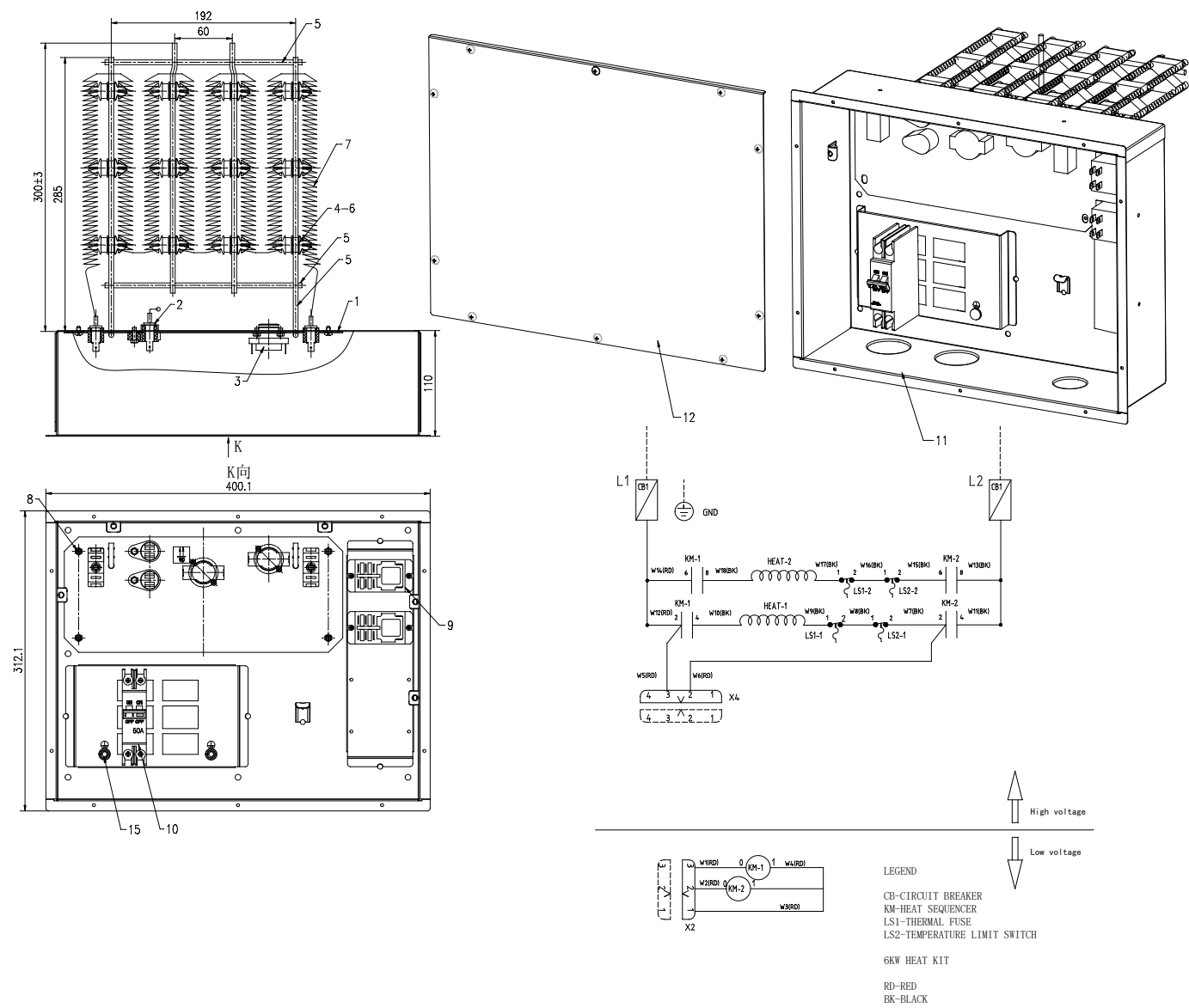
- (2) Any change to, replacement or maintenance of, or use of this product with another equipment, which goes against the manufacturer's operation instructions;
- (3) It is verified that a product defect directly arises out of corrosive gas;
- (4) It is verified that a defect is caused by improper operation during transportation of this product;
- (5) Failure to follow the operation instructions or related regulations while operating, repairing, or maintaining the unit;
- (6) It is verified that a dispute arises out of the quality specification or performance of parts produced by other manufacturers; or
- (7) Any personal injury or property damage caused by natural disasters or force majeure.

II. Product Structure:

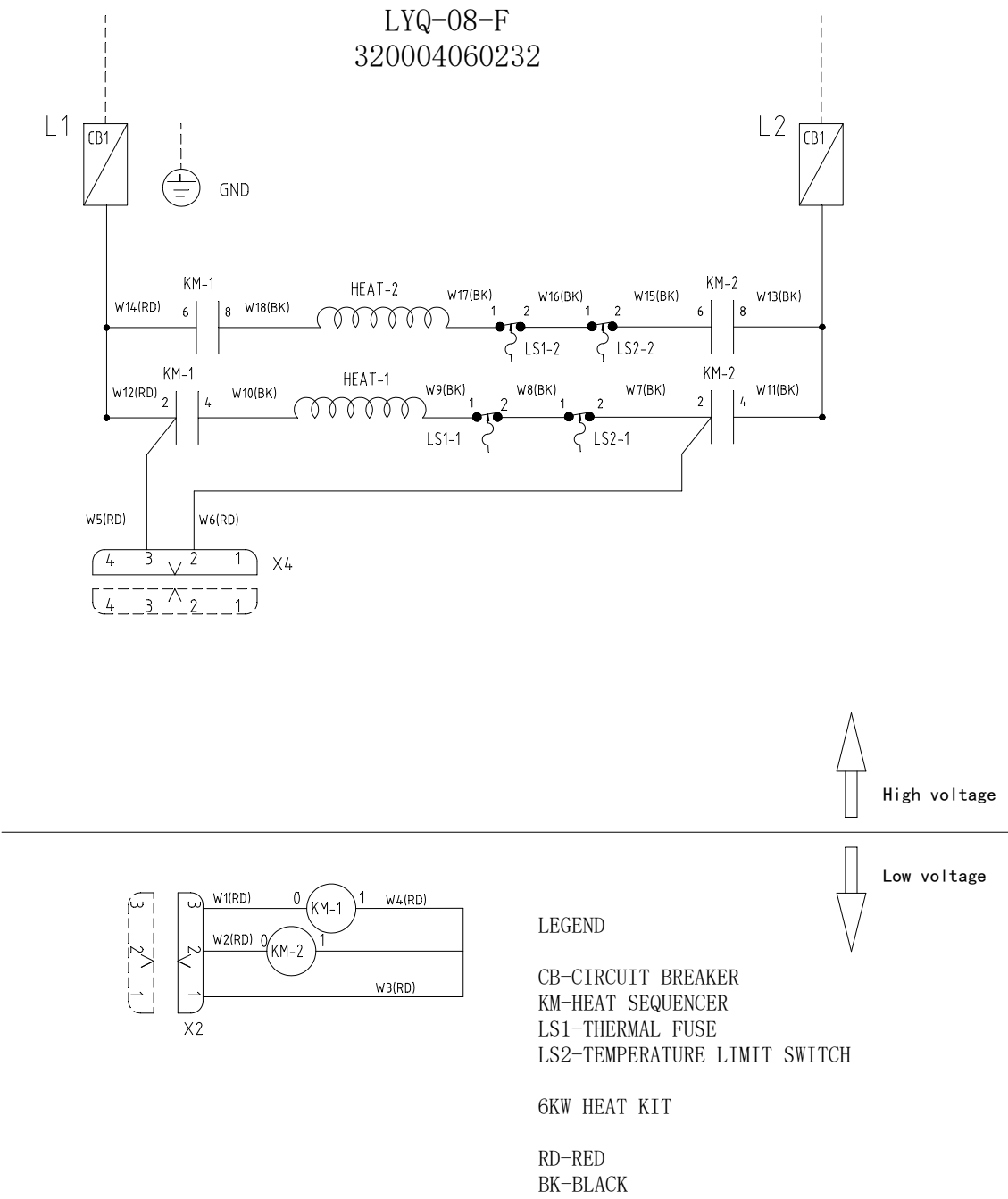
① Model: LYQ-08-F Material Code: 320004060232

(a) Specification: 240 V / 6 KW

(b) Overall dimension drawing



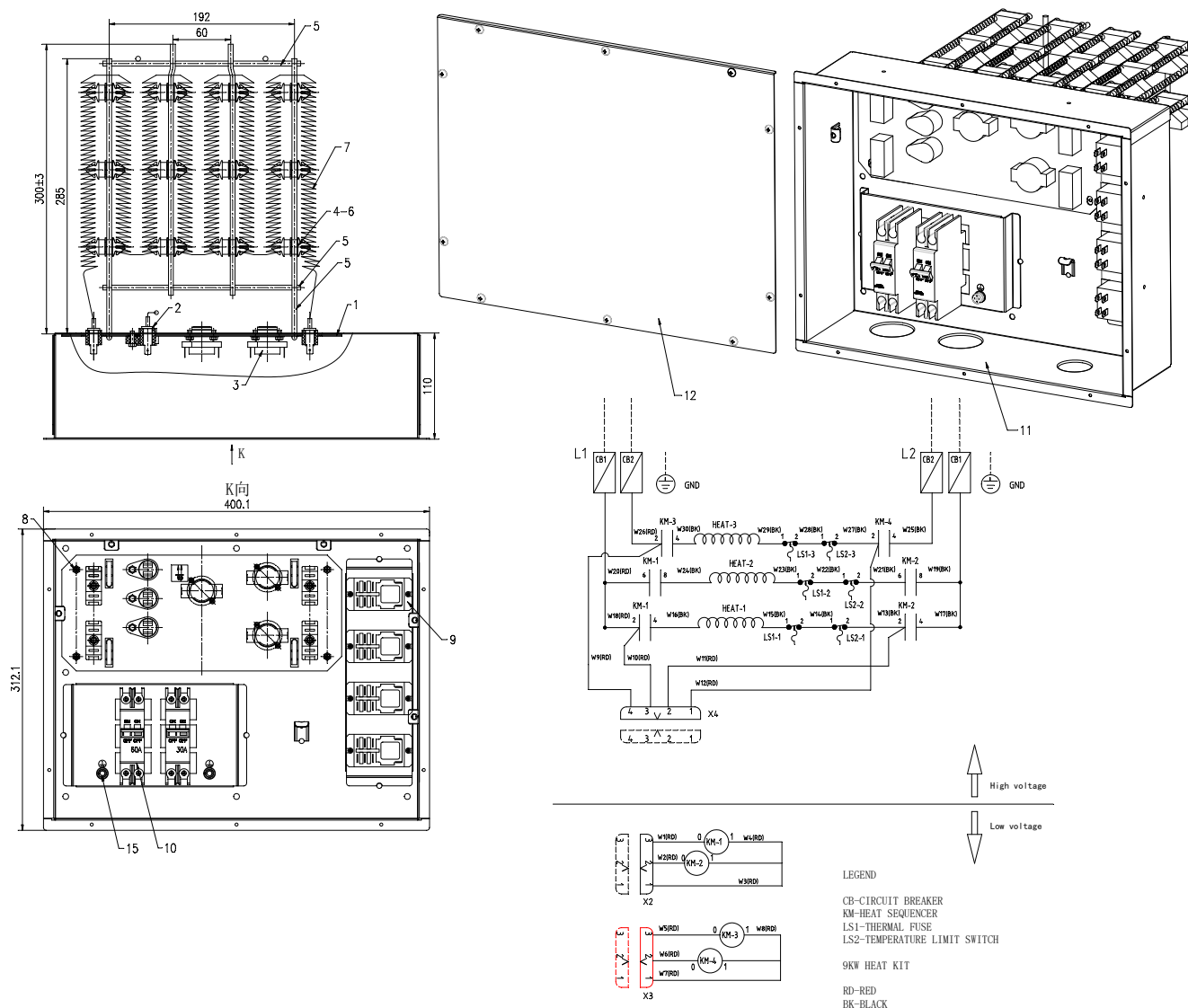
(c) Wiring diagram:



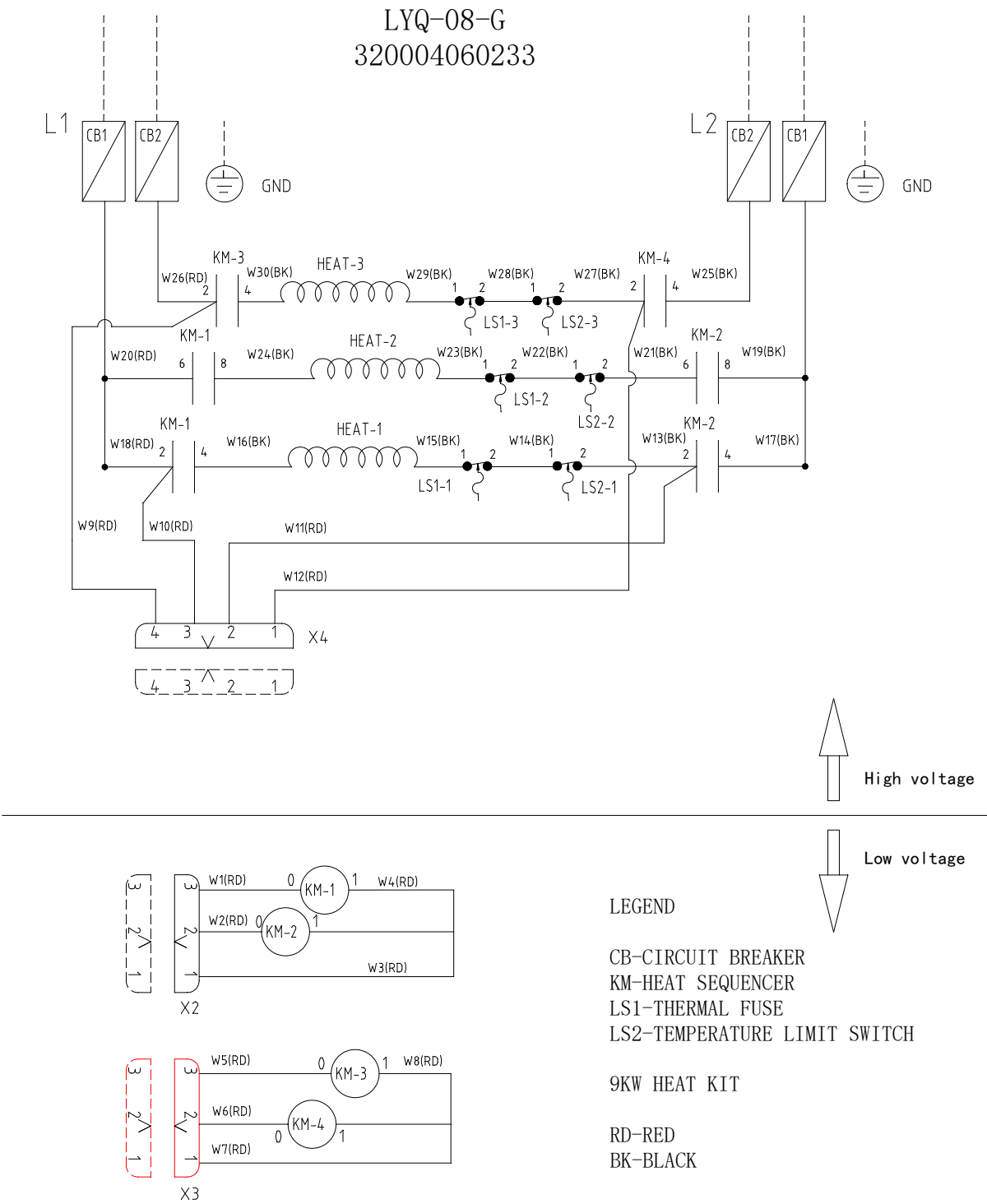
② Model: LYQ-08-G Material Code: 320004060233

(a) Specification: 240 V / 9 KW

(b) Overall dimension drawing



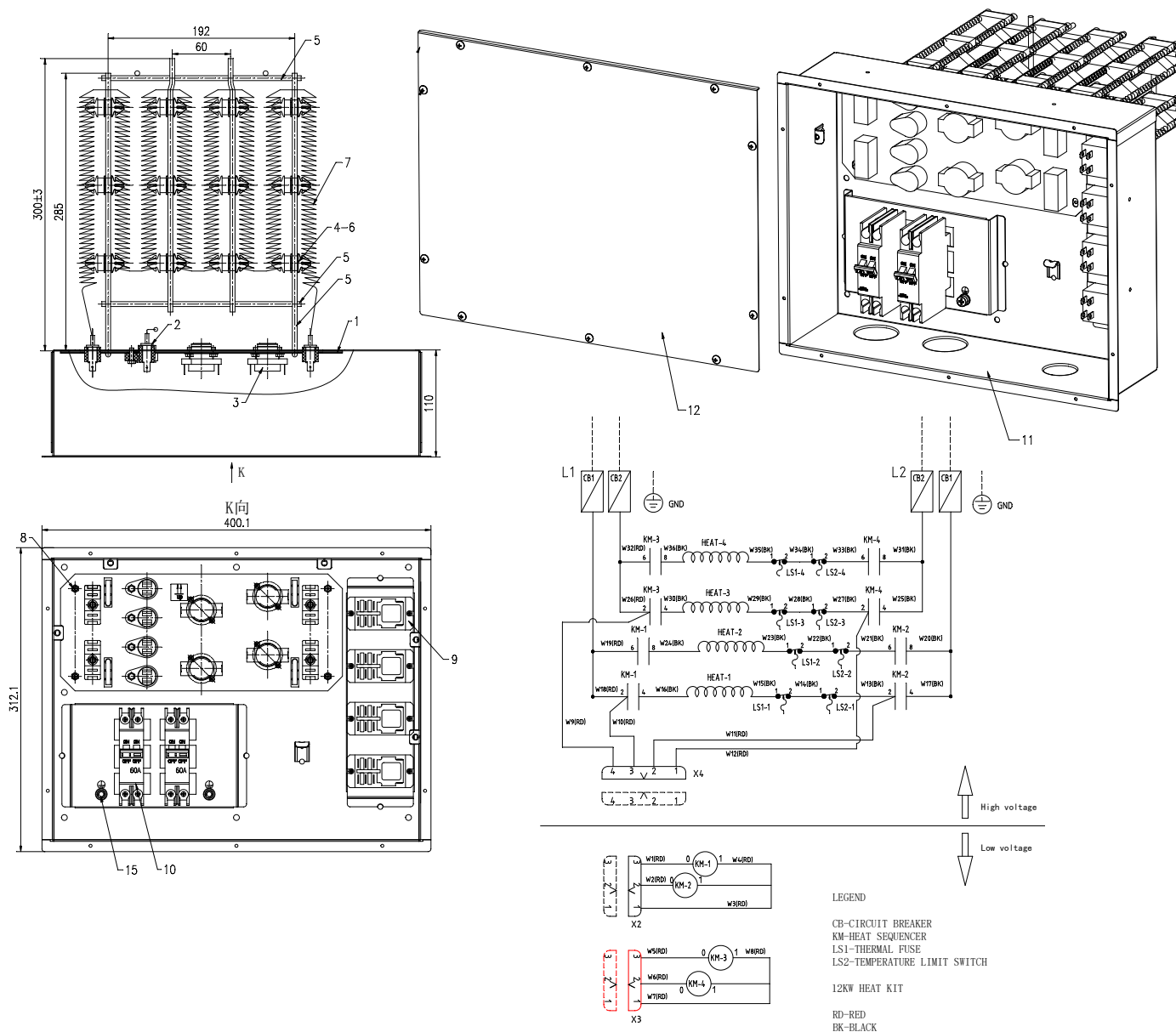
(c) Wiring diagram:



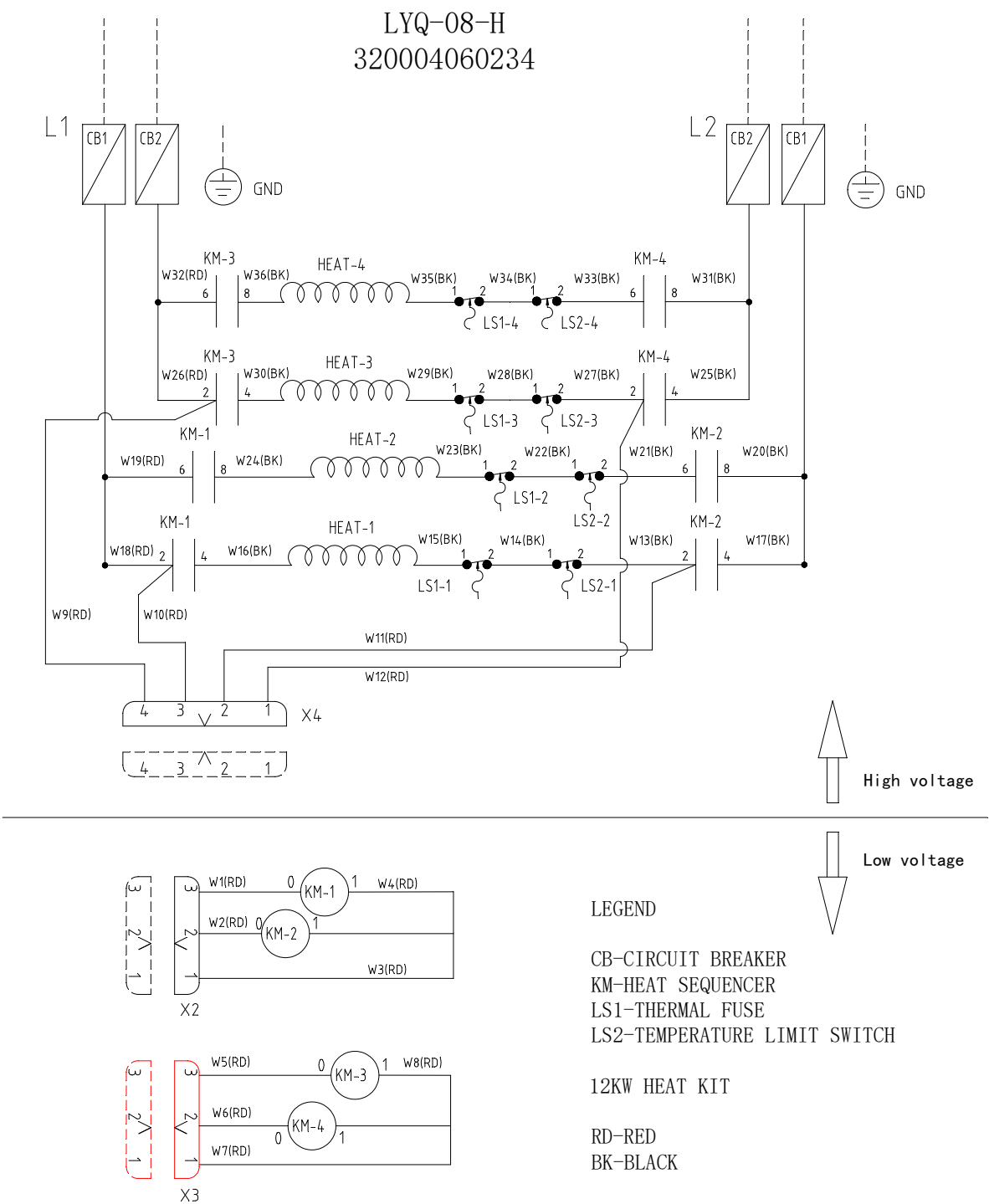
③ Model: LYQ-08-H Material Code: 320004060234

(a) Specification: 240 V / 12 KW

(b) Overall dimension drawing



(c) Wiring diagram:



III. Major Materials

S/N.	Description	Material	Specification	Remarks
1	Mounting plate	Galvanized steel plate	t=1.2	
2	Fuse assembly		250 V, 25 A, 98 °C	
3	Temperature controller		250 V, 25 A, 60/40	
4	Ceramic module	95% alumina ceramics		
5	Frame strip	SUS304	Φ5	
6	Clamp	SUS304		
7	Heating element	Cr20Ni80		
8	Screw	Trivalent chromium electroplating		
9	Relay		JT92F-024A6-2A21S(310)	
10	Circuit breaker		30A/45A	
11	Fixed plate assembly (electrical box) (medium grey)	Hot-dipped galvanized sheet (surface plastic coating)		
12	Electrical box cover (electric heater) (medium grey)	Hot-dipped galvanized sheet (surface plastic coating)		
13	Wire		UL1015	
14	Wire		UL1332	
15	Bolt assembly		M6X16	Green

IV. Technical Requirements:

1. Parts should be firmly fixed without looseness.

Spot welding should be used for the mounting plate, frame strip, and clamp.
2. Dimensions without individual tolerance indications are subject to Grade C defined in GB/T1804.
3. For electric strength, no breakdown or flashover should occur when dielectric strength is AC1800V/S at 5 mA.
4. Cold insulation resistance $\geq 100 \text{ M}\Omega$
5. Leakage current at the operating voltage $\leq 0.5 \text{ mA}$.
6. All materials should comply with corresponding requirements in the *Toxic and Hazardous Substances Control for Electric Heaters* (DF-3-YF-002).
7. Firm assembly should be ensured between parts without warp or deformation as a whole.
8. No Chinese text is allowed for an entire part.
9. Standards QJ/GD12.10.008 and Q/321191 AAM008 shall be followed.

Installation Instructions

Precautions of the Electric Heater



Attention for Installer

Be sure to be fully familiar with this *Installation Manual* before you install this product. Follow all the safety warnings. Keep in mind during installation or maintenance that you are responsible for installing this product and instructing customers regarding how to use it, in a safe manner.

RISK OF ELECTRIC SHOCK CAN CAUSE INJURY OR DEATH: DISCONNECT ALL REMOTE ELECTRIC POWER SUPPLIES BEFORE SERVICING.

RISQUE DE CHOCS ÉLECTRIQUES. PEUT CAUSER DES BLESSURES ET MÊME ENTRAÎNER LA MORT. COUPER LES SOURCES D'ALIMENTATION À DISTANCE AVANT LE DÉPANNAGE.

Precautions

- Be sure to shut off all power supplies before you try to install this electric heater. There might be several circuit breakers.
- A safety protection device must be provided at the power inlet connecting to the cabinet.
- Only copper conductors can be used.
- Installation must comply with the national electrical specification and other applicable norms.

If this equipment is to be installed in a closed area (such as garage or utility room) where there is any device that will generate carbon monoxide, ensure that such area is well-ventilated.

1. Remove the sheet metal of the whole machine and place the removed panel properly.





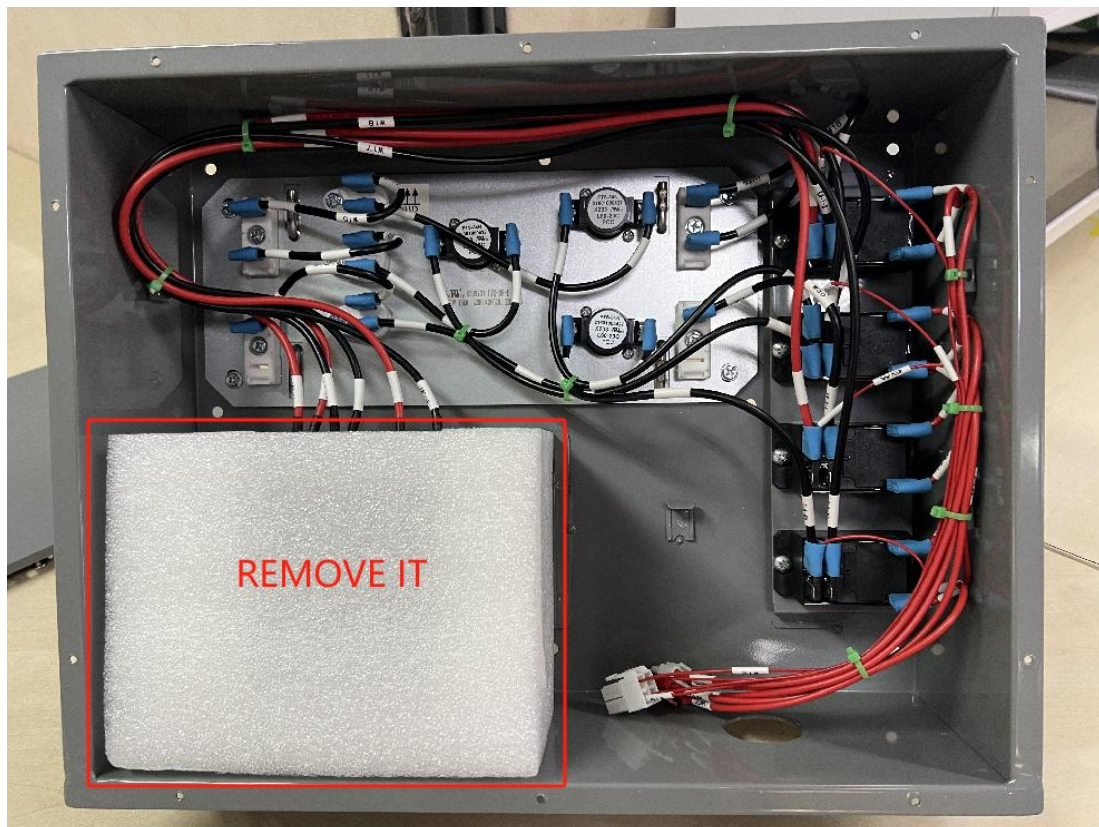
2. Pull out the sheet metal.

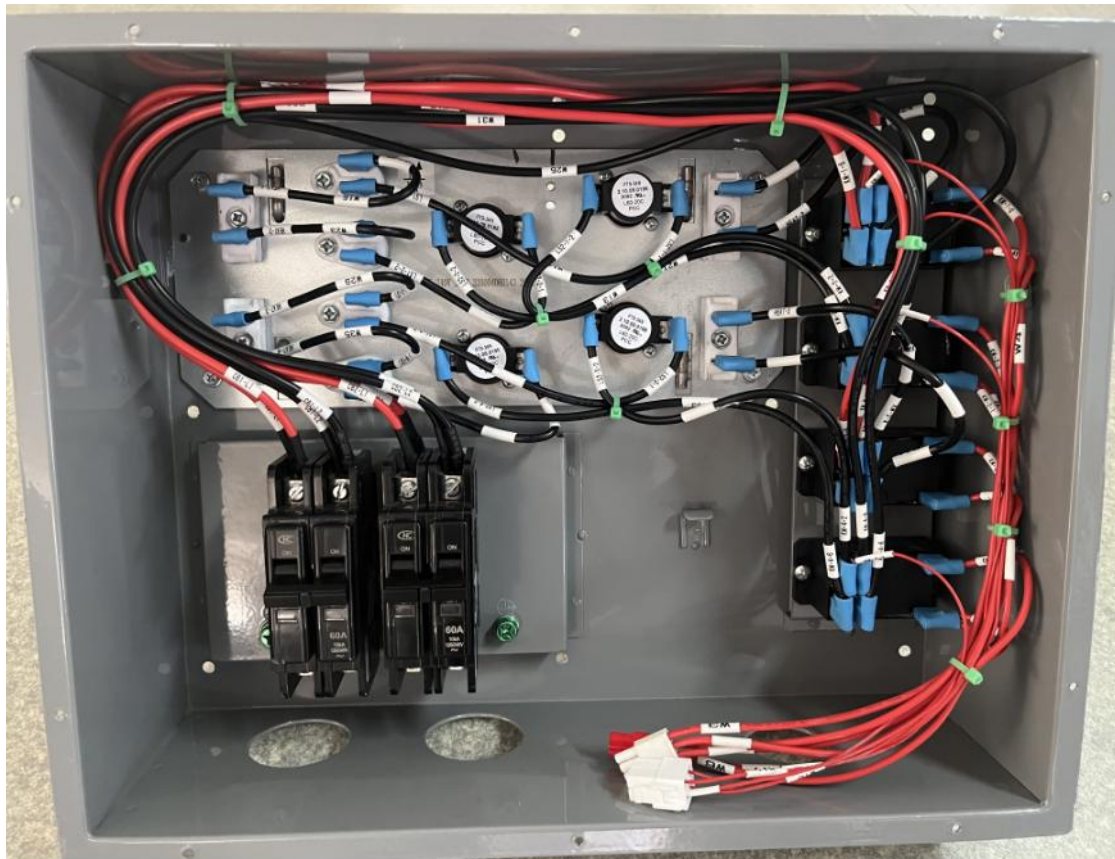


3. Remove the mounting plate at the mounting holes of the electric heater.

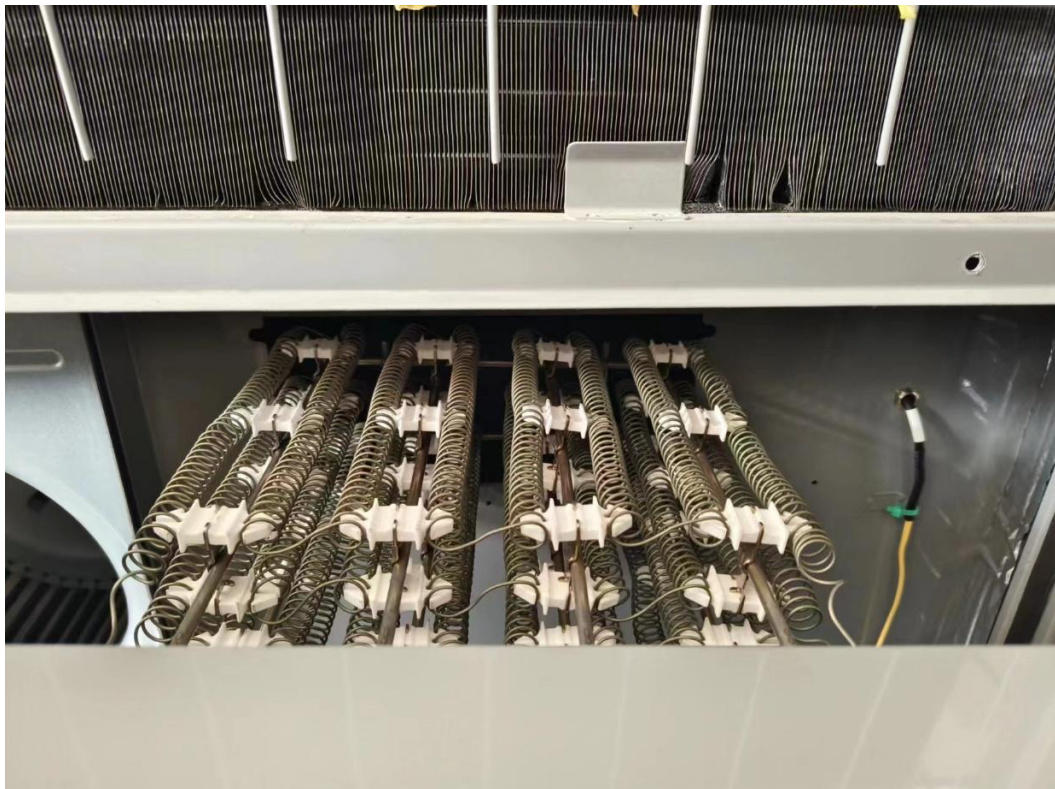


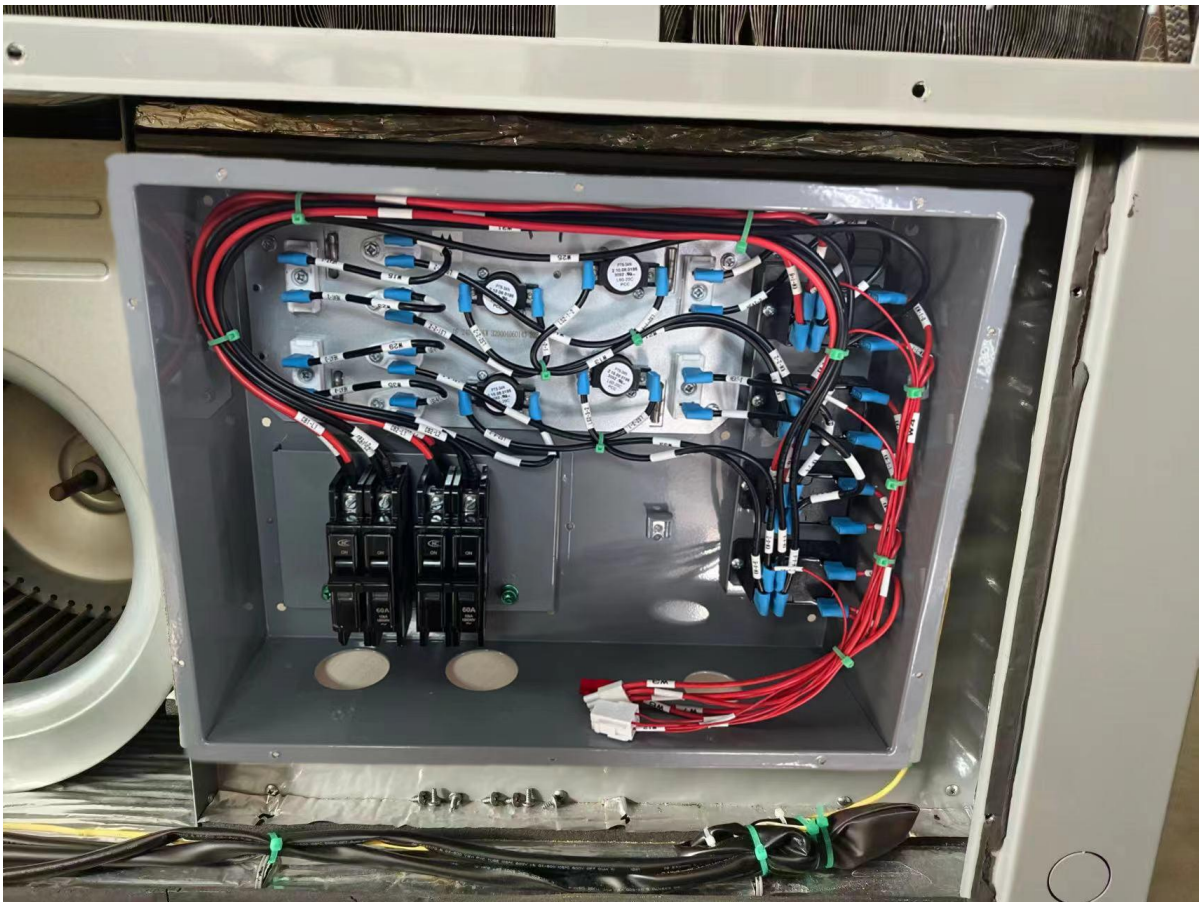
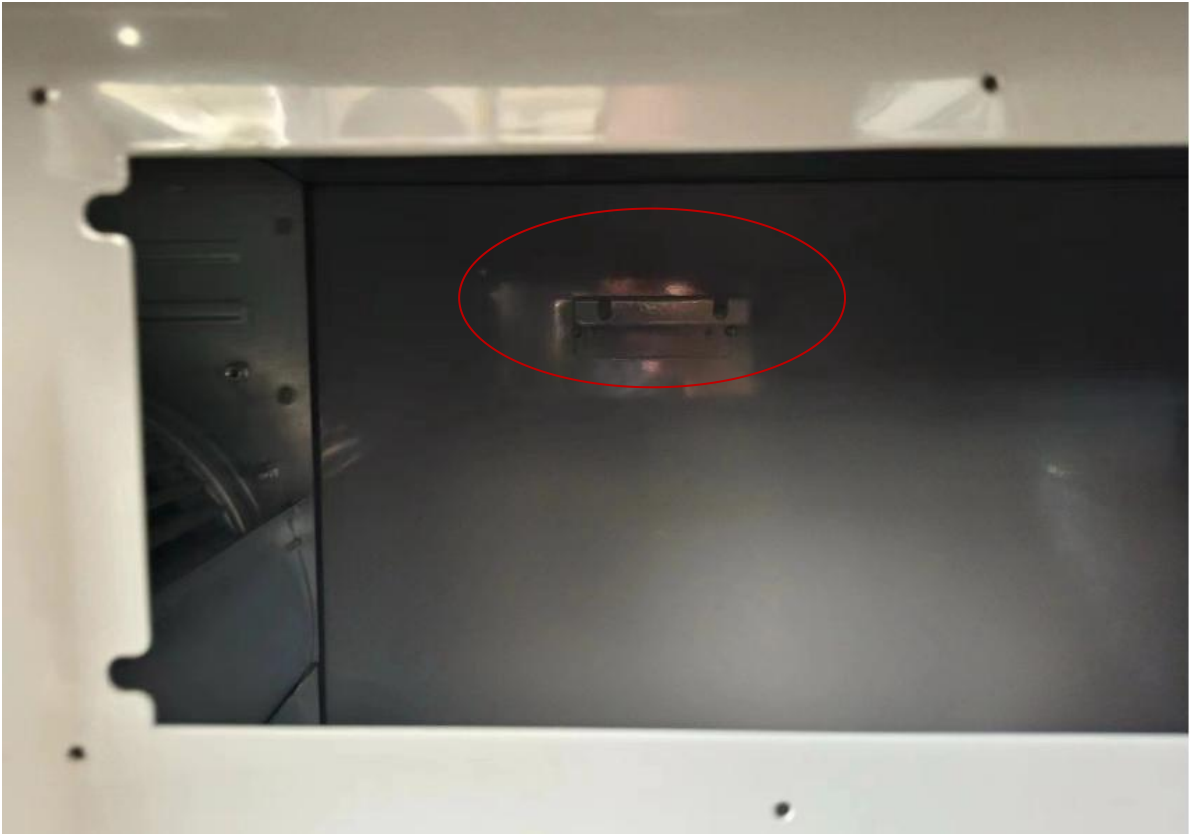
4. Remove the panel of the heater. Please note that this pearl cotton is used to protect the circuit breaker, remove it when installing the unit and do not leave it in the heater module.





5. Install the electric heater where the metal plate is removed at Step 3. There are two slotted holes inside. They are used to fix the bracket of the electric heater. Fix and mount it properly inside the sheet metal of the electric heater with seven screws.





6. Connect the terminal of the electric heater. For the same specification, pay attention to colors during plug-in connection.



7. Install and firmly fix the panel of the electric heater with ten screws. Install the sheet metal of the whole machine in place and then fix it with ten screws.



The pictures are for reference only, and the specific objects are mainly based on objects.

S/N.	Model	Code	Specification	Remarks
1	LYQ-08-F	320004060232	240 V / 6 KW	
2	LYQ-08-G	320004060233	240 V / 9 KW	
3	LYQ-08-H	320004060234	240 V / 12 KW	