

“❄️ ⏰” key instruction:

Under running status, press and release the “❄️ ⏰” key (Defrost surplus time), the “Room Temp.” display screen appears defrosting surplus time and system exit 5s later.

“❄️” key instruction:

Under running status, the defrost time and the defrost cycle is set not as “0”, under the non-defrosting status, the defrost sensor temperature is lower than the setting defrost stop temperature, pressing the “❄️” key (“Forcible defrost” key) for 5s to enter the forcible defrosting status, the defrosting indicator light is on. Under running status, during the defrosting procedure, pressing the “❄️” key (“Forcible defrost” key) for 5s to exit from defrosting status, the defrosting indicator light is off.

“❄️” key instruction:

Under running status, and non-defrosting, non-refrigerating, no-dripping, when the storage temperature is higher than the “stop temp.” meantime is lower the “start temp.”, pressing “❄️” key (“Forcible refrigerating” key) for 5s to enter forcible refrigerating status, refrigerating indicator light flashes when compressor delay time not exceed the set delay time: Refrigerating indicator light is on when compressor delay time exceeds the set delay time.

Under running status, pressing “❄️” key (“Forcible refrigerating” key) for 5s to exit from the refrigerating status, the refrigerating indicator light is off.

“▲ 🔔” key instructions:

Under running status, press and release the “▲ 🔔” key to cancel the alarm sound.

“▼” key operation instruction:

Under running status, press and release “▼” key, the “Room Temp.” display screen appears the defrosting sensor’s temperature, 5s later it exit automatically.

Function control output:

1) Compressor control:

● Compressor start up when all the following conditions are satisfied:

- Compressor delay time exceeds the setting compressor delay time.
- Under the non-defrosting, dripping while defrost is not going status, the storage temperature is \geq the setting start temperature or when the forcible refrigerating or hot gas defrosting.

● Compressor close when any of the following condition is satisfied:

- The storage temperature \leq the setting stop temperature
- When the electric heating defrosting start
- When hot gas defrosting is end
- When the forcible refrigerating is end

2) Defrost control

Defrosting start when all the following conditions are satisfied:

- Both defrost time and defrost cycle are not set as “0”
- The storage temperature $<$ the setting defrost stop temperature
- When system reaches the setting defrost cycle time, or the forcible defrosting starts.

Defrosting stops when any of the following condition is satisfied:

- When defrost time is set as “0”
 - When the defrost cycle is set as “0”
 - Defrosting running time runs out
 - Defrosting temperature is higher than defrosting stop temperature
- e) Pressing the “❄️” (“forcible defrost” key) to end defrosting

3) Fan control

When the fan running mode is set as:-1: Fan continues to work, and fan stops in the process of defrosting.

When the fan running mode is set as: 0: Fan and compressor works synchronously, fan stops in the process of defrosting.

When the fan running mode is set as: 1~5: Fan start-up delay 1~5 minutes than compressor, and fan stops

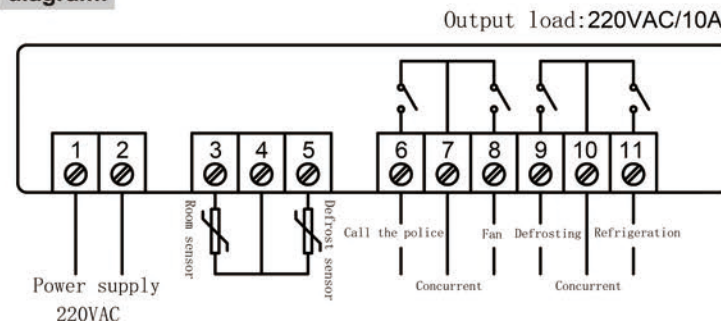
in the process of defrosting.

4) Alarm output

Controller own 1 output: buzzer alarm sound output.

Under the running mode, when the sensor error or temperature exceeds the temperature range or when the buzzer alarms ,please press and release the “▲ 🔔” key to cancel the alarm sound.

Wiring diagram:



Error code function explanation:

Code	Reasons and display mode
E1	Sensor will be short circuit or open circuit if the storage sensor is not connected in a correct way, and the refrigerating run as per mode: stop for 30 mins and run 15 mins, the buzzer output.
E2	Sensor will be short circuit or open circuit if the defrost sensor is not connected in a correct way, and the defroster will run as preset defrost cycle and the defrost duration time, meanwhile the buzzer output.
E3	Refrigerating will run as the proportional time(stop for 30 mins and run for 15 mins) when the storage temperature exceeds the setting temperature upper limit, the buzzer output.
E4	Defroster will run as the preset defrost cycle and the defrost duration time when the storage temperature exceeds the setting temperature upper limit, and the buzzer output.

Safety rule:

★ Danger:

- Strictly distinguish the sensor down-lead, power wire and output line of the relay, and prohibit wrong connections or overloading the relay.
- Prohibit connecting the wire terminals without electricity cut-off.

★ Warning:

Prohibit using the machine under the environment of over damp, high temp., strong electromagnetism interference or strong corrosion

★ Notice:

- The power supply should conform to the voltage value indicated in the instruction, and make sure the power supply steady.
- To avoid the possible interference, the sensor down-lead and power wire should be kept a distance.