

Functions and features:

ECB-5060 is specially designed for refrigerating unit. Double-screen display with both the current temperature and setting temperature; measuring temperature by double sensors; manage and control compressor and defroster separately ; Auto and manual control optional; Defrosting over temperature protection; Crank heating; when Sensor error, compressor turns on/off with proportional time; easy operation and visual display, stable and reliable performance.

Specification:

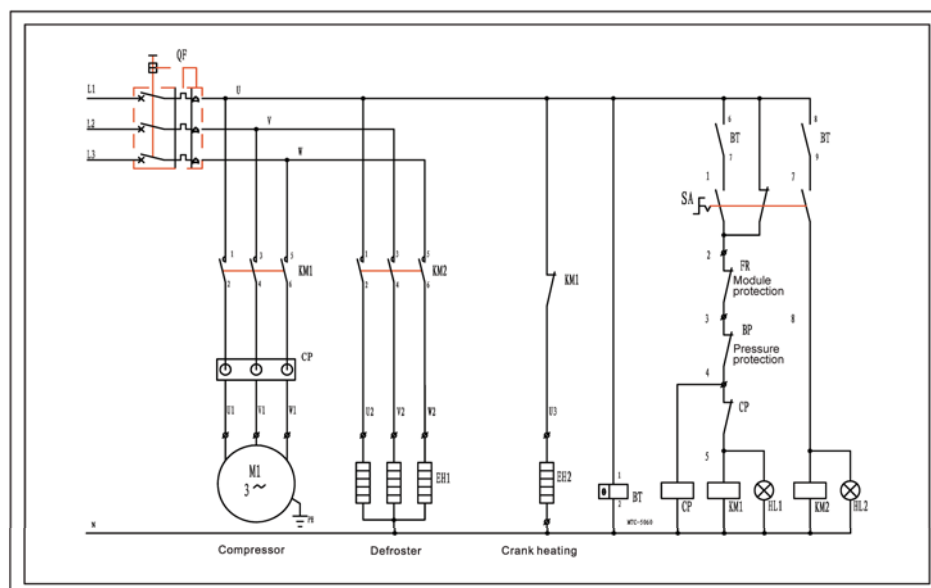
Product size: 300X400X150mm

Technical parameters:

- ◆ Power supply: Three-phase five-wire (or three-phase four-wire), 380 VAC $\pm 10\%$, 50Hz
- ◆ Temperature measuring and controlling range: $-50^{\circ}\text{C} \sim +50^{\circ}\text{C}$
- ◆ Accuracy: $\pm 1^{\circ}\text{C}$
- ◆ Resolution: 0.1
- ◆ Compressor start-up delay protection time: 0~120 minutes (Adjustable)
- ◆ Max. capacity of controlling the compressor (KW): 11
- ◆ Max. capacity of controlling the defroster (KW): 11



Wiring diagram:



ECB-5070

General descriptions:

This product has the function of current display and motor integrated protection, which can effectively avoid the various danger caused by the instability of current and voltage, to ensure safe operation of the device, and at the same time, users could intuitively view real-time current status. Dual sensor settings could control the dual-way loading of compressor and defrost.

Functions and features:

Compressor integrated protection function, which can effectively avoid the various danger caused by the instability of current and voltage, to ensure safe operation of the device and the safety of goods in the cold storage; integrated protector adopts digital processing technology, which could detect three-phase current and determine whether exists the failures of overload, phase failure, three phase current imbalance, ensuring the stable running of the device; dual temperature sensor could control temperature of compressor and the defrost, safer and more energy efficient; operation panel easy operation; independent function keys, easy operation without the guide of manual; dual display screen, which could intuitively view the current temperature and set temperature, easy to use for end users; crank heating function, which could effectively protect compressor and increase the service life of the compressor. It starts working when the compressor is off, shut down when the compressor starts; internal wiring in the box complies with electrical safety norms. All wirings are marked for easy maintenance. All wiring are performed pressure test or torque test; Box uses thicker metal plate material, paint treatment, moisture proof and shock proof, anti-corrosion, durable.

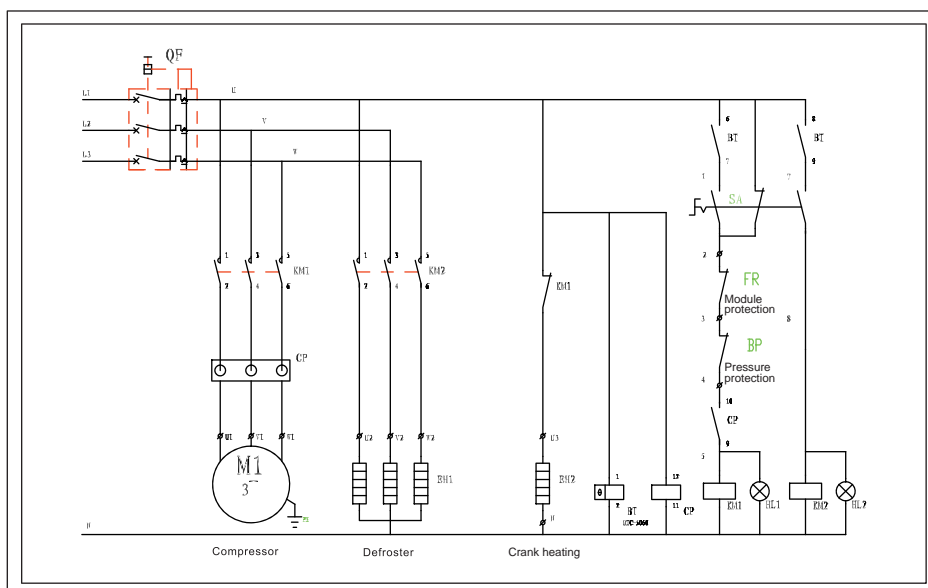
Specification:

Electric control box: W 300 * H 400 * D 150 (mm)

Technical parameters:

- ◆Power supply: three-phase five-wire (or three-phase four-wire) 380VAC \pm 10% 50Hz
- ◆Dual temperature sensor for separately temperature control of compressor and defrost, more secure and energy-saving;
- ◆Compressor integrated protection functions;
- ◆The integrated protector can display three-phase current, and determine whether exists the failures of overload, phase failure, three phase current imbalance according to the current.

Wiring diagram:



ECB-5080F

Split electrical control box

Functions and features:

Power box and panel separated, the effective signal transmission distance is up to 200 meters;

The large panel temperature controller, beautiful, which could be freely installed in office, duty room, monitoring room, etc where is convenient for monitoring.

Power box can be mounted directly on the unit, saving a lot of wire cost for customers;

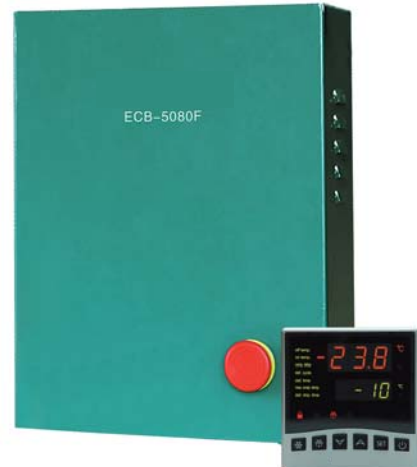
Operation panel is easy to operate; switch between Celsius and Fahrenheit; Independent function keys, easy operation, specially designed for cold storage market;

The contractors could preset general parameters which could be directly invoked by users, reducing after sale maintenance costs;

Have the engineering password function which could effectively avoid payment arrears for the contractors.

Compressor integrated protection function;

Unique box design: when take off the lid, only the control board, no interference of surrounding box shell, making the installation and wiring much more easier and bringing customers a whole new experience;



Specification:

W 280 * H 350 * D 140 (mm)

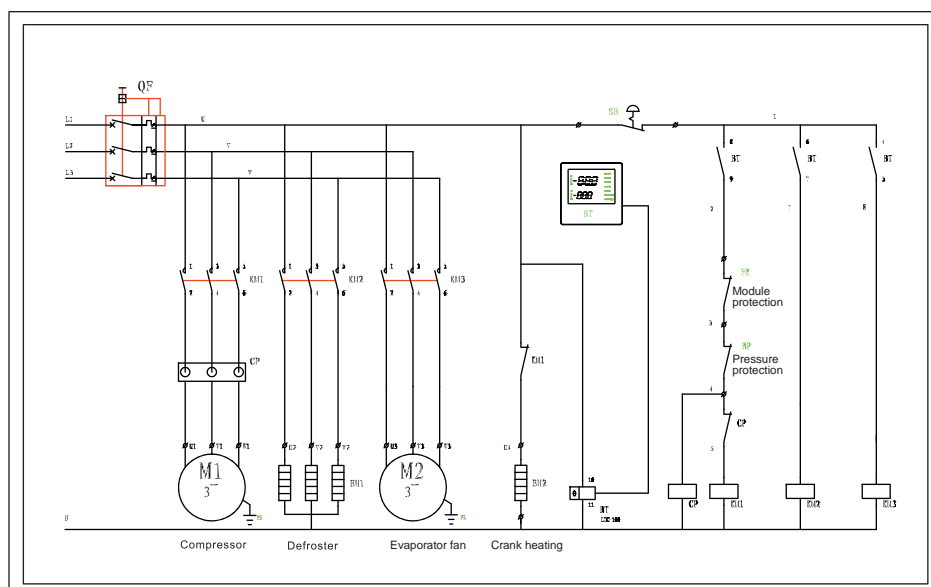
Technical parameters:

◆Power supply: three-phase five-wire(or three-phase four-wire)380VAC±10%/50Hz

Features:

- ◆Dual temperature sensor for separately temperature control of compressor and defrost, more secure and energy-saving;
- ◆Compressor integrated protection functions;
- ◆Sensor failure and over-temperature alarm function
- ◆Connection data line length: signal transmission distance not less than 200meters.

Wiring diagram:



ECB-10

General descriptions:

ECB-10 is a optimizing product especially designed for refrigerant units. Practical functions and complete protection. Easy-to operate, stable and reliable performance. ECB-10 is a universal Electric Control Box with rather high performance versus price ratio.

Functions and features:

- ◆ User's parameter and manager's menu setting, common customers only need to set temperature parameter
- ◆ Single-point temperature adjustment, return difference for temperature controlling, easy-to-operate
- ◆ Temperature upper and lower limits control
- ◆ Refrigerating and Heating modes optional
- ◆ Comprehensive protection function of compressor
- ◆ Compressor starts/stops proportionally when sensor error
- ◆ Auto and manual control function
- ◆ Alarm functions when Sensor error and exceeding the temperature limits

Specification:

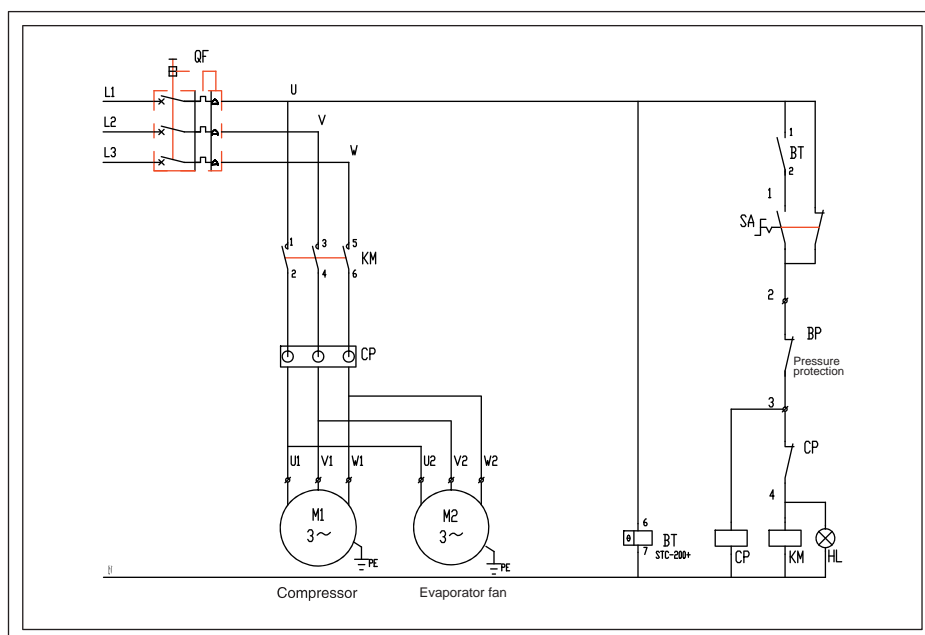
Product size: 300X400X150mm



Technical parameters:

- ◆ Power supply: Three-phase five-wire (or three-phase four-wire), 380 VAC \pm 10%, 50Hz
- ◆ Temperature measuring and controlling range: -50 $^{\circ}$ C~+99 $^{\circ}$ C
- ◆ Accuracy: \pm 1 $^{\circ}$ C
- ◆ Compressor start-up delay protection time: 0~9 minutes (Adjustable)
- ◆ Max. capacity of controlling the compressor and fan (KW): 11

Wiring diagram:



ECB-30

General descriptions:

ECB-30 is a optimizing product especially designed for refrigerant units. Double-sensor control, control three-load synchronously, proper and complete protection functions. Easy-to-operate, stable and reliable performance. ECB-30 is an Electric Control Box with multi-functions and rather high performance versus price ratio.

Functions and features:

- ◆ Three-load control, can control compressor, fan, defrost independently.
- ◆ Double temperature measuring sensors to independently control the temperature of compressor and defroster, more safe and economic
- ◆ Thermal and electric heating defrost
- ◆ Comprehensive protection function for compressor
- ◆ Auto and manual control function
- ◆ Sensor error alarm and alarm when exceeding the temperature limits functions
- ◆ Compressor start-up delay adjustable

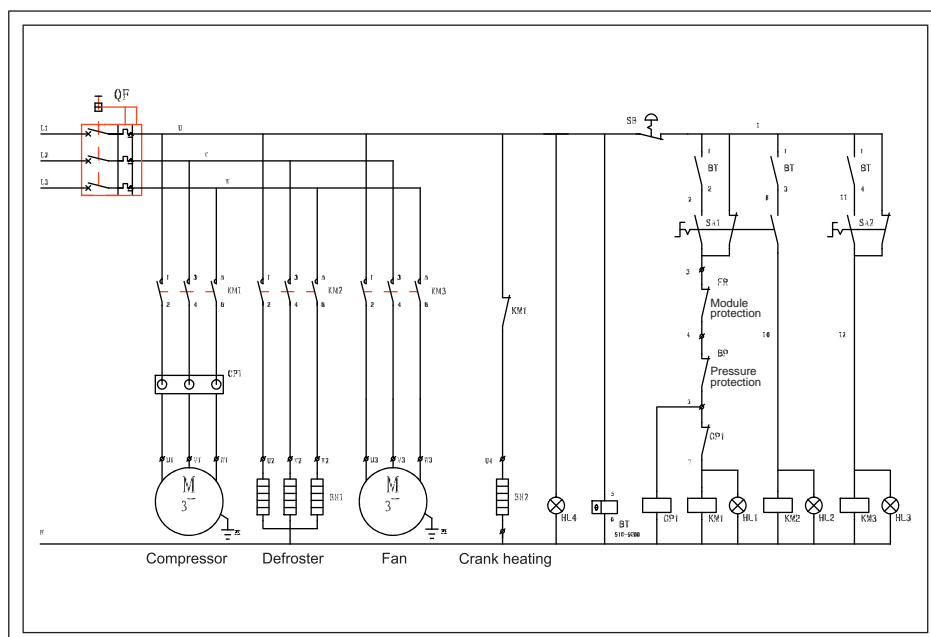
Specification:

Product size: 300X420X150mm

Technical parameters:

- ◆ Power supply: Three-phase five-wire (or three-phase four-wire), 380 VAC $\pm 10\%$, 50Hz
- ◆ Temperature measuring and controlling range: $-50^{\circ}\text{C} \sim +50^{\circ}\text{C}$
- ◆ Accuracy: $\pm 1^{\circ}\text{C}$
- ◆ Compressor start-up delay protection time: 0~9 minutes (Adjustable)
- ◆ Max. capacity of controlling the compressor (KW): 11
- ◆ Max. capacity of controlling the fan(KW): 4
- ◆ Max. capacity of controlling the defroster (KW):11

Wiring diagram:



ECB-3000

Functions and features:

ECB-3000 is a optimizing product especially designed for mini-type cold storage. Easy parameters setting and operation reliable performance, complete functions. ABS fire-proof plastic material for security and good water-proof ability. Modifying parameters even when the machine is running. Auto and manual switch function, while in manual operation, it can control fan, compressor and defrost separately. compressor start-up delay protection. Fan start-up delay. Auto defrost and enforced defrost. Main control units are famous brand with high reliability.

Specification:

Product size: 250X190X139mm

Technical parameters:

- ◆ Power supply: Three-phase five-wire (or three-phase four-wire), 380VAC $\pm 10\%$, 50Hz
- ◆ Temperature measuring and controlling range: $-50^{\circ}\text{C} \sim +50^{\circ}\text{C}$
- ◆ Resolution: 0.1
- ◆ Return difference: $1^{\circ}\text{C} \sim +25^{\circ}\text{C}$
- ◆ Defrost time: 0-255 minutes
- ◆ Defrost cycle: 0-120 hours
- ◆ Compressor start-up delay protection time: 0-50 minutes (Adjustable)
- ◆ Defrost thermal protection relay connected temperature: 50°C
- ◆ Defrost protection relay connected temperature: 40°C
- ◆ Max. capacity of controlling the compressor (KW): 5.5
- ◆ Max. capacity of controlling the defroster (KW): 5.5



Wiring diagram:

