EAG8503

Operating instructions:

Set temperature:

Press UP or DOWN to set temperature.

Refrigeration:

Start refrigeration: When the temperature ≥ set temperature + temperature difference (default 4 degrees), start refrigeration;

Stop refrigeration: When the temperature ≤ the set temperature, the refrigeration is turned off.

Code, Reason, and Action

Code	Reason	Status	Action
E1	Temperature sensor failure	Turn off 30 min & then Turn on 15 min	Check sensor contact or replacement if necessary
HH	Exceeds measurement range	Turn off 30 min & then Turn on 15 min	Check whether the actual temperature is beyond
LL	beyond the lowest range	Turn off 30 min & then Turn on 15 min	the range or replace the sensor

EAG8503

Refrigeration and Defrosting (output)
Instructions for operation in the factory

I. Characteristics

The new EAG8503 is a general micro-freezing and refrigeration controller with high precision, high performance, and wide application range. It provides output control of refrigeration and defrosting, and is suitable for various micro-frozen and refrigerated display cabinets, SBDG, cake cabinets, and other control occasions.

- ●set start and stop temperature & Upper and lower limit
- ●Protection against Frequent Start of Compressor
- ●Brown panel, waterproof design
- ●Fault Code Alarm
- ●Strong Anti-jamming Ability to avoid the wrong Action
- ●Imported temperature sensor
- ●Shock Resistant Power Relay
- ●Imported industrial chip
- ●Embedded Installation
- ●Applicable Range of Industrial Environmental Temperature
- ●High-quality terminals to ensure good contact

II. Specification:

Range of measurement: -40 ℃～110 ℃;

Resolution: 0.5 at -19.5-20 ℃; the rest is 1℃.

Control range: --40 ℃～110 ℃

Power: 220VAC 50/60Hz

Measurement Accuracy: ±1℃

Sensors: NTC, 1pc, (optional).

Installation: 71mm (W)×29mm (H)

Front panel protection level: IPX5

Relay output capacity: refrigeration: 30A/250VAC, defrosting: 10A/250V

III. HMI: 4 buttons: SET，▲ and▼;

Symbol	Function	Flash	On
	Refrigeration LED	Output delay	Control Output Started
	Frost LED		Stop for defrosting
SET	Setting LED		Setting parameters
Flashing	Temperature measurement	Over temperature alarm	

IV. Menu:

Menu narks	Menu function	Range	UNit	Default value
	Temperature setting (stop temperature)	F1～F2	℃	3
F1	Prohibit setting lower temperature limit	-40～Setting temperature	℃	0
F2	Prohibit setting the upper-temperature limit.	Setting temperature～110	℃	7
F3	Temperature difference setting	0-15	℃	4
F4	Compressor Start Delay	0-15	Min	1
F5	Defrosting	0～99, Set to 0 to cancel regular defrosting	H	4
F6	Defrosting time	0～99, Set to 0 to cancel regular defrosting	Min	10
F7	Temperature correction	-9～+9	℃	0
F8	Over temperature alarm upper limit	F9～110	℃	50
F9	Over temperature alarm lower limit	-40～F8	℃	-40
F10	Defrost mode	0: normal; 1: display the beginning temperature of defrosting; 2: display the set temperature until the temperature returns to the boot range	--	0

V. Operating instructions

5.1 User Settings:

Press up or down key to adjust the setting temperature directly, and the setting value is limited between F1~F2 value.

5.2 Modify menu parameter values:

When the controller works normally, press SET key for 9 seconds, enter menu parameter setting, and then press▲ or▼ to adjust F1~F10. When F1 appears, press SET key to display the value of F1, and press▲ or▼ to modify the parameter value.

Press the " " button to save the parameters and return to the normal display or in 30 seconds without any key operation.

5.3 Restore the factory setting value:

Keep Press the "SET" key on and press the " " key until the parameters are restored to the factory menu settings (“YS” appeared).

VI. Control output:

6.1 Refrigeration:

Start refrigeration: When the temperature≥ the set temperature + backlash, the refrigeration is started.
Stop refrigeration: When the temperature ≤ the set temperature, the refrigeration is turned off.
Note 1: When the sensor fails, the compressor runs at the ratio of starting for 15 minutes then stopping for 30 minutes.

6.2 defrosting:

·Automated Frost: According to the F5 value of the set defrosting cycle and F6 value of defrosting time, defrosting starts automatically.

·Forced defrosting: Press the " ❄ " for 3 seconds, enter the forced defrosting, defrosting duration according to F6 value.

In the defrosting process, press the "❄" button for 3 seconds can exit the forced defrosting.
Note: Forced defrosting (manual) function is allowed only when defrosting time and defrosting cycle is not set at 0.

VII. The wiring diagram is detailed in the thermostat.