

AG-326 Temperature Controller Instructions

Main Functions

- 1, Refrigeration ,defrost, alarm, light
- 2, User's menu separate with administrator menu ,easy for user to operate, suitable for administrator adjust;
- 3.Return difference ; temperature resolution:0.1℃;

Technical Parameter

- 1.Temperature measure range: $-50\sim 120^{\circ}\text{C}$;Temperature control range: $-50\sim 120^{\circ}\text{C}$
2. Power supply: 220VAC +10%, 50/60Hz(110VAC \pm 10%, optional)
3. Compressor relay output capacity: 30A/220VAC
4. Light relay output capacity: 10A
5. Digital display: Three-digit LED+ Status indicator light(set; refrigeration; defrost; light)
6. Sensor: 1 NTC, 2m.
- 7.Production size:76*34*62mm
- 8.Mounting size:71*29mm

Indicator

Indicator	Status	Function
Refrigeration	Sustaining lighting	Compressor working
	Blinking	Compressor protection delay time
	Off	Compressor stops
Defrost	On	Defrost
	Off	Non-defrost
Set	On	Setting status
	Off	Normal status

Key Operation and Setting

Unlocked operation

Under normal status, press ▲ and ▼ for 3S, unlocked or locked the controller, it display ON when unlocked, display LOC when locked. It can only operate when unlocked. More than 1 minute without any operate will lock automatic.

Power on/off setting

Under normal status, press PRG more than 3seconds for power off .It displays "OFF". Press PRG for power on.

Rapid setting function

Press ▲ or ▼ can adjust setting temperature (Temperature value only allow to be set between HSE and LSE setting range)without movement 5S to save the setting value.

User menu setting:

1. Under normal status, unlocked ,press SET more than 3S,display"SET";
2. Press▲ and ▼ rolls code(SET, Hy);
3. Press SET to confirm code, the value displayed;
4. Press▲ and ▼ to increase or decrease the value;
5. Press SET to store the modified value temporarily, back to code;
6. Repeat step3~5 if other codes need modified;
7. Press SET more than 3S,store modified value and out of setting mode.

Administrator menu setting:

1. Under normal status, unlocked, press SET + ▼ more than 3S,display"HSE";
2. Press▲ and ▼ rolls code(HSE~ALd);
3. Press SET to confirm code, the value displayed;
4. Press▲ and ▼ to increase or decrease the value;
5. Press SET to store the modified value temporarily, back to code;
6. Repeat step3~5 if other codes need modified;
7. Press SET more than 3S, store modified value and out of setting mode

One-key recovery:

- 1.Under setting mode, press PRG 3S,display RST, reset to the latest default value.

Menu

Menu	Code	Setting range	default	Remark
User menu	SEt	Temp. lowest setting limit ~Temp. Highest setting limit	-5℃	Temp.Setting value
	Hy	1℃~25℃	2℃	Differential setting

Menu	Code	Setting range	default	Remark
Admin. Menu	HSE	SET~120℃	20℃	Temp. Highest setting value
	LSE	-50℃~SET	-30℃	Temp. Lowest setting value
	AC	0min.~50min.	3min.	Compressor protection delay time
	ldF	0hr~120hr.	2hours	Defrost cycle
	MdF	0min.~255min.	15min.	Defrost time
	ot	-10℃~10℃	0℃	Sensor temp. calibration
	ALU	SET~120℃	50℃	Exceeding upper limit alarm temp.value
	ALL	-50℃~ALU	-50℃	Exceeding lower limit alarm temp.value
	ALd	0~99min	15	Exceeding limit alarm delay time

Function

1. Compressor working status:

start: when non-defrost, satisfied with a, b, compressor relay connect.

a) compressor delay time over the delay setting time

b) storage temperature higher than setting temperature + differential setting value

stop: when satisfied with one of below conditions, compressor stops.

◇ Storage temperature lower than setting temperature ◇ defrosting

2. Defrost

When satisfied with the below conditions, defrost starts.

◇ Defrost cycle has been reached or enforced defrost start(defrost cycle is the period starts from the time of electrify)

When satisfied with one of below conditions, defrost stops.

◇ defrost operation time is over

Under normal status, when defrost time and cycle not set to be zero, when non-defrost, press ▼ more than 3S, could enforce defrost. when defrost, press ▼ more than 3S, could stop defrost.

3. Highest and Lowest limit temperature setting:

HSE and LSE to setting the highest and lowest temperature value, they limit the temperature setting range.

e.g. set HSE value to be 20, LSE value to be -20, temperature range(SET) only can be setted among 20 and -20.

If want to enlarge the temperature setting range, HSE and LSE setting value should be modified at first.

4. Light

Press PRG to open the light, press again, the light will be off.

5. Alarm

◇ When storage temperature higher than exceeding upper limit alarm temp. value or lower than exceeding lower limit alarm temp. value, and has finished setting alarm delay time, buzzer alarm, display "AH" if exceed the high limit, display "AL" if exceed the low limit.

◇ when storage temperature higher than temperature measuring range, display "HHH", lower than measuring range, display "LLL", buzzer alarm.

◇ when storage sensor short circuit or open circuit, display "EE", buzzer alarm.

◇ When storage temperature beyond measuring range or sensor error, compressor operates by the cycle of stop 45minutes and work 15minutes.

◇ When alarm, press any button could stop it, but alarm status not change.

Under error status, alarm stopped by human beings, if new error appears, blink and display error code, buzzer will not alarm. Till all the errors are corrected, error delay works, buzzer restarts to alarm.

6. Some changes of parameter will be performed from the next cycle, If want to execute immediately can be power off and power on.

Wiring Diagram

