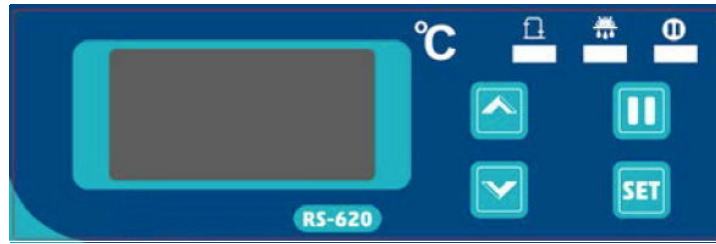


RS-620

Refrigeration system controller

Panel



Notice

1. Before installing, please turn off the power to avoid fatal electrical injuries
2. Please install on dry place and avoid damp.
3. In order to prevent from leaking and dangerous, waterproofing measures must be taken.
4. Please check the wiring and input power before power transmission.
5. Please follow the installed rules for your safety, especially wiring diagram and electric current requirement.
6. **Please do not tie sensor, connecting line of panel and rear, power lines and lines of load (e.g. fan) together.**

Technical data

- **Input voltage** 12V/AC/DC/50~60HZ
- **Temperature range** -50°C ~ +80°C
- **Working temperature** -15°C ~ +70°C
- **Accuracy** ±1 °C
- **Resolution** 1 °C
- **Mounting** SNAP-IN
- **Fit-in size** 81*25.5*39mm³
- **Display** Seven segment LEDs
- **Maximum output rating** 1HP/120VAC/16FLA,2HP/240VAC/12FLA

System parameter table

No.	Symbol	Description	Range	Default
1.	tS	Set compressor stop temperature	tL~tH	+5 °C
2.	td	Define differential temperature	+1°C~+15°C	+4 °C
3.	Sd1	Compressor start delay time after First stop	0~15 min.	1 min.
4.	Sd2	Compressor start delay time after Second stop	0~15 min.	1 min.
5.	di	Defrost interval	0~24 Hr.	6 Hr.
6.	dd	Defrost duration	0~60 min.	15 min.
7.	tA	Sensor calibration	-15°C~+15°C	0 °C

Lock system parameter table

No.	Symbol	Description	Range	Default
1.	Lo	Select system parameters to lock or unlock	y: lock/ n: unlock	n
2.	tH	The upper temperature limit	tS~+80°C	+50 °C
3.	tL	The lower temperature limit	-50°C~+tS	-50 °C
4.	do	Showing of display during defrost	1= temperature before defrost 2= show DEF 3= room temp.	1

Note : When 『Lo』 = y , 『tS』 will be the only parameter which can be modified, and its setting range will be from 『tL』 to 『tH』. If you want to modify other parameters, set 『Lo』 to n.

Error code

Error code	Description
E1H	Sensor shorted or temperature higher than+80°C
E1L	Sensor opened or temperature lower than -50°C

System parameter setting

1. Press 『SET』 key for three seconds, the display flashes pattern “888” for 3 times, then shows the symbol of the first system parameter 『tS』. Press 『SET』 key again to show the value and then using 『▲』 and 『▼』 to adjust parameter value.
2. When setting parameter, don't press 『SET』, 『▲』 or 『▼』 key within 30sec., display will show 『god』 first and temperature.
3. After power “ON”, the compressor is delaying for protecting. Press 『▲』 key until display shows 『Fon』, then compressor runs immediately.
4. When the controller detects a sensor error, and the display will show error code until problem is solved.

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5. Total operating time can be showed on display by showing three sets of digits through push 『▲』 and 『▼』 keys, simultaneously. For example, if the total operating time is 12345 hours, after you push 『▲』 and 『▲』 keys simultaneously, the display will show first value “tot” (means total operating time) “012” and “345”.

Lock system parameter setting

1. Press 【SET】 key for three seconds, the display begins flashing pattern 『888』. While flashing, press 『▲』 and 『▼』 keys simultaneously until display shows 『Lo』. At this time, press 『▲』 or 『▼』 to lock by choosing 『y』 or to unlock by choosing 『n』.
2. After selecting system parameters to unlock, press 『SET』 key to show pattern 『tH』. Press 『SET』 key again to show the value and press 『▲』 or 『▼』 key to adjust the value.
3. When setting parameter, don't press 『SET』, 『▲』 or 『▼』 key within 30sec., display will show 『god』 first and temperature.

Function keys

▲ ▼	Increase/ decrease	To increase or decrease one unit value
SET	Set	Request for setting the parameter

Indicators

Ⓛ	Green	Lamp on, compressor running
		Lamp flash, compressor time delay
❄️	Red	Lamp on, system defrosting

Sensor Probe Type:

	<p>Correct connection method :</p>
Isolation wire NTC sensor with BLACK PVC/1.5M/5cm 6φ copper head	If you want to lengthen the NTC sensor probe , for isolating the noise , the extension wire must be shielded, and use the shielded wire as the ground wire.(as shown above).

※(1) When NTC black sensor is in error status, the system stops working.

Wiring diagram

