Elitech®
STC–8080H INSTRUCTIONS

General description：

STC-8080H is a universal single-sensor temperature controller, with refrigeration, defrosting exceeding temperature limit alarm functions. Compressor delay time adjustable, after electrified exceeding temp. limit alarm delay adjustable, suitable for refrigerant industries such as refrigerator, refrigerator car, etc.

Size:

Front panel size: 75X34.5(mm)   Installing hole size: 71X29(mm)

Product size: 75X34.5X85(mm)   Sensor: 2meters (probe included)

Technical parameters：

Power supply：220V+10%/-15%AC 50/60Hz   Power consumption: ≤3W

Temperature measuring range：-50~99℃   Temperature controlling range：-40~50℃

Resolution: 1℃   Accuracy: ±1℃, -50~70℃; ±2℃ at others

Refrigeration output contact capacity:10A/277VAC   Defrost output contact capacity: 10A/277VAC

Sensor error delay time: 1min   Sensor: NTC

Safe level: IP65   Operation temperature: 0~60℃

Operation humidity: 20%~85% (no condensate)   Storage temperature: -30~75℃

Front panel：

Key operation

Check parameter set value:

Press ▲ and then loosen to display the set upper limit; press and then loosen▼ to display the set lower limit; press and the loosen Set to display the defrost cycle; press and then loosen Rst to display set defrost time. 2s later return to display normal temperature.

Parameters adjustment:

Press Set for more than 3s to enter into parameter modifying status, display the last adjusted menu after electrified with parameter modifying indicator light on.

Press ▲ or ▼ to go forward or backward the menu item; press Set to display the current parameter set value.

Press Set and ▲or ▼at the same time can adjust the current parameter set value; press Set and ▲at the same time more than 1s will increase current parameter set value quickly; press Set and ▼at the same time more than 1s will decrease the current parameter set value quickly.

Press Rst or no operation in 30s will save the set parameter and return to normal temperature display status.

Manual defrost:

If set defrosting time is not 0, manual defrost function is allowed.

Under non-defrost status, press ▼ for more than 3s to enter into manual defrost.

Under defrost status, press ▼ for more than 3s to stop defrosting.

Restore the parameter setting

When electrify the controller, first check the parameter setting, if check parameter setting is wrong, LED display E1 with buzzer sound, at this time press Set will restore default setting. Advise to reset the parameter.

Key–press function:

Key-press	Normal mode	Parameter adjustment
Set	Check defrost cycle	Display current menu item setting
Set …3seconds	Enter into parameter adjustment	
Rst	Check defrost time	Quit from parameter adjustment
▲	Temperature upper limits checking	Menu items go backwards
▼	Temperature lower limits checking	Menu items go forwards
▼…3seconds	Manual defrost	
Set +▲		Parameter values increase by degrees
Set +▼		Parameter values decrease by degrees

Control output:

Compressor:

When the storage temp. is higher than set temp. upper limit, compressor starts, when lower than set temp. lower limit, compressor stops. When sensor error, compressor works proportionably as on-15 minutes off-30 minutes. After electrified or compressor stops, compressor restart-up is allowed after running out of compressor protection time.

Defrost:

When running out of the defrost cycle or under non-defrost status, press ▼for more than 3s to start defrost, and refrigeration output is forbidden while defrosting. When the defrost cycle ends or when defrosting press ▼for more than 3s to stop defrost. After electrify the controller or after defrost end, the controller will enter into next defrost cycle. Set the defrost cycle or time as 0 to cancel timing defrost, but when the defrost time is not 0, permit manual defrost.

Alarm:

While temp. exceeding value is not 0, LED blinkingly displays current temperature when storage temperature is higher than set temperature upper limit +exceeding temp. value or lower than set lower limit-exceeding temp. value. When running out of the exceeding temp. limit alarm delay after electrified, exceeding temp. limit alarm starts with buzzer sound, and alarm cancel when temperature return to normal temperature.

LED blinkingly display E1 with buzzer sound when memorizer error; display E2 with buzzer sound when sensor error. Display HH when temp. higher than 99℃ and lower than 120℃. Press any key to cancel alarm sound, but alarm status remains.
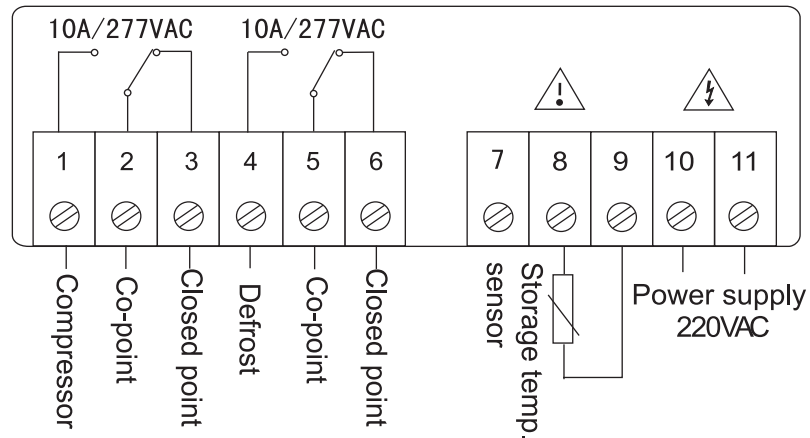
Indicator light description:

Indicator light	Status	Function
Defr	Always on	Defrost output
Cool	Always on	Compressor output
Cool	Flashes	Compressor output delay
Set	Always on	Parameter modification status

Parameter list:

ITEM	FUNCTION	SETTING RANGE	UNIT	DEFAULT
F1	Upper limit	F2～+50	℃	-10
F2	Lower limit	-40～F1	℃	-20
F3	Temperature calibration	-5～5	℃	0
F4	Compressor protection time	0～9	min	3
F5	Exceeding temperature value	0～50,set value as 0 to cancel alarm	℃	15
F6	Exceeding temperature alarm delay time	0～99	min	20
F7	Defrost cycle	0～99,set value as 0 to cancel defrost	hour	8
F8	Defrost time	0～99,set value as 0 to cancel defrost	min	20

Wire diagram：

10A/277VAC   10A/277VAC

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |

Compressor | Co-point | Closed point | Defrost | Co-point | Closed point | Storage temp. sensor | Power supply 220VAC

Safety regulations:

◆Danger:
◇Strictly distinguish the sensor down-lead, power wire and output relay interface from one another, prohibit wrong connections or overloading the relay.
◇All connections should be modified under electricity cut-off.
◆Warning:
◇Prohibit to use the machine in water or under the environment of over damp, high temperature, strong electromagnetism interference or strong corrosion.
◆Caution:
◇The power supply should conform to the one labeled on the machine, and ensure the stability of the power voltage;
◇Sensor down-lead and power wire should be kept for a proper distance to avoid possible interferences.

Error code：

Code	Reason	Status
E1	Memorizer error	Alarm, machine does not work
E2	Sensor errror	Alarm, Compressor starts/stop proportionably
HH	Exceeding temp. display limit	——