Elitech

STC-200 Instruction

KI&BNT

STC-200 adopts manual switches among refrigeration, heating and alarm, differential to control temperature, user and administrator parameter setting separately, compressor delay time adjustable, temperature calibration, alarm when error, compressor works as per the scheduled procedure when sensor error. STC-200 is an all-purpose model with high performance versus price ratio. It is suitable for refrigeration and deepfreeze, seafood machine, water heater and products which need simple temperature monitoring and alarm.

Specification and Parameters:

◆ Whole product size: 77.0 x 34.5 x 65.5 (mm)
◆ Installing-hole size: 70.5×28.5 (mm)
◆ Operating ambient temperature: -5℃～+60℃
◆ Stored temperature: -30℃～+85℃
◆ Relative humidity: 20%~60% (No condensate)
◆ Main technical parameters:
◇ Power supply: 220VAC±10% (12V±10% optional)
◇ Watt consumption: < 5W
◇ Temperature measurement range: -40℃～+99℃
◇ Temperature control range: -40℃～+70℃
◇ Resolution: 1
◇ Accuracy: ±1℃
◇ Relay contact capacity: 10A/250VAC/30VDC
◆ Main functions:
◇ Temperature measurement, display and control
◇ Adopt differential to set temperature
◇ Compressor startup delay
◇ Alarm when error
◇ Switches among refrigeration, heating and alarm

Mode of indicator light:

Mode indicator light	Set indicator light
Light blinks	Light off
Light on	Light on
Light off	Light on
Compressor startup delay	Normally works
Compressor normally works	Under setting mode
Compressor termination	

Parameter inspection and setting:

◆Parameter inspection (under non-setting mode)
Press "▲" key to display the set temperature value and display the current temperature in 2 seconds; Press "▼" key to display the temperature differential value and display the current temperature in 2 seconds.
◆Parameter setting
◇Entry into user setting mode:
Under non-setting mode, press SET key for above 5 seconds to enter into user setting mode, the set indicator light on and LED displays the current temperature set value.
◇Temperature setting:
Under user setting mode, press "▲"or"▼"key to upwards or downwards adjust the temperature set value. Press once to increase or decrease 1℃, press the key for above 2 seconds to start prompt adjustment.
◇Quit from user setting mode:
Under user setting mode, press SET key for above 5 seconds or no key operation within 30 seconds, the system will preserve the displaying temperature set value and return to normal working mode.
◇Entry into administrator menu:
Under non-setting mode, press SET and"▲"keys for above 5 seconds to enter into administrator menu setting mode. The set indicator light on and LED displays item F0.
◇Setting item modification and entry into parameter setting mode:
Under setting item mode, press"▲"or "▼"key to upwards or downwards adjust the setting items F0~F5. "▼" is null under setting item F0;"▲"is null under setting item F5. When modify the parameter values, press"▲"or"▼"key to adjust it to the corresponding setting item, press SET key to enter into parameter modification mode, this moment, LED displays the current set value of this parameter.
◇Parameter modification and return to setting mode:
Under parameter setting mode, press"▲"or"▼"key to upwards or downwards adjust parameter values."▼"is null at the minimum parameter value;"▲"is null at the maximum parameter value. Press SET key to return to setting item modification mode after parameter setting, this moment, LED displays the current setting item.
◇Parameter preservation and quit from setting mode:
Under setting item or parameter mode, press SET key for above 5 seconds or no key operation within 30 seconds, the system will preserve the current set value and quit from the setting mode.

Output relay connection and disconnection:

Press on/off key to turn on the temperature controller. Under running mode, press this key for above 3 seconds to turn off the temperature controller.
◆Refrigeration
◇Relay starts refrigeration when compressor delay time > the set delay time or the sensor's temperature > set temperature + temperature differential value.
◇Relay stops refrigeration when sensor's temperature < set temperature.
◆Heating
◇Relay connects when actual delay time > set delay time or sensor's temperature < set temperature;
◇Relay disconnects when sensor's temperature > set temperature + temperature differential value.
◆Alarm output (under alarming mode)
◇Relay connects and alarm output when sensor's temperature > set temperature + temperature differential value or sensor's temperature < set temperature.

Descriptions of alarming function:

◆Alarm when sensor error
◇LED blinkingly displays E1 with buzzer sound when sensor open circuit;
◇LED blinkingly displays E2 with buzzer sound when sensor short circuit.
◆Alarm when exceeding temperature limits
LED displays HH or LL when sensor's temperature >+99℃ or <-40℃.
◆When sensor error, under refrigeration mode, compressor will work as per the procedure (work for 15 minutes and stop for 15 minutes)

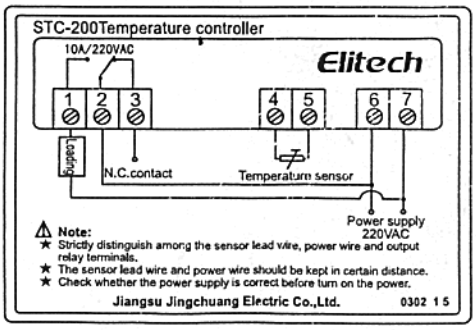
Administrator menu setting function:

Code	Setting item	Default	Parameter setting range
F0	Temperature differential setting	3℃	1℃~16℃
F1	Compressor delay time	3Minutes	0~9Minute
F2	Temp. lower limit setting	-20℃	-40℃~set temperature
F3	Temp. upper limit setting	20℃	Set temperature~70℃
F4	Mode optional	1	1: refrigeration 2:heating 3: alarm
F5	Temperature calibration	0	-5℃~+5℃

Inspection before use and installation requirements:

◆Power supply must conform to the power labeled on the instrument.
◆Prohibit to using in water or humidity ambient, prohibit to using under environments of high temperature, high electromagnetism interference and serious corrosion.
◆Sensor down-leads, power wires and output relay down-leads should be strictly distinguished from one another, prohibit wrong connections. Do not overload the relay.
◆Sensor down-leads and power wires should be kept for a proper distance to avoid possible interferences.
◆Sensor installation should be kept away from the vent hole for accurate measurement.

Electric connection paradigm:



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