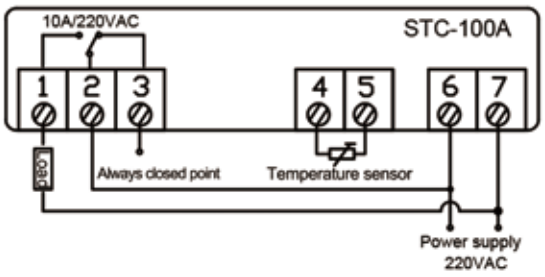
Universal controller series

Microcomputer temperature controller

HS GROUP

wiring diagram



refrigeration heating 1NTC

Manually switch between heating and cooling
Control the temperature by adjusting the temperature set value and difference
The refrigeration and heating start delay protection
Limit the temperature setting range
Calibration temperature

power supply	220VAC±10%/-15%, 50/60Hz	Relative humidity	20%~85% (non-condensing)
Temperature measurement range	-40°C~99°C	Sensor type	NTC sensor
Temperature resolution	1°C	Installation hole size	L71xW29(mm)
Relay output capacity	10A/220VAC	Overall size	L77xW34.5xD62(mm)

Serial code	Control output	Signal input	Buzzer beep
	Cooling/Heating/Alram	Cabinet temperature	
STC-100A	Cooling/Heating 10A	✓	×
STC-200	Alram /Cooling/Heating 10A	✓	✓
STC-1000	Alram / Cooling / Heating 10A	✓	✓

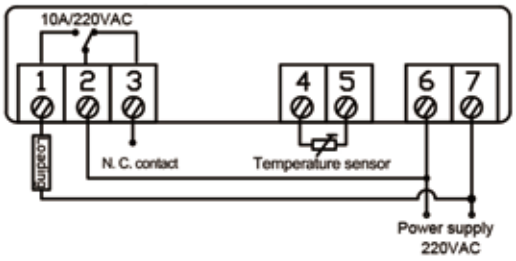
Universal controller series

Microcomputer temperature controller

MODEL STC-200

refrigeration heating alarm 1NTC

wiring diagram



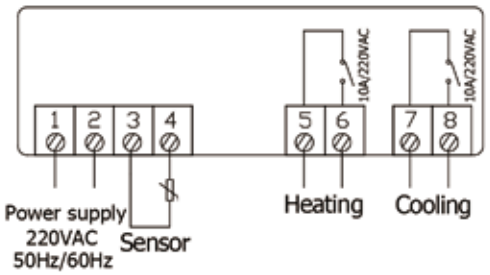
- Refrigeration, heating and alarm are manually switched and controlled by temperature difference;
- User and administrator parameters are set separately. Compressor delay time is adjustable.
- Temperature calibration, error alarm and the compressor works according to the predetermined program when the sensor is wrong; cost-effective general model;
- suitable for refrigeration and deep freezing, seafood machines, water heaters andproducts that require simple temperature monitoring and alarming.

power supply	230VAC +10%, 50/60Hz	Relative humidity	20%~60% (non-condensing)
Temperature measurement range	-40°C~99°C	Sensor type	NTC sensor
Temperature resolution	1°C	Installation hole size	L71xW29(mm)
Relay output capacity	10A/220VAC	Overall size	L77xW34.5xD62(mm)

MODEL STC-1000

refrigeration heating alarm 1NTC

wiring diagram



- Heating and cooling mode automatic switching;
- Control the temperature by setting the temperature setting value and the difference value;
- Temperature calibration;
- Refrigeration control output delay protection;
- Alarm when temperature exceeds temperature limit or sensor error.

power supply	230VAC +10%, 50/60Hz	Storage temperature	-30°C~75°C
Temperature measurement range	-50°C~99°C	Sensor type	NTC sensor
temperature resolution	1°C	Installation hole size	L71xW29(mm)
Power consumption	<3W	Overall size	L77xW34.5xD85(mm)

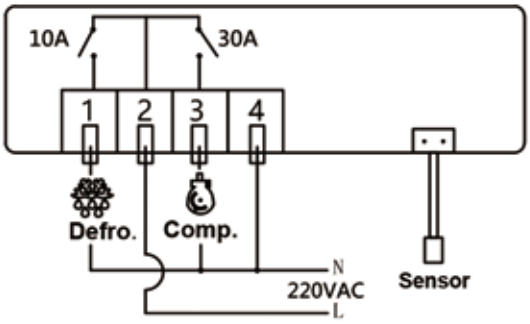
Universal controller series

Microcomputer temperature controller

HS GROUP

MODEL STC-201

wiring diagram



refrigeration | defrost | alarm | wiring method | 1NTC

This product is a general-purpose single-sensor thermostat with functions such as refrigeration, defrosting, fan, and lighting temperature over-limit alarm. It is suitable for refrigeration industries such as freezers, refrigerators, island cabinets, etc.

power supply	220VAC ±10%, 50/60Hz	defrost relay capacity	10A/220VAC
Temperature display range	-50°C~ 120°C	Sensor type	NTC sensor
Temperature control range	-40°C~20°C	Installation hole size	L71xW29(mm)
Compressor relay capacity	30A/250V	Overall size	L77xW34.5xD82(mm)

Serial code	Control output				Signal input	Buzzer beep
	Cooling	Defrost	Light	Fan	Cabinet temperature	
STC-201	30A	10A	×	×	✓	✓
STC-202	30A	×	10A	×	✓	✓
STC-203	30A	×	×	10A	✓	✓

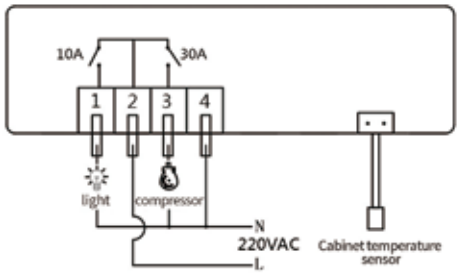
Universal controller series

Microcomputer temperature controller

MODEL STC-202

refrigeration light alarm wiring method 1NTC

wiring diagram



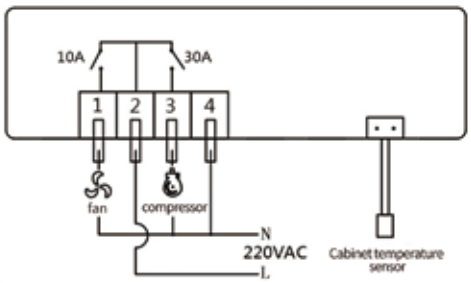
- This product is a general-purpose single-sensor thermostat with functions such as refrigeration, defrosting, fan, and lighting temperature over-limit alarm. It is suitable for refrigeration industries such as freezers, refrigerators, island cabinets, etc.

power supply	230VAC +10%, 50/60Hz	light relay capacity	10A/250V
Temperature measurement range	-50°C~120°C	Sensor type	NTC sensor
Temperature control range	-40°C~20°C	Installation hole size	L71xW29(mm)
Relay output capacity	30A/220VAC	Overall size	L77xW34.5xD82(mm)

MODEL STC-203

refrigeration fan alarm wiring method 1NTC

wiring diagram



- This product is a general-purpose single-sensor thermostat with functions such as refrigeration, defrosting, fan, and lighting temperature over-limit alarm. It is suitable for refrigeration industries such as freezers, refrigerators, island cabinets, etc.

power supply	220VAC ±10%, 50/60Hz	Fan relay capacity	10A/250V
Temperature display range	-50°C~ 120°C	Sensor type	NTC sensor
Temperature control range	-40°C~20°C	Installation hole size	L71xW29(mm)
Compressor relay capacity	30A/220VAC	Overall size	L77xW34.5xD82(mm)

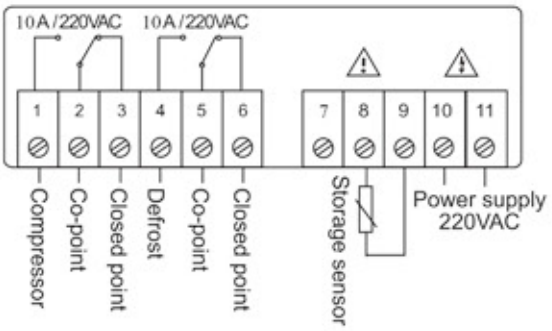
Universal controller series

Microcomputer temperature controller

HS GROUP

MODEL STC-8080A+

wiring diagram



refrigeration · defrost · alarm · 1NTC

This product is a general-purpose single-sensor temperature controller;
Refrigeration,defrosting, over-limit alarm temperature, etc.;
Compressor protection delay time is adjustable;
Suitable for cold storage, refrigerated truck refrigeration industry, etc.

power supply	220VAC ±10%, 50/60Hz	Relative humidity	No more than 80% (no condensation)
Temperature measurement range	-50°C~99°C	Sensor type	NTC sensor
Power consumption	<3W	Installation hole size	L71xW29(mm)
Ambient temperature	-10°C~60°C	Overall size	L77xW34.5xD85(mm)

Serial code	Control output		Signal input	Buzzer beep
	Cooling	Defrost	Cabinet temperature	
STC-8080A+	10A	10A	✓	✓
STC-8080H	10A	10A	✓	✓
STC-8000H	10A	×	✓	✓

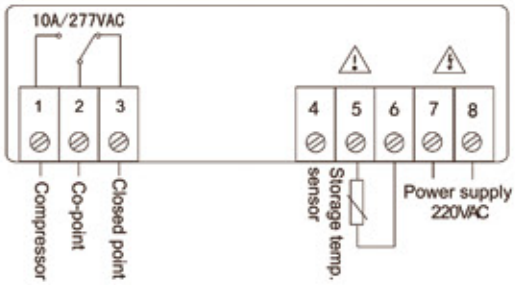
Universal controller series

Microcomputer temperature controller

MODEL STC-8080H

refrigeration alarm 1NTC

wiring diagram



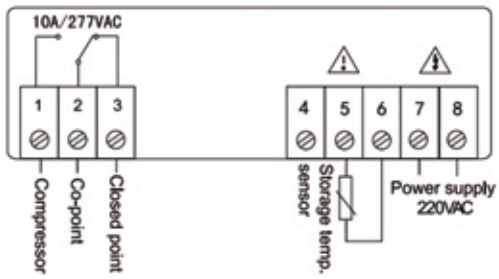
- This product is a general-purpose single-sensor temperature controller;
- Refrigeration,defrosting, over-limit alarm temperature, etc.;
- Compressor protection delay time is adjustable;
- Suitable for cold storage, refrigerated truck refrigeration industry, etc.

power supply	230VAC +10%, 50/60Hz	Relative humidity	No more than 80% (no condensation)
Temperature measurement range	-50°C~99°C	Sensor type	NTC sensor
Temperature resolution	1°C	Installation hole size	L71xW29(mm)
Ambient temperature	-10°C~60°C	Overall size	L77xW34.5xD85(mm)

MODEL STC-8000H

refrigeration alarm 1NTC

wiring diagram



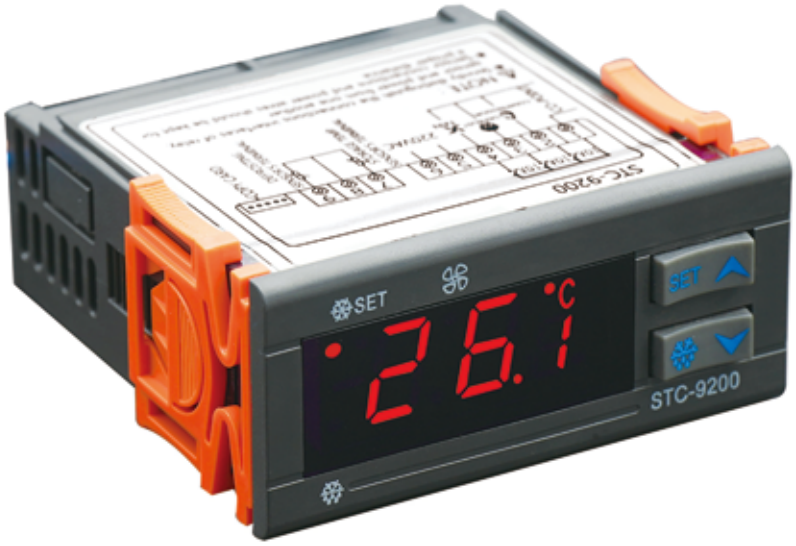
- STC-8000H is a general-purpose single-sensor temperature controller with refrigeration and over-temperature alarm functions;
- compressor delay time is adjustable, and the over-temperature alarm delay is adjustable after power-on;
- Suitable for refrigerators, refrigerated trucks and other refrigeration industries.

power supply	220VAC+10%/-15%，50/60Hz	Storage temperature	-30°C~75°C
Temperature measurement range	-50°C~99°C	Sensor type	NTC sensor
Temperature resolution	1°C	Installation hole size	L71xW29(mm)
Cooling output contact capacity	10A/277VAC	Overall size	L77xW34.5xD85(mm)

Universal controller series

Microcomputer temperature controller

HS GROUP



refrigeration defrost fan alarm 2NTC

Refrigeration, defrost and fan control modes;
The user menu and the administrator menu can be set separately, which is convenient for users to operate, and leaves enough space for the adjustment of senior management;
Differential control mode, the temperature display resolution is 0.1;
Multiple protection and alarm modes are optional;
CORYKEY function (optional).

Serial code	Control output				Signal input		Buzzer beep
	Cooling	Defrost	Fan	Alarm	Cabinet temperature	Defrost temperature	
STC-9100	10A	10A	×	10A	✓	✓	✓
STC-9200	10A	10A	10A	×	✓	✓	✓
ETC-3000	10A	10A	10A	×	✓	✓	✓
STC-300	10A	×	×	×	✓	×	✓
ETC-100+	10A	×	×	×	✓	✓	✓
ETC-200+	10A	10A	×	×	✓	×	✓

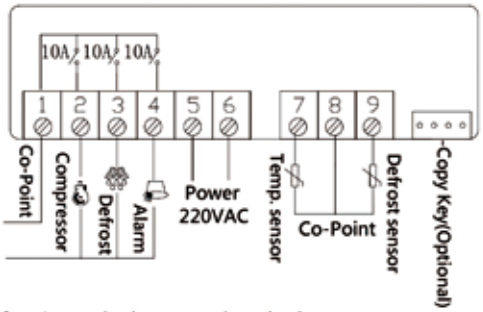
Universal controller series

Microcomputer temperature controller

MODEL STC-9100

refrigeration defrost alarm 2NTC

wiring diagram



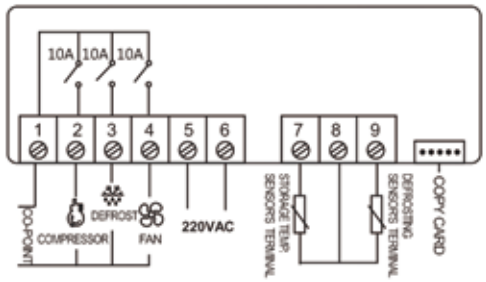
- Cooling, defrosting and other control methods;
- User menu and administrator menu can be set separately, which is convenient for users to operate, and leaves enough space for the adjustment of senior management;
- Differential control mode, the temperature display resolution is 0.1;
- Various protection and alarm modes are optional;
- CORYKEY function (optional).

power supply	220VAC, 50Hz	Relative humidity	20%-85% (NON-CONDENSING)
Temperature measurement range	-50°C~50°C	Sensor type	NTC sensor
Temperature resolution	1°C	Installation hole size	L71xW29(mm)
Compressor relay capacity	10A/220VAC	Overall size	L77xW34.5xD85(mm)

MODEL STC-9200

refrigeration defrost fan alarm 2NTC

wiring diagram



- Refrigeration, defrost and fan control modes;
- The user menu and the administrator menu can be set separately, which is convenient for users to operate, and leaves enough space for the adjustment of senior management;
- Differential control mode, the temperature display resolution is 0.1;
- Multiple protection and alarm modes are optional;
- CORYKEY function (optional).

power supply	220VAC+10%/-15%，50/60Hz	Relative humidity	20%-85% (non-condensing)
Temperature measurement range	-50°C~50°C	Sensor type	NTC sensor
Accuracy	±1°C	Installation hole size	L71xW29(mm)
Cooling output contact capacity	10A/220VAC	Overall size	L77xW34.5xD85(mm)

Universal controller series

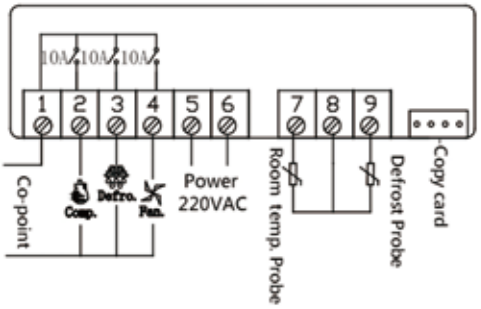
Microcomputer temperature controller

HS GROUP

MODEL ETC-3000

refrigeration defrost fan alarm °C/°F 2NTC

wiring diagram



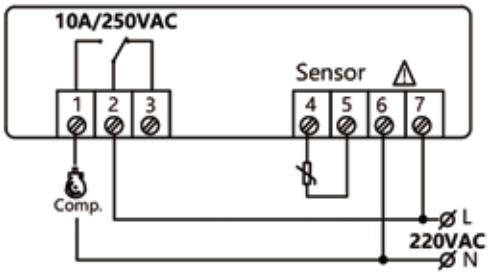
- Refrigeration, defrost, fan control mode;
- The user menu and the administrator menu are set separately, which is convenient for operation and provides enough space for the adjustment of high-level management;
- Hysteresis control temperature; switch between °C and °F; temperature display resolution is 0.1;
- A variety of protection and alarm methods are optional;

power supply	220VAC±10%	Fan and defrost relay capacity	10A/220VAC
Temperature measurement range	-45.5°C~120°C	Sensor type	NTC sensor
Temperature control range	-45.5°C~110°C	Installation hole size	L71xW29(mm)
Compressor relay capacity	10A/220VAC	Overall size	L77xW34.5xD85(mm)

MODEL STC-300

refrigeration alarm 1NTC

wiring diagram



- This product is a general-purpose single-sensor temperature controller with functions such as refrigeration and over-temperature alarm;
- Compressor protection delay time is adjustable;
- After the power is turned on, the temperature overrun alarm delay is adjustable;
- Suitable for cold storage, refrigerated truck refrigeration industry, etc.

power supply	220VAC+10%/-15%，50/60Hz	Relative humidity	No more than 80% (no condensation)
Temperature measurement range	-50°C~120°C	Sensor type	NTC sensor
Accuracy	±1°C	Installation hole size	L71xW29(mm)
Cooling output contact capacity	10A/220VAC	Overall size	L77xW34.5xD85(mm)

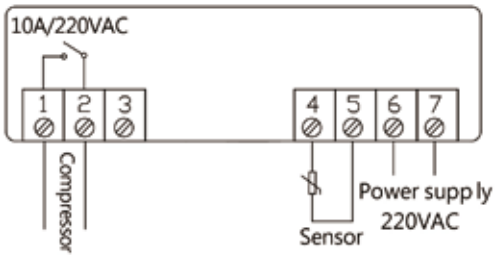
Universal controller series

Microcomputer temperature controller

MODEL ETC-100+

refrigeration alarm 1NTC

wiring diagram



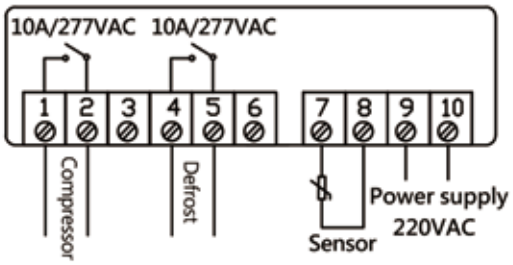
- Temperature measurement and control;
- Temperature calibration;
- Start delay protection;
- Enter the password to adjust the parameters.

power supply	220VAC±10%, 50/60Hz	Relative humidity	20%-85% (NON-CONDENSING)
Temperature measurement range	-40°C~120°C	Sensor type	NTC sensor
Temperature resolution	1°C	Installation hole size	L71xW29(mm)
Relay contact capacity	10A/220VAC	Overall size	L77xW34.5xD85(mm)

MODEL ETC-200+

refrigeration defrost heating alarm 1NTC

wiring diagram



- Temperature measurement and control;
- Temperature calibration;
- Over temperature alarm;
- Enter the password to adjust the parameters.
- Defrosting control;
- Start delay protection;
- Cooling and heating switching;

power supply	220VAC±10%, 50/60Hz	Relative humidity	20%-85% (non-condensing)
Temperature measurement range	-40°C~120°C	Sensor type	NTC sensor
Accuracy	±1°C	Installation hole size	L71xW29(mm)
Relay contact capacity	10A/220VAC	Overall size	L77xW34.5xD85(mm)

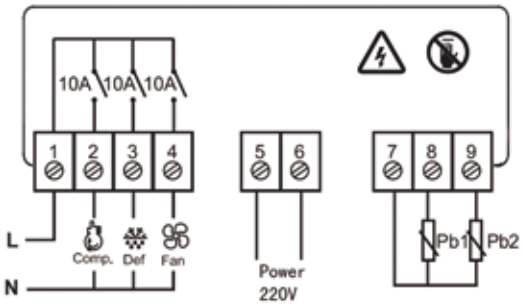
Universal controller series

Microcomputer temperature controller

HS GROUP

MODEL EK-3030

wiring diagram



refrigeration | defrost | fan | touch screen | alarm | 2NTC

This controller is suitable for temperature control of medium and low temperature cold storage;
With temperature measurement, display and control functions. Calibration, forced defrost, over temperature. Alarm and sensor failure alarm, one key to restore the factory default value, parameter preset, one key to restore;
Adopt touch key design, with key lock function;
Two-way sensor input: cabinet temperature sensor and defrost temperature sensor. Three control outputs: cooling, defrosting and fan.

power supply	220VAC ±10%, 50/60Hz	Relative humidity	±1°C at(-30°C~50°C); ±2°C other range
Temperature measurement range	-40°C~99°C	Sensor type	NTC sensor
Temperature control range	-40°C~85°C	Installation hole size	L71xW29(mm)
Compressor relay capacity	10A/220VAC	Overall size	L78.5xW34.5xD82(mm)

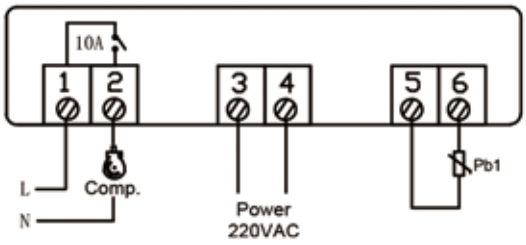
Serial code	Control output			Signal input		Buzzer beep
	Cooling/Heating	Defrost	Fan	Cabinet temperature	Defrost temperature	
EK-3010	10A	×	×	✓	×	✓
EK-3020	Cooling 10A	10A	×	✓	×	✓
EK-3030	10A	10A	10A	✓	✓	✓

Universal controller series

Microcomputer temperature controller

MODEL EK-3010

wiring diagram



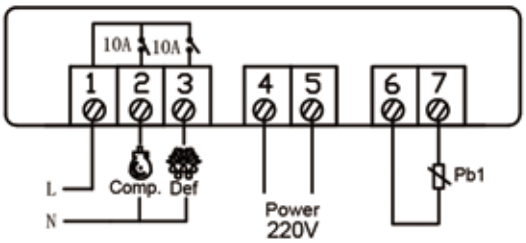
refrigeration heating touch screen alarm 1NTC

- The controller is suitable for temperature control of medium and low temperature cold storage and heating equipment.
- With temperature measurement, display and control functions; temperature correction; temperature over-temperature and sensor failure alarm;
- One-key recovery of factory settings; a set of parameters can be preset and one-key recovery;
- Using touch keys, with key lock function.

power supply	230VAC +10%, 50/60Hz	Accuracy	±1°C at(-30°C~50°C); ±2°C other range
Temperature measurement range	-40°C~99°C	Sensor type	NTC sensor
Temperature control range	-40°C~85°C	Installation hole size	L71xW29(mm)
Relay capacity	10A/220VAC	Overall size	L78.5xW34.5xD82(mm)

MODEL EK-3020

wiring diagram



refrigeration defrost alarm touch screen 1NTC

- This controller is suitable for temperature control of medium and low temperature cold storage;
- With temperature measurement, display and control functions. Calibration, forced defrost, over temperature. Alarm and sensor failure alarm, one key to restore the factory default value, parameter preset, one key to restore;
- Adopt touch key design, with key lock function;
- Single-channel sensor input: cabinet temperature sensor (Pb1). Dual control outputs: cooling and defrosting.

power supply	220VAC ±10%, 50/60Hz	Accuracy	±1°C at(-30°C~50°C); ±2°C other range
Temperature control range	-40°C~85°C	Sensor type	NTC sensor
Temperature measurement range	-40°C~99°C	Installation hole size	L71xW29(mm)
Resolution	0.1°C	Overall size	L78.5xW34.5xD82(mm)

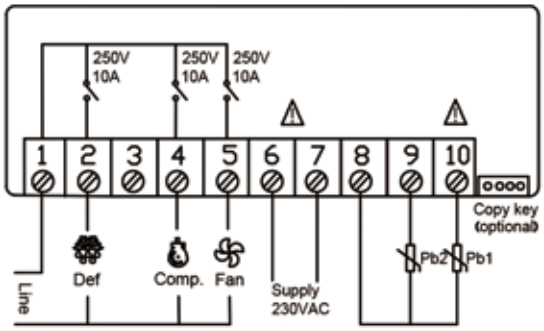
Universal controller series

Microcomputer temperature controller

HS GROUP

MODEL ETC-974

wiring diagram




refrigeration


defrost


fan


alarm


copy

℃/℉

2NTC

Refrigeration, defrost and multi-mode fan control are optional;
Hysteresis control, temperature display resolution 0.1°C;
switch between °C and °F;
Multiple alarm function.

power supply	230VAC +10%, 50/60Hz	Relative humidity	10%~90%RH (no condensation)
Temperature measurement range	-50°C~120°C	Sensor type	NTC sensor
Ambient temperature	-5°C~50°C	Installation hole size	L71xW29(mm)
Relay (compressor, defrost, fan) capacity	10A/230VAC	Overall size	L77xW32xD58(mm)

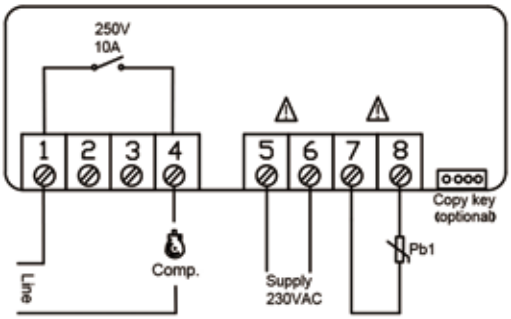
Serial code	Control output			Signal input		Buzzer beep
	Cooling	Defrost	Fan	Cabinet temperature	Defrost temperature	
ETC-974	10A	10A	10A	✓	✓	✓
ETC-961	10A	×	×	✓	×	✓
ETC-902	10A	×	×	✓	×	✓
ETC-512B	16A	×	×	✓	×	×
MTCB-974	10A	10A	10A	✓	✓	✓

Universal controller series

Microcomputer temperature controller

MODEL ETC-961

wiring diagram



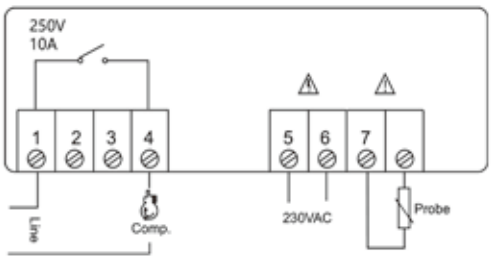
refrigeration defrost alarm copy NTC 1NTC

- Refrigeration defrosting function;
- Hysteresis control, temperature display resolution 0.1°C;
- Multiple alarm function.

power supply	230VAC +10%, 50/60Hz	Relative humidity	10%~90%RH (no condensation)
Temperature measurement range	-50°C~120°C	Sensor type	NTC sensor
Ambient temperature	-5°C~50°C	Installation hole size	L71xW29(mm)
Relay (compressor, defrost, fan) capacity	10A/250VAC	Overall size	L77xW32xD58(mm)

MODEL ETC-902

wiring diagram



refrigeration defrost alarm 1NTC

- Refrigeration defrosting function;
- Hysteresis control, temperature display resolution 0.1°C;
- Multiple alarm function.

power supply	230VAC+10% 50/60Hz	Relative humidity	20%~85% (non-condensing)
Temperature control range	-50C ~ 99°C	Sensor type	NTC sensor
Storage temperature	-15C~60°C	Installation hole size	L71xW29(mm)
Relay rated current	8A/220VAC	Overall size	L77xW32xD58(mm)

Universal controller series

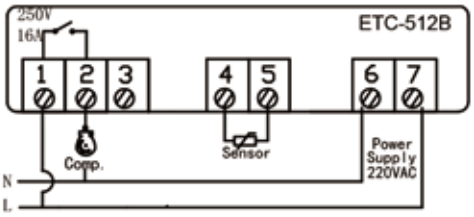
Microcomputer temperature controller

HS GROUP

MODEL ETC-512B

refrigeration defrost heating copy 1NTC

wiring diagram



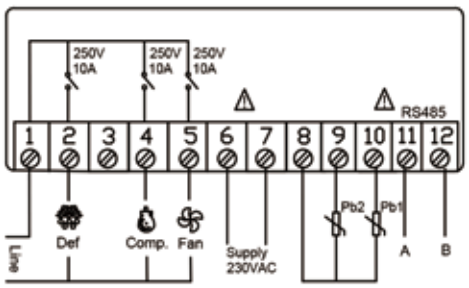
- ETC-512B is a refrigeration only controller with the off cycle defrost mode, defrost time adjustable. it could also be set as heating only.
- Refrigeration relay: under the condition that the protection delay time has finished, when the measured temperature is higher than set temperature value+Hysteresis, the compressor will start .If it is lower than set value, the compressor will stop. Under the heating mode, when the measured temperature

power supply	220V+15%-10%	Relative humidity	10%-90%RH(Non-condensing)
Temperature measurement range	-50°C-105°C	Sensor type	NTC sensor
Relay capacity	16A/250V	Installation hole size	L71xW29(mm)
Working temperature	-10°C-60°C	Overall size	L77xW32xD58(mm)

MODEL MTC-974

refrigeration defrost fan alarm RS485 2NTC

wiring diagram



- MTC-974 is a universal standard temperature controller with cooling, defrosting, RS485 terminal and fan control outputs. The parameter setting of MTC-974 is divided into the user menu and administrator menu. If you are an equipment company, you can set up the administrator menu parameters. The end-user only sets the user parameter menu, which is convenient for users to operate. The administrator menu has a password protection function to prevent users from misusing settings.

power supply	230VAC+10% 50/60HZ	Relative humidity	10%~90% RH (not condensing
Storage temperature	-30°C~85°C	Sensor type	NTC sensor
Use temperature	-5°C~55°C	Installation hole size	L71xW29(mm)
Rated current of the relays	10A/220VAC	Overall size	L77xW34.5xD58(mm)

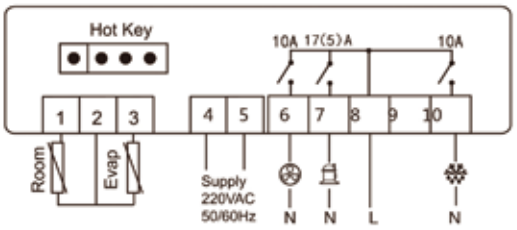
HS GROUP

Universal controller series

Microcomputer temperature controller

MODEL ECS-974NEO

wiring diagram



refrigeration defrost fan copy 2NTC

ECS-974neo is a universal standard temperature controller. Two temperature sensors are used fo r cabinet temperature adjustment and defrost temperature measurement. Three-way output control can control amplifier, defrost and transformer. The controller parameters can be restored with one click and it also has a copy card function to quickly adjust the controller parameters. The display resolution menu is adjusted to 0.1 or 1°C. A variety of defrosting and grading operation modes to meet the needs of different cabinet types. The product menu is divided into user and administrator menus. The administrator menu has a password protection function to prevent users from misoperation settings.

power supply	220 VAC±10 %, 50/60Hz	Resolution	0.1°C/1°C settable
Temperature control range	-50°C~99°C	Sensor type	NTC sensor
Temperature measuring range	-50°C~99°C	Installation hole size	L71xW29(mm)
Accuracy	±1°C(-40°C~50°C), ±2°C(others)	Overall size	L78.5xW34.5xD74(mm)

Serial code	Control output				Signal input			Buzzer beep
	Cooling	Defrost	Fan	light	Cabinet temperature	Defrost temperature	External signal	
ECS-974NEO	16A	10A	10A	×	✓	✓	×	✓
ECS-961NEO	16A	×	×	×	✓	×	×	×
ECS-180NEO	17(5)A	10A	10A	5A	✓	✓	✓	✓

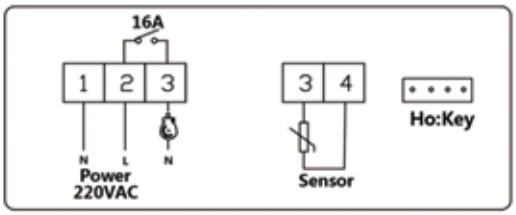
Universal controller series

Microcomputer temperature controller

HS GROUP

MODEL ECS-961NEO

wiring diagram



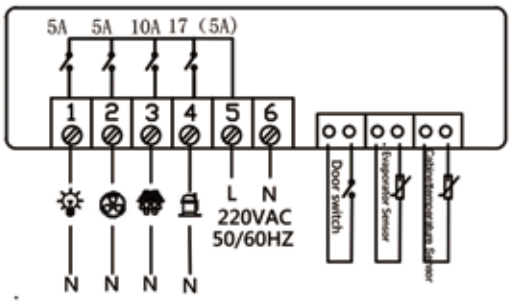
refrigeration defrost heating copy NTC 1NTC

- ECS-961neo has user menu and administrator menu. User menu is used to adjust the temperature.
- ECS-961neo has 1 sensor for the room and with 16Amax)relay to control the compressor; it has a very big display screen with the compressor and defrost indicator light which help the user check the statues of the refrigeration units easily.

power supply	220V+15%-10%	Relative humidity	20%~85%(no frost)
Measuringrange	-50°C~99°C	Sensor type	NTC sensor
Resolution	0.1or1°C	Installation hole size	L71xW29(mm)
Refrigeration	16A/240VAC(No type)	Overall size	L77xW34.5xD41(mm)

MODEL ECS-180NEO

wiring diagram



refrigeration defrost copy fan light NTC 2NTC

- ECS-180 neo temperature controller could be used in the middle and low temperature medicine cabinet, kitchen cabinet, supermarket split cabinet, air curtain cabinet, island counter, wine cabinet, etc.
- The controller adopts building block design concept and users could select defrost, fan, light/external alarm according to their demand.

power supply	220±10 %(VAC) 50/60Hz	Relative humidity	20%~85% (non-condensing)
Measuring range	-50°C~90°C or -58°F~194°F	Sensor type	NTC sensor
Storage temperature	-25°C~75°C	Installation hole size	L71xW29(mm)
Power consumption	<3W	Overall size	L77xW34.5xD82(mm)

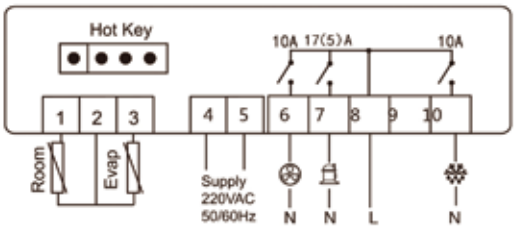
HS GROUP

Universal controller series

Microcomputer temperature controller

MODEL SH3B23

wiring diagram



refrigeration defrost fan copy 2NTC

This product is specially designed for refrigerated cabinets , bottle coolers , and other refrigeration equipment. The user interface consists of a larger than average custom display, with decimal point and function icons, and four touch keys. It guarantees IP65 protection for easy cleaning. It has adaptive management of the defrost function and can implement energy-saving strategies.

power supply	220 VAC+10 %, 50/60Hz	Product protection level	IP 65
Temperature measurement range	-50°C~150°C	Sensor type	NTC/10K
Temperature control range	-50°C~99°C	Installation hole size	L71xW29(mm)
Operating and storage environment	-10°C~60°C	Overall size	L77xW34.5xD82(mm)

Serial code	Control output				Signal input		Buzzer beep
	Cooling	Defrost	Fan	Light	Cabinet temperature	Defrost temperature	
SH3B23	17A	10A	5A	×	✓	✓	✓
SH-713	30A	×	×	10A	✓	×	×
SH-161	16A	×	×	12A	✓	×	×
SH-160D	16A	×	×	12A	✓	×	✓
SH-704	30A	10A	10A	×	✓	✓	×
SH-735	30A	×	×	10A	✓	×	×
STC-60CX	20A	10A	5A	×	✓	✓	✓

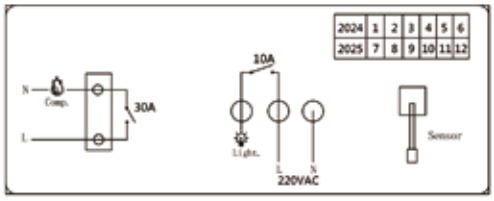
Commercial display case series

Microcomputer temperature controller

HS GROUP

MODEL SH-713

wiring diagram



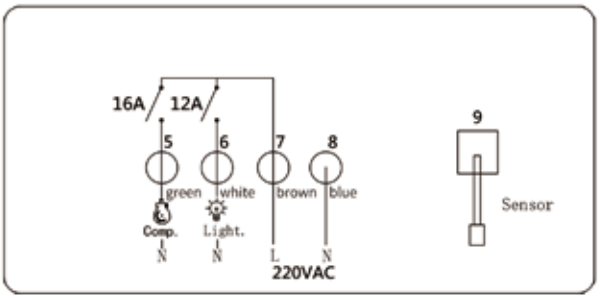
refrigeration defrost light NTC 1NTC

- This product is a universal single-sensor temperature controller with functions such as refrigeration, shutdown defrosting, lighting, and temperature over-limit alarm. It is suitable for refrigeration industries such as freezers, refrigerators, and island cabinets.

Power supply voltage	220VAC±10% 50Hz/60Hz	Compressor relay capacity	30A/250V
Temperature display range	-50°C~120°C	lighting relay capacity	10A/250V
Temperature control range	-40°C~20°C	Installation hole size	L137xW33(mm)
Working environment temperature	-10°C~60°C	Overall size	L148xW43xD48(mm)

MODEL SH-161

wiring diagram



refrigeration defrost light NTC 1NTC

- This product is specially designed for direct-cooling type refrigeration systems, with LED digital display. It is mainly used for platform cabinets, transverse cabinets, island cabinets and other equipment and occasions that require direct-cooling refrigeration systems. Products are more beautiful, more reliable and more energy-saving. The new humanized operation interface makes operation simpler and more convenient.

Power supply	220VAC ±10% 50/60Hz	Product protection level	IP 65
Temperature measurement control range	-50°C~120°C	Operating and storage environment	-10~60°C, humidity ≤90%, no condensation
Relay capacity	16A/12A	Installation hole size	L124xW54(mm)
Temperature control range	-40°C~30°C	Overall size	L148xW76xD48(mm)

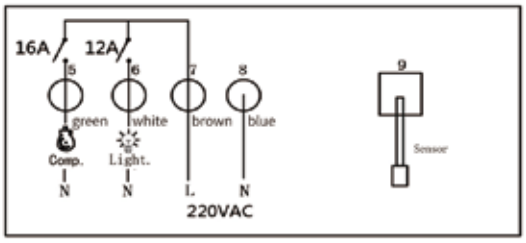
Commercial display case series

Microcomputer temperature controller

MODEL SH-160D

refrigeration light 1NTC

wiring diagram



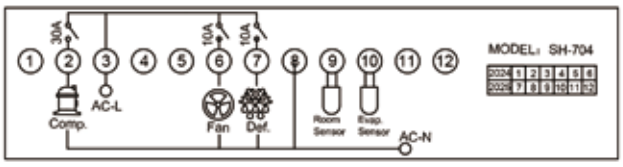
- This product is specially designed for direct-cooling type refrigeration systems, with LED digital display. It is mainly used for platform cabinets, transverse cabinets, island cabinets and other equipment and occasions that require direct-cooling refrigeration systems. Products are more beautiful, more reliable and more energy-saving. The new humanized operation interface makes operation simpler and more convenient.

Power supply	220VAC ±10% 50/60Hz	perating and storage environment	-10~60°C, humidity ⩽90%, no condensation
Temperature measurement control range	-50°C~120°C	Sensor type	NTC/10KQ
Temperature control range	-40°C~30°C	Installation hole size	L124xW54(mm)
Relay capacity	16A/12A	Overall size	L148xW76xD48.5(mm)

MODEL SH-704

refrigeration defrost fan 2NTC

wiring diagram



- SH-704 is a small integrated intelligent control, with below features :
- temperature display /temperature control
- Time and temperature stop the defrosting Memory lock/parameter lock
- Ultra low temperature alarm/light control
- Short press the button to display the defrost temperature

Operating voltage	AC220V ±10% 50HZ/60HZ	Resolution	1°C
Working environment	-10°C~50°C RH⩽90%	Input signal	NTC-10K x 2 meters
Control range	-45°C~80°C	Opening size	L192xW58(mm)
Power consumption	⩽3W	Appearance size	L208xW64xD43(mm)

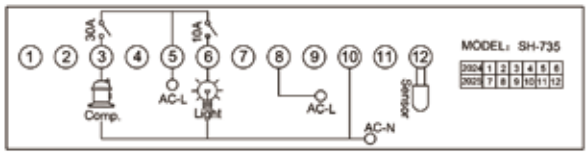
Commercial display case series

Microcomputer temperature controller

HS GROUP

MODEL SH-735

wiring diagram



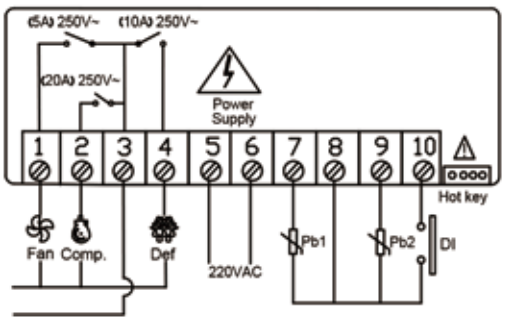
refrigeration lamplight 1NTC

- SH-735 is a small integrated intelligent control, with below features : Temperature control/switch machine/light/first press the right button to start self-diagnosis/fault compresser start-stop proportion.

Power supply	AC110V-220V	Relative humidity	20% ~90% (No condensate)
Temperature measuring range	-45°C~80°C	Light	10A/110V-250VAC
Temperature control range	-45°C~9°C	Installation hole size	L192xW58(mm)
Compressor relay contact capacity	30A/110V-250VAC	Overall size	L208xW64xD43(mm)

MODEL STC-60CX

wiring diagram



refrigeration defrost fan alarm touch screen copy 2NTC

- The instrument is fully configurable through special parameters that can be easily programmed through the keyboard or by Hot Key

Power supply	220VAC ±10% 50/60Hz	Relative humidity	±1°C at(-30°C~50°C); ±2°C other range
Temperature measurement range	-40°C~99°C	Sensor type	NTC sensor
Temperature control range	-40°C~85°C	Installation hole size	L71xW29(mm)
Compressor relay capacity	20A/220VAC	Overall size	L78.5xW34.5xD82mm)

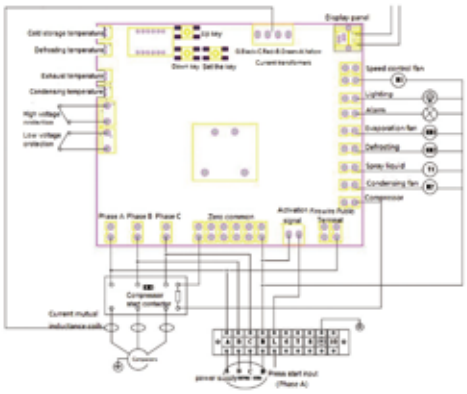
HS GROUP

Cold room controller series

Microcomputer temperature controller

MODEL JDC-5086F

wiring diagram



① High/low temperature alarm
② Phase sequence protection
③ Current protection
④ High and low voltage protection
⑤ Excessive condensation protection
⑥ Alarm output
⑦ First power on protection
⑧ Excessive exhaust temperature protection

Control compressor start and stop: According to the start-up temperature and shutdown temperature control.
Control defrosting: Periodic defrosting, the defrosting end condition is temperature and time dual control
Control of the evaporation fan: The compressor can be started early or lagging and the shutdown can be delayed.
Control condensing fan: Depending on the condensing temperature or exhaust temperature, start/stop the condensing fan.
Control condensing speed control fan: According to the condensing temperature or exhaust temperature, adjust the speed of the condensing speed control fan.
Control lighting: Manually control the light on and off.
Control alarms: Alarm output when error.

Temperature display range	-50.0°C~150.0°C	Controller supply voltage	three-phase 380VAC or single-phase 220VAC
Temperature setting range	-50.0°C~120.0°C	Temperature Sensor	NTC R25=10KΩ B(25/85)=3435K
Current display range	0~100A	Motherboard size	13.2×11.0cm
Output Contact Capacity	5A/250VAC (Pure Resistive Load)	Display size	12.0×12.0 cm

Serial code	Control output						
	Cooling	Defrost	Evaporation fan	Light	Spray liquid	Codensing fan	Alarm
JDC-5086F	5A	5A	5A	10A	5A	5A	5A
SH-5080T	3A	3A	Fan 3A	×	×	×	5A

Signal input								Buzzer beep
Cabinet temperature	Defrost temperature	Exhaust temperature	Condensing temperature	High voltage drotecyion	Low voltage drotecyion	External signal	Current transformers	
✓	✓	✓	✓	✓	✓	×	✓	✓
✓	✓	×	×	×	×	✓	×	✓

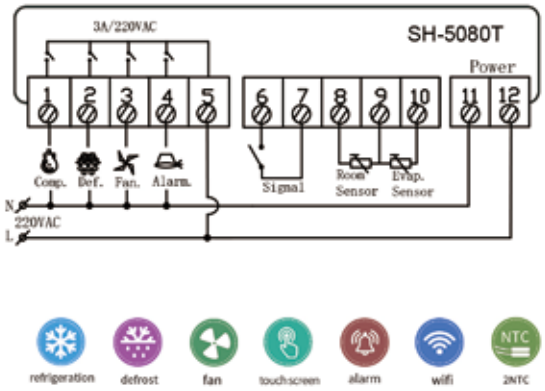
Cold room controller series

Microcomputer temperature controller

HS GROUP

MODEL SH-5080T

wiring diagram



Measuring /controlling temperature range	-40°C~99°C	Resolution	0.1°C
Power supply voltage	220VAC ±10% 50/60Hz	Sensor type	NTC (10KΩ/25°C B value 3435K)
Operating ambient temperature	-10°C~60°C	Installation size	L92xW44(mm)

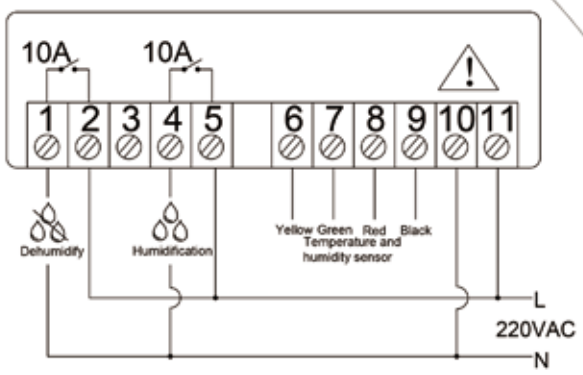
This controller is used for the control of medium and low temperature cold storage temperature, with temperature measurement, display and control; temperature correction; Forced defrosting; Temperature overtemperature and sensor overtemperature alarm; One-click restore of factory settings; A set of parameters can be preset and r with one click; It adopts touch k eys and has a key lock function, with Wi-Fi function for remote check and control via the mobile app.

Temperature and humidity series

Microcomputer temperature controller

MODEL STC-501

wiring diagram



humidification Dehumidification 1NTC

This product is a general-purpose single humidity controller with functions such as humidification, dehumidification, and humidity overrun alarm. It is suitable for various scenarios that require humidity control.

Power supply voltage	230VAC+10% 50/60Hz	Humidification relay capacity	30A/250V
Humidity display range	0%RH~99%RH	sensor type	Temperature and humidity integrated sensor
Humidity control range	5%RH~99%RH	Installation hole size	L71xW29(mm)
Sensor accuracy	Humidity +3%RH	Overall size	L77xW34.5xD82(mm)

Serial code	Control output			Signal input	Buzzer beep
	Cooling/Heating	Dehumidify/Humidification	Dehumidify/Humidification	Temperature/humidity sensor	
STC-501	×	Dehumidify:10A	Humidification:10A	✓	✓
STC-502	10A	10A	×	✓	✓
DHC-100+	×	Dehumidify:10A	Humidification:10A	✓	✓
STC-3028	10A	10A	×	✓	×
STC-3008	10A	×	×	Temperature sensor	×
STC-3018	10A	×	×	Temperature sensor	×
SHT-2000	10A	10A	×	✓	×
STC-3001	10A	×	×	Temperature sensor	×
STC-3005	×	10A	×	✓	×

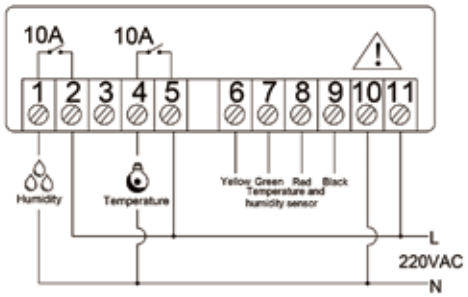
Temperature and humidity series

Microcomputer temperature controller

HS GROUP

MODEL STC-502

wiring diagram



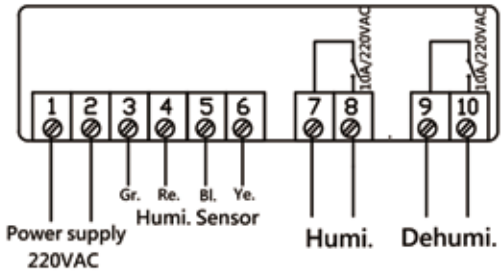
refrigeration heating humidification Dehumidification 1NTC

- This product is a universal temperature and humidity dual display controller, with cooling or heating, humidification or dehumidification, and over-limit alarm functions, suitable for various scenarios where the equipment needs temperature and humidity control.

power supply	220VAC ±10%, 50/60Hz	Humidity control range	5%~99%RH
Temperature display range	-50°C~150°C	Sensor accuracy	humidity ±3%RH, ±0.5°C
Temperature control range	-40°C~90°C	Installation hole size	L71xW29(mm)
Humidity display range	0~100%RH	Overall size	L77xW34.5xD82(mm)

MODEL DHC-100+

wiring diagram



humidification Dehumidification 1NTC

- This product adopts humidity controller, which has the characteristics of high reliability and good long-term stability;
- Can be widely used in humidifiers, dehumidifiers, air humidification;
- Adjust the humidity control of machines and other equipment;
- Can also be used for relative humidity measurement and display.

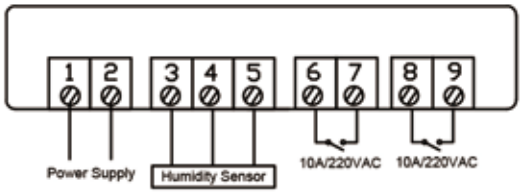
power supply	230VAC+10% 50/60Hz	Accuracy	±3%RH
Humidity range	0%RH~99%RH	Sensor type	Temperature and humidity integrated sensor
Humidification range	5%RH~99%RH	Installation hole size	L71xW29(mm)
Resolution	0.1%RH	Overall size	L77xW34.5xD85(mm)

Temperature and humidity series

Microcomputer temperature controller

MODEL STC-3028

wiring diagram



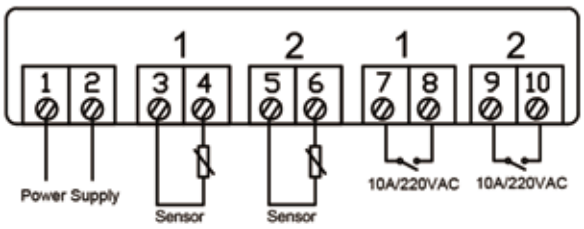
refrigeration heating humidification Dehumidification 1NTC

- Switch between hot and cold modes; by controlling the temperature Set the temperature set point and difference;
- Temperature calibration; refrigeration control output delay protection; alarm when temperature exceeds, temperature limit or sensor error.
- Ability to control temperature and humidity at the same time.
- Ability to connect a humidifier and dehumidifier at the same time.
- Ability to connect cooling/heating and humidification/dehumidification equipment at the same time.

power supply	AC110~220V±10%, DC24V, DC12V	Relay output contact capacity	10A/240VAC
Measuring temperature range	-20°C ~ 80°C	Sensor length	1m
Measuring humidity range	00%RH~+100%RH	Installation hole size	L71xW29(mm)
Accuracy	±1, 0.1%RH	Overall size	L77xW34.5xD85(mm)

MODEL STC-3008

wiring diagram



refrigeration heating 2NTC

- ABS flame retardant plastic shell, safer to use.
- Microcomputer intelligent digital temperature controller, dual display and dual temperature.
- The large and clear digital display shows the measured temperature with high temperature measurement accuracy.
- It is suitable for automatic switching of refrigeration and heating equipment such as seafood
- machines and cooling water machines.

power supply	12V/24V/110V - 220VAC	Ambient temperature	0°C~60°C
Temperature control range	-50°C~110°C	Relative humidity	20%~85% (non-condensing)
Temperature measurement accuracy	±1°C (-50°C~70°C)	Installation hole size	L71xW29(mm)
Machine power consumption	< 3W	Overall size	L77xW34.5xD82(mm)

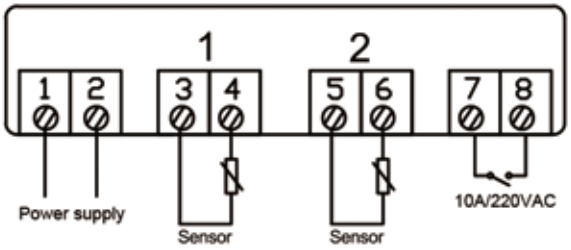
Temperature and humidity series

Microcomputer temperature controller

HS GROUP

MODEL STC-3018

wiring diagram



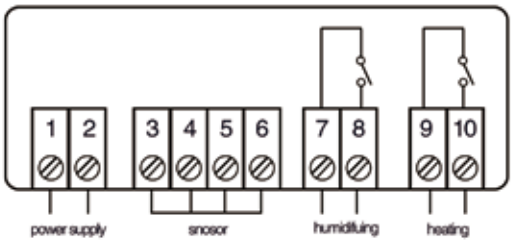
refrigeration heating 2NTC

- Microcomputer intelligent digital temperature controller, double-panel display (with temperature + Fahrenheit function).
- The large and clear digital display shows the measured temperature with high temperature measurement accuracy.
- It is suitable for automatic switching of refrigeration and (incubator) heating equipment such as seafood machines and cooling water machines.

power supply	110~220VAC (or DC12V/DC24V)	Humidity control range	5%~99%RH
Temperature control range	-50°C~120°C	Output capacity	10A
Temperature measurement accuracy	±1°C	Installation hole size	L71xW29(mm)
Resolution	0.1°C	Overall size	L77xW34.5xD82(mm)

MODEL SHT-2000

wiring diagram



refrigeration heating humidification Dehumidification 1NTC

- Equipped with a humidity sensor, easy to use, the cable length is about 1 meter.
- Large and clear digital display shows temperature and humidity measurement values, with high temperature and humidity measurement and control accuracy.
- Suitable for automatic switching of refrigeration and heating devices such as incubators.

power supply	DC 12V / DC 24V / AC 110~230V	Humidity measurement accuracy	3%
Power frequency	50/60Hz	Output power	MAX 10A
Humidity range	0%~100%RH	Installation hole size	L71xW29(mm)
Temperature measurement accuracy	0.3°C	Overall size	L77xW34.5xD82(mm)

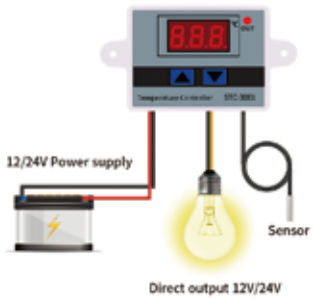
Temperature and humidity series

Microcomputer temperature controller

MODEL STC-3001

refrigeration heating NTC 1NTC

wiring diagram



- The single-chip microcomputer control system and high-precision temperature probe are adopted, with outstanding temperature control accuracy, wide temperature control range, simple setting, and the function of automatically distinguishing heating/cooling mode, which is widely used. Incubation field, equipment chassis, air conditioning system, temperature protection and other fields.

Load power	120/240/1500W	Output capacity	up to 10A
Measurement input	NTC10K	Relative humidity	Installation hole distance
Supply voltage	12v/24v/220v	Temperature control accuracy	0.1 degrees
poewr consumption	less than 3W	Overall size	L60xW45xD31(mm)

MODEL STC-3005

humidification Dehumidification 1NTC

wiring diagram

- With single-chip microcomputer control system and high-precision temperature probe, the temperature control precision is outstanding, the temperature control range is wide, the setting is simple, and the function of automatically distinguishing the temperature/humidity mode is widely used. Incubation field, equipment chassis, air conditioning system, temperature protection and other fields.

Product model	STC-3005	Output type	direct output
Power supply voltage	12V/24V/110-220V	Output capacity	maximum 10A
Humidity measurement range	00%RH-99%RH	Installation hole distance	73MM (hole distance 4(mm)
Humidity control accuracy	0.1%RH	Appearance size	60*45*31(mm)

PID controller series

Microcomputer temperature controller

HS GROUP

MODEL CH SERIES

- Intelligent PID regulation
- Return difference control
- Temperature correction
- High and low temperature alarm

CH series intelligent temperature controllers have dual-purpose outputs of relay contacts and voltage pulses (SSR). Adopting the most advanced PID intelligent regulation control, it has the features of small temperature control deviation, small volume, strong anti-interference performance, and can input various signals.

MODEL BT6 SERIES

- Intelligent PID regulation
- Return difference control
- Temperature correction
- High and low temperature alarm

BT6 series A variety of sensors free input, intelligent stability, high precision, strong anti-interference performance, plexiglass +led light, can do RS485 communication, face the industrial control site.

MODEL KT SERIES

- Intelligent PID regulation
- Return difference control
- Temperature correction
- High and low temperature alarm

KT series LCD temperature controllers use switching power supply and surface mount technology (SMT) to make the instruments compact and reliable. Unique self-diagnostic function, self-adjustment function and intelligent control function.

USB Data Logger series

Microcomputer temperature controller

MODEL SINGLE USE/DISPOSABLE USB DATA LOGGER TEMPERATURE

60 DAYS

90 DAYS

Single-use PDF Temperature Data Logger is one kind of cold chain data logger. It is mainly used for temperature recording during storage and transportation of foodstuff, medicine, chemicals and other products. After record finishing, it can be inserted to computer' s USB port and get PDF report directly.

Accuracy	±0.5°C (-20°C~+40°C); ±1°C(others)	Storage	Recommend 20% to 60% RH, 10°C to 50°C
Temperature measurement range	<2°C or >8°C (<35.6°F or >46.4°F)	Water Proof Level	IP67
Start Delay	30mins	Communication Interface	USB2.0
Operating Temperature	-30°C~+60°C (22°F~140°F)	specification	60days &90days

MODEL PROGRAMMABLE USB TEMPERATURE RECORDER

PDF/CSV report

Temperature alarm

32000
Data storage

USB interface

- Multi-use temperature measuringand recording
- Widely measuring range, high
- accuracy and large data memory
- Statistics available on LCD screen
- No software needed to generate PDF and CSV temperature report
- Parameter programmable by configure software

The device is mainly used to monitor the temperature of food, medicine, and other products during storage and transportation. After recording, insert it into the USB port of PC, it will automatically generate reports without any driver.

Temp Accuracy	+0.5°C(-20°C~+40°C),+1.0°C(other)	Start Delay	OptionalDefault: 30 mins
Temp Range	-30°C~60°C	Alarm Delay	OptionalDefault: 10 mins
Capacity	32,000 readings	Alarm Range	Optional Default: <2°C or >8°C
Interval	OptionalDefault: 10 mins	Dimensions	83mm*36mm*14mm

Embedded thermometer series

Electronic digital thermometer

HS GROUP

MODEL TPM-900

Features and functions:

- 220V supply, probe fault instructions, compact size is easy to install;
- Suitable for refrigerated cabinets. Display cabinets, such as the use of a variety of refrigeration equipment.

Power supply	220VAC	Distinguishing rate	<100°C is 0.1,≥100°C is 1
Temperature measure range	-30°C~110°C	Transducer	NTC
Power consumption	<3W	Product size	64*31*35 mm
Accuracy	±1°C	Installing size	58.4*25.7mm

MODEL TPM-910

Features and functions:

- LED display,with simple and elegant appearance,whole waterproof design;
- Suitable for refrigerant cabinet and display cabinet etc.

Power supply	220VAC	Accuracy	±1°C
Power consumption	<3W	Transducer	NTC
Temperature measure range	-30°C~110°C	Product size	64*31*35 mm
Resolution	<100°C is 0.1,≥100°C is 1	Installing size	58.4*25.7mm

MODEL TPM-10

Features and functions:

- LCD display,one side to measure temperature,fashionable appearance,with small size;
- Suitable for aquarium and also suitable for lab, planting green house(black and white selectable)

Battery	2 1.5V LR44 button cells	Power consumption	0.15 mW in working state
Temperature measurement range	-50°C -110°C	Temperature measurement accuracy	±1°C
Display resolution	0.1°C	Induction line length	1 meter (can be changed)
Display mode	LCD display	Dimensions	48*28*15MM

HS GROUP

Embedded thermometer series

Electronic digital thermometer

MODEL TPM-30

Features and functions:

- LCD liquid crystal display, front battery compartment, easy to install and carry.
- It is suitable for the measurement and use of various refrigeration equipment such as refrigerators and display cabinets.

Temperature measurement range	-50℃~+110℃	Power supply	DC1.5V button battery (LR44)
Resolution	>-20℃, 0.1;≤-20℃, 1	Overall size	62.5×29.5×19(mm)
Accuracy	±1℃	Installation size	59.5×25(mm)

MODEL JDP-10P

Features and functions:

- Large LCD display temperature and humidity with internal panel
- Indoor temperature and humidity display
- Select C/F temperature unit display for orders

Temperature measurement range	-50℃~70℃	Humidity test accuracy	±5% (at room temperature 25℃)
Temperature sampling period	5 seconds	Temperature test accuracy	47.6*28.4*15.5mm
Relative humidity test range	20% - 90%	Overall size	64*31*35 mm
humidity display resolution	1%	Embedded hole size	44.3*25.3mm

MODEL JW-30

Features and functions:

- Scope of application: pet box, reptile, cigar box, fish tank, vehicle, measuring environmental temperature and humidity factory warehouse laboratory

Temperature measurement range	-10~50 (℃)	Battery	LR44
Temperature measurement accuracy	±1 (℃)	Humidity measurement range	10%~99% (RH)
Humidity measurement accuracy	±5%(40%~80%), other ±8% (RH)	Product size	57*32*11mm
Humidity resolution	1 (RH)	Installing size	47*21mm

Embedded thermometer series

Electronic digital thermometer

HS GROUP

MODEL ST-1A

Features and functions:

- LCD display,one way to measure the temperature,fashionable appearance;
- Suitable for water-chiller aquariums

Temperature measurement range	-50°C～+110°C (-58°F～+230°F)	Humidity	20%～85%
Power supply mode	A button battery (LR44, 1.5V)	Resolution	0.1°C
Use environment: temperature	0°C～60°C	Product size	55*42*16mm
Temperature measurement accuracy	±1°C	Sensor type and length	thermistor sensor, cable length 1 meter

MODEL ST-2

Features and functions:

- dual-channel temperature measurement inside and outside, with clock display function, ultra-thin shell

Temperature measurement range	-50°C~ 70°C	Accuracy	±1°C
Resolution	>-20°C is 0.1°C, ≤-20°C is 1.0°C	Overall size	56.5*37.8*11.3mm
Power source	1.5V button battery (LR44)	Display size	46.7*21.2mm

MODEL DST-50

Features and functions:

- Solar powered, easy to use, large LCD screen, small size, suitable for refrigerating cabinets, display cabinets and other refrigeration equipment that require temperature measurement and display.

Power supply	Solar panel and LR44 backup battery	Sampling period	10 seconds
Temperature measurement range	-50°C~150°C	Minimum illumination	Cold light: > 60 Lux Daylight :>50 Lux
Resolution	0.1	Machine size	66.5*31.7*190mm
Accuracy	1°C(-20°C~+80°C)	Installation size	46.2*26.7mm

Embedded thermometer series

Electronic digital thermometer

MODEL DST-30

Features and functions:

- Solar cell supply without battery,sealed and water-proof;
- Suitable to use in damp environment;
- Wide temperature measuring range.strong anti-interference;
- Used in fridge.refrigeration cabinet and display cabinet.

Power supply	solar battery panel	Operation environment	Illumination level≥100Lux
Temperature Measure range	-50°C~150°C	Humidity/temperature	5%~85%RH, -10°C~45°C
Resolution	0.1°C	Product size	66*30*11.6 mm
Accuracy	±1°C	Installing size	59.5*26mm

MODEL DS-1

Features and functions:

- Dual temperature measuring probes can detect two temperatures at the same time.
- Equipped with clock display.
- Temperature conversion between Celsius and Fahrenheit.
- High precision and intuitive display.

Power supply	DC1.5V 7#(Alkaline batteries)	Resolution	>-20°C is 0.1°C; ≤-20°C is 1°C
Temperature measure range	-50°C~70°C (-58°F~158°F)	Product size	118*30*28.5mm
Accuracy	±1°C	Display size	33*12mm

MODEL WT-2

Features and functions:

- Celsius-Fahrenheit conversion function;
  temperature maximum and minimum memory function;
  temperature data hold function;
  5 seconds high and low temperature alarm settings;

Temperature measurement range	-50°C~+300°C(-58F~+572F	Probe length	198mm
Power supply	DC1.5V7# alkaline battery (optional)	Lengthened lead	1m
Resolution	0.1°C	Machine size	107*66*24mm
Accuracy	±1°C	Display siz	3.5*14.5mm

Digital thermometer series

Electronic digital thermometer

HS GROUP

MODEL HTC-1

Features and functions:

- LCD large car digital thermometer for room using temperature and humidity meter features large character LCD display;
- Displays time, humidity and temperature in Celsius or Fahrenheit;
- Includes stand and can be used as desk clock or room thermometer.

Power supply	1.5V AAA (battery Included)	Accuracy	Temperature:±1°C,humidity:±5%
Temperature measure range	-50°C~70°C	N/W	114g
Humidity measure range	10% ~ 99% RH	Product size	105*98*24 mm
Device Color	White	Display size	76*54mm

MODEL HTC-2

Features and functions:

- Simultaneous display of temperature/humidity, clock and calendar display.
- Daily alarm function.
- °C/°F conversion function.
- MAX/MIN temperature and humidity meter memory function.
- Can be placed on the desktop or hung on the wall.

Temperature measurement range	-50°C to 70°C (-58°F to 158°F)	Temperature resolution	0.1 °C
Battery	AAA 1	Weight	135 kg
Humidity measurement range	10%RH ~ 99%R (RH)	Humidity measurement accuracy	±5% RH
Temperature measurement accuracy	±1 °C	Product size	100*110*20 mm

MODEL JDB-60

Features and functions:

- Measure and display the temperature and indoor humidity automatically memorize the max/min values of temperature and indoor humidity switch between °C/°F clock function and alarming function calendar function values;
- Suitable for cold storage,warehousing,home,office and other places of use.

Temperature measure range	-30°C~50°C(-22°F~122°F)	Power supply	DC1.5V 7#(alkaline batteries)
Humidity measure range	20%~99%RH	Temperature sensor	1m
Resolution	Temperature:0.1°C;humidity:1%RH	Product size	115*64*19mm
Accuracy	Temperature ±1°C;humidity:±5%RH	Display size	64*43mm

HS GROUP

Digital thermometer series

Electronic digital thermometer

MODEL JW-100A

Features and functions:

- Uplink display indoor temperature and humidity,downlink display
- outdoor temperature and humidity;
- The highest and lowest indoor temperature and humidity value can
- be used to eliminate the maximum and minimum indoor temperature and humidity;

Temperature measure range	-10°C~50°C	Accuracy	Temperature:±1°C, humidity:±5%
Humidity measure range	20%~95%RH	Power supply	1.5V AAA (7#) battery
Resolution temperature	0.1	Product size	110*100*20mm
Resolution humidity	1%RH	Display size	80*64mm

MODEL DT-2

Features and functions:

- Big screen LCD display, two-way temperature measuring, one way humidity measuring;
- Temperature, humidity and time displayed simultaneously, body comfort
- degree display and with clock function, three placement methods;

Suitable for home and office.

Measure internal temperature	-30°C~50°C	Resolution	Temperature:0.1°C(0.2°F),humidity:1%RH
Measure External temperature	-50°C~70°C	Accuracy	Temperature:±1°C,humidity:±5%(at +25°C)
Humidity measure range	20%RH~99%RH	Product size	115*64*19mm
Power supply	DC1.5V one 7# alkaline battery	Display size	63*43mm

MODEL WT-1

Features and functions:

- Pen-shaped structure, 110MM/125MM stainless steel probe, straight measurement, easy to carry. Wide measurement range.
- Suitable for refrigeration, heating, food processing, etc.

Temperature measurement range	-50°C~300°C(-58°F~572°F)	Power supply	DC1.5V LR44
Resolution	0.1°C	Overall size	2*206 CM
Accuracy	±1°C (-20°C~+80°C)	Probe length	120 mm
Accuracy	±5°C (other ranges)	Display size	21*8 mm

Pen style thermometer series

Electronic digital thermometer

HS GROUP

MODEL TP101

Features and functions:

- Switch key:ON/OFF;
- Temperature unit conversion key:℃/℉;
- HOLD key,MAX/MIN key;
- 146mm long stainless steel probe;
- Thermometer for your kitchen、laboratory、factory or BBQ.

Temperature measure range	-50℃~300℃	Accuracy	±1.0℃(0℃~100℃)，±2℃ otherwise range
Resolution	0.1℃	Product size	226*20mm
Power supply	AG13 battery	Display size	29*11mm

MODEL PT-3

Features and functions:

- Pen-shaped structure, stainless steel probe, straight measurement, easy to carry. Wide measuring range. Suitable for refrigeration, heating, food processing, etc.
- Function: switch, maximum and minimum memory, hold, Celsius and Fahrenheit conversion functions.

Temperature measurement range	-50℃~300℃(-58℉~572℉)	Power source	DC1.5V LR44
Resolution	0.1℃	Cycle of measuring temperature	2s/time
Accuracy	±1℃(-20℃~80℃)	Probe length	110mm/125 mm

MODEL JDB-23

Features and functions:

- LCD display with foldable probe,waterproof structure;
- Auto power off in 10 minutes without operation;
- Max temperature record;Re-calibrate function;
- Super fast response time is 4S,also fold /unfold the probe to off/turn thermometer.

Temperature range	-50~300℃	Battery model	AAA7 battery *1PCS
Appearance Material	ABS	Gross weight	65g
Measurement error	±1℃ (0~150℃)	Product size	154.6*47.6*20mm
Sampling time	1S	Display size	50*21.8mm

HS GROUP

Pen style thermometer series

Electronic digital thermometer

MODEL TP100

Features and functions:

- Switch key:ON/OFF;
- Temperature unit conversion key:℃/℉;
- 135mm long stainless steel probe;
- Thermometer for your kitchen、laboratory、factory or BBQ.

Wide measuring range	-50℃～300℃ (-58℉～572℉)	Operating temperature range	-5℃～50℃ (-23℉～122℉)
Probe length	13.5cm	Sampling time	2S
Resolution	0.1℃	Specification	44*30*30mm

MODEL TP300

Features and functions:

- Switch key:ON/OFF;
- Temperature unit conversion key:℃/℉;
- HOLD key;
- 145mm long stainless steel probe;
- Thermometer for your kitchen、laboratory、factory or BBQ.

Temperature measurement range	-50℃~300℃ (-58℉~572℉)	Probe length	14.5CM
Resolution	0.1℃	Overall product length	24.5CM
Power supply	AG13 battery	Product weight	50g

MODEL JDP-66

Features and functions:

- Outer material: ABS environmental protection material
- Probe material: food grade 304 stainless steel probe
- Product weight: net weight 77g/gross weight 90g/outer bag/16.5kg/168pcs
- Thermometer for your kitchen、laboratory、factory or BBQ.

Temperature range	-50~300℃ (-58~572℉)	Temperature measurement speed	2~3S
Display resolution	0.1℃/0.2℉	Use battery	3VCR2032 1pcs
Accuracy range	±0.8℃	Product size	164*42*20mm
Probe specification	length 101MM	Outer box size	408*358*340mm

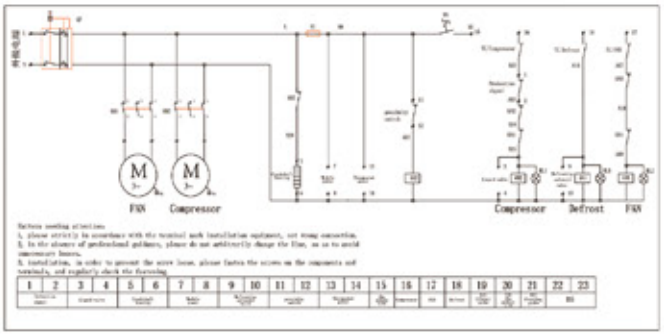
Refrigeration control panel series

Electrical control panel

HS GROUP

MODEL MTCB-974

wiring diagram

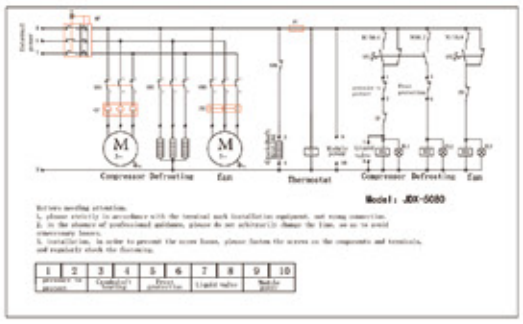


With multiple protection functions, including over-load protection, missing item protection, wrongitem protection,three-phase unbalance protection,etc.; double display screen can intuitively view thecurrent temperature and the set temperature,alignment groove and independent zero line row tomake the control, the system box is more beautiful,it is a professional refrigeration unit designed for aproduct.

Temperature control range	-50°C ~ 50°C	Power supply voltage	380VAC / 220VAC, 50HZ
Accuracy	±1°C	Sensor type	NTC sensor
Compressor delay protection	1~120 minutes adjustable	Installation hole size	340*340*135mm

MODEL SHP-5082F

wiring diagram



JDC-5086F touch screen temperature controller, cooling, defrosting control: temperature setting upper and lower limit control; It has multiple protection functions, including overload protection, missing protection, wrong protection, three-phase unbalanced protection, etc., dual display screen can visually view the current temperature, set the temperature running current, etc. : password protection function, cable trough and independent neutral line bar make the control box more beautiful.

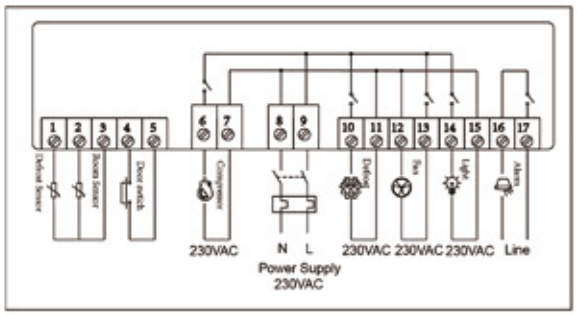
Temperature control range	-50°C ~ 50°C	Power supply voltage	380VAC / 220VAC, 50HZ
Accuracy	±1°C	Sensor type	NTC sensor
Working environment temperature	0°C~60°C	Installation hole size	300*450*150mm

Refrigeration control panel series

Electrical control panel

MODEL ECB-1000Q

wiring diagram

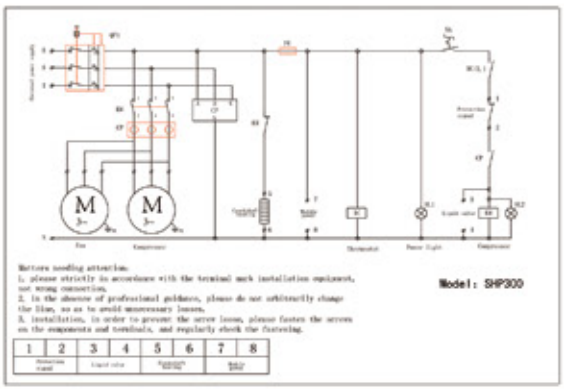


This control box is widely used for the small and medium size cold storage, with the function of refrigeration, defrost, fan, light control, alarm and time display.
Defrost force function Smaller volume and lighter material
Directly controls heavy loads with up to 3HP relay
Super-Big display area shows all necessary information
Real-Time-Clock really schedules and fixes defrost time
Password Protection avoids accidental tampering by personnel

Temperature control range	-45°C~99°C	Power Supply	220VAC±10%,50/60HZ
Temperature Controlling Range	-40°C~90 °C	Sensor type	NTC(10KΩ/25°C,B-3435K)
Power Consumption	Less than 5W	Work Temperature	-5°C~60°C

MODEL SHP-300

wiring diagram



Single cooling, single sensor, with ammeter, phase sequence, new technology, temperature setting upper and lower limit control;
Adjustable compressor delay, compressor integrated protection function;
With the compressor manual and automatic control function, with the compressor boot delay protection.

Temperature control range	-50°C ~ 50°C	Power supply voltage	380VAC / 220VAC, 50HZ
Accuracy	±1°C	Sensor type	NTC sensor
Compressor delay protection	1 ~ 120 minutes adjustable	Installation hole size	300*400*150mm

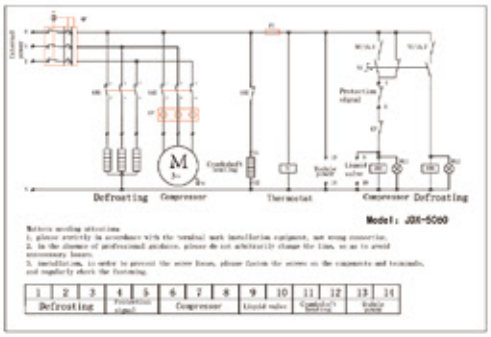
Refrigeration control panel series

Electrical control panel

HS GROUP

MODEL JDX-5060

wiring diagram

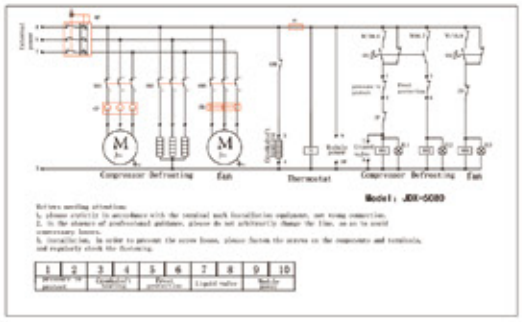


Refrigeration, defrost, double sensors, with a comprehensive protection device, the temperature set the upper and lower limit control;
Adjustable compressor delay, compressor integrated protection function;
With the compressor manual and automatic control function, with the compressor boot delay protection.

Temperature control range	-50°C ~ 50°C	Power supply voltage	380VAC / 220VAC, 50HZ
Accuracy	±1°C	Sensor type	NTC sensor
Compressor delay protection	1~120 minutes adjustable	Installation hole size	300*400*150mm

MODEL JDX-5080

wiring diagram



The temperature controller with dual temperature display can display the current cold storage temperature and the set shutdown temperature at the same time;
It has the function of compressor start-up delay protection. After the temperature sensor fails, it can operate in proportion to the set start-up and stop time;

Temperature control range	-50°C ~ 50°C	Power supply voltage	380VAC / 220VAC, 50HZ
Accuracy	±1°C	Sensor type	NTC sensor
Working environment temperature	0°C~60°C	Installation hole size	300*400*150mm

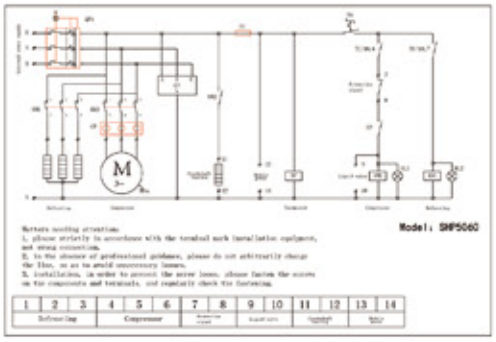
HS GROUP

Refrigeration control panel series

Electrical control panel

MODEL SHP-5060

wiring diagram

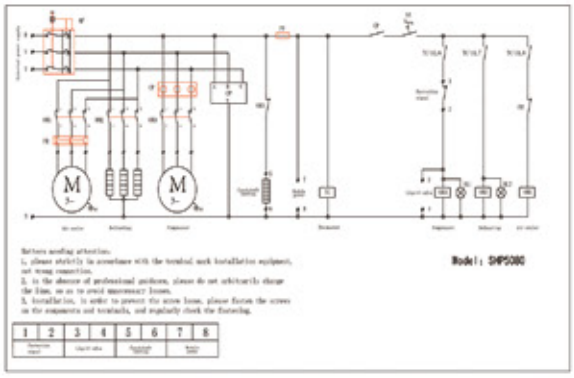


Refrigeration, defrost, double sensors, with a comprehensive protection device, the temperature set the upper and lower limit control;
Adjustable compressor delay, compressor integrated protection function;
With the compressor manual and automatic control function, with the compressor boot delay protection.

Temperature control range	-50°C ~ 50°C	Power supply voltage	380VAC / 220VAC, 50HZ
Accuracy	±1°C	Sensor type	NTC sensor
Compressor delay protection	1~120 minutes adjustable	Installation hole size	300*400*150mm

MODEL SHP-5080

wiring diagram



Refrigeration,defrosting,fan,double sensor,with ammeter,phase sequence,new technology, temperature setting upper and lower limit control;
Adjustable compressor delay, compressor integrated protection function;
With the compressor manual and automatic control function, with the compressor boot delay protection.

Temperature control range	-50°C ~ 50°C	Power supply voltage	380VAC / 220VAC, 50HZ
Accuracy	±1°C	Sensor type	NTC sensor
Compressor delay protection	1 ~ 120 minutes adjustable	Installation hole size	300*400*150mm