Knob Fan Coil Controller
—TROOM-7

- Controllable temperature range: 10℃~30℃
- Current loading: <3A
- Accuracy: ±1℃
- Power supply: 220VAC±10%   50/60Hz
- The power consumption: <1.5W
- Hole spacing: 60mm
- Cover: ABS
- Online line diameter: 0.5~2.5mm2
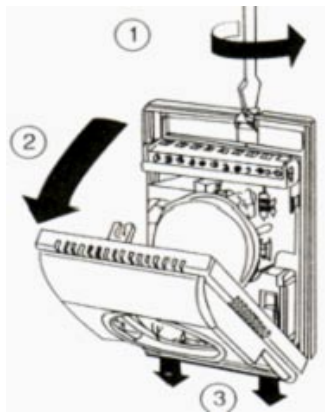- Dimension: 130×85×43mm

Instructions

There are temperature adjustment knob and scale indication on the front panel. HIGH-MED-LOW speed transfer switch and HEAT-OFF-COOL switch. Operation steps are as follows:
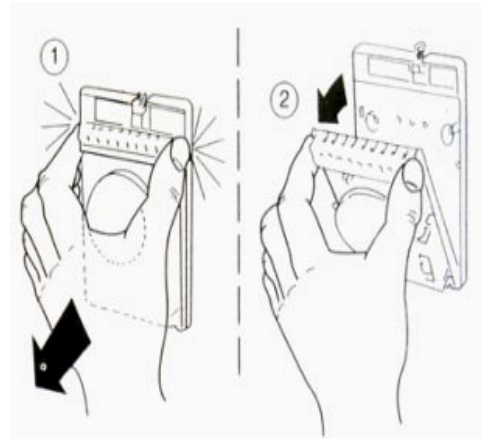
(1) ON/OFF: when heating is on, take HEAT-OFF-COOL switch to HEAT; when cooling is on, turn switch to COOL.Take switch to OFF when it is shut.

(2) Temperature setting: adjust the pointer on the knob to temperature valve you want.

(3) Speed selection: select high, middle and low wind speed by HIGH-MED-LOW switch.
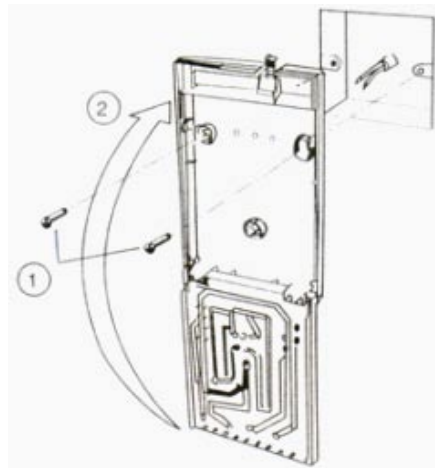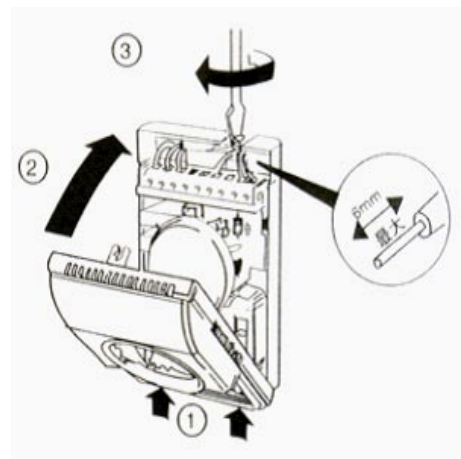
Installation
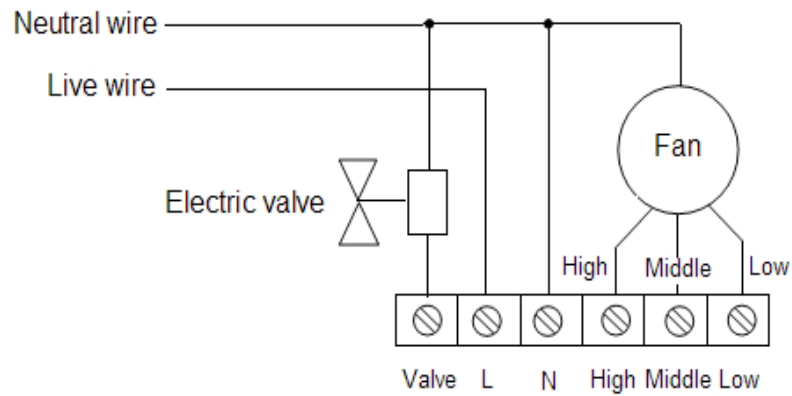
(1) take off front cover

(2) take off middle cover

(3) install baseplate

(4) wiring

Wiring diagram

Neutral wire

Live wire

Electric valve

Fan

High   Middle   Low

| Valve | L | N | High | Middle | Low |

LCD Fan coil Controller
—TROOM-9

- Temperature range: 5℃~35℃
- Loading current: <3A
- Accuracy: ±1℃
- Power supply: 220VAC±10%   50/60Hz
- Power consumption: <2W
- Installation pitch-row: 60mm
- Case: ABS
- Connection terminal: screw retention,1mm2single core copper wire
- Dimension: 86×86×15mm

Feature

TROOM-9 adopts electronic logic circuit to set temperature in the room and compare stated temperature with actual temperature.Then control the valve or fan coil according to the result of comparison, thus to keep constant temperature in the room.

TROOM-9 combines functions of temperature correction coefficient setting, upper and lower temperature limit setting,running mode setting and sleep function. It is widely used in commercial,industrial and civilian building for controlling fan coil and valve.

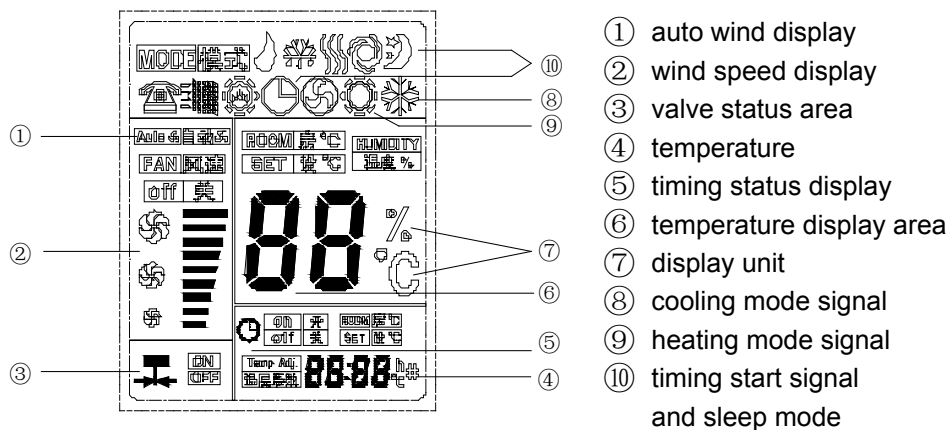Remote control function is selectable

Control panel

① display
② power switch
③ mode key
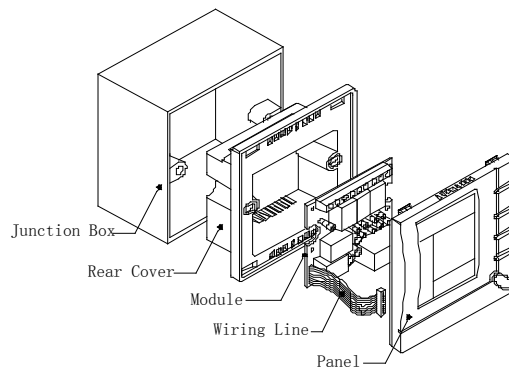④ speed key
⑤ menu key
⑥ plus key
⑦ minus key

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Function of keys

1) ON/OFF key: ② : control the power

2) mode key③ : cooling or heating circulation

3) speed key④ : low,middle,high,auto speed

4) menu key⑤ : when controller is on,press this key shortly to set sleep mode;when controller is off,press this key for more than 4 seconds can go to setting of temperature correction coefficient, upper limit temperature setting, lower limit temperature setting and fan coil running mode.

5) plus key⑥ : add temperature value

6) minus key⑦ : reduce temperature value

Display

① auto wind display
② wind speed display
③ valve status area
④ temperature
⑤ timing status display
⑥ temperature display area
⑦ display unit
⑧ cooling mode signal
⑨ heating mode signal
⑩ timing start signal and sleep mode

Installation

Junction Box
Rear Cover
Module
Wiring Line
Panel

1.Wiring: maximum terminals is 2 mm2 wire, 1mm2 single copper wire is recommended

2.Installation after power off,or elements are easy to be damaged

3.Installation steps: wiring (wire pass through rear cover)→put module into rear cover→embed terminal box to rear cover→fix the screw→plug wire into socket→put panel into rear cover→finished;

4.Choose proper installation position,put it in a cool,dry place away from sunlight

5.Operating temperature: -5℃—55℃ RH: Max. RH< 92%(no condensation)

6.If it is installed in the washroom, please use specialized water shield

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Operation process

1) Sleep mode: when controller is on，press ⑤ key shortly, go into "sleep mode", sleep icon display, press ⑤ key shortly, quit sleep mode (sleep icon disappear)

2) Introduction of sleep mode operation:

cooling mode: timing after enter sleep mode,when the value≥1h,setting temperature will increase 1ºC automatically,when the value≥2h,setting temperature will increase 1ºC again.timing value=8h,go back to the setting temperature before sleep mode.(decrease 2ºC) and exit sleep mode.

Heating mode: timing after enter sleep mode,when the value≥0.5 h,setting temperature will decrease 1ºC automatically,when the value≥1h,2h,setting temperature will decrease 1ºC again.Timing value=8h,go back to the setting temperature before sleep mode. (increase 3ºC) and exit sleep mode.

3) Auto wind mode instruction:

cooling mode: room temperature－setting temperature≥3℃,operate high speed wind. room temperature－setting temperature=2℃, operate middle speed wind,other situations, operate low speed wind.

heating mode: setting temperature－room temperature≥3℃,operate high speed wind. setting temperature－room temperature=2℃, operate middle speed wind,other situations, operate low speed wind.

Parameter setting

When controller is off, press ⑤ key for more than 4 seconds can enter parameter: 1.room temperature correction coefficient 2.upper temperature limit setting 3.lower temperature limit setting 4.fan coil operating way

1) Parameter 1: room temperature correction coefficient setting:

It is needed to revise and compansate room temperature because of installation position and cross ventilation. Operating steps: enter parameter 1 setting, press ⑥ or ⑦ key to set temperature compansation value (settable compensation range: -3°C—3°C), press ② to confirm and exit.

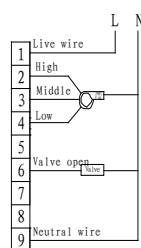2) Parameter2, 3--- upper and lower temperature limit setting

enter parameter 2 setting, press ⑥ or ⑦ key to set upper temperature limit (the range is 26°C-37°C, default is 37°C), press ② to confirm and exit.

Lower temperature limit setting: enter parameter 3 setting, press ⑥ or ⑦ key to set lower limit temperature value. (settable temperature range is 5~20°C), press ② to confirm and exit.
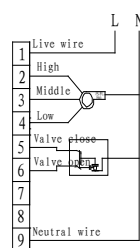
3) Parameter 4--- fan coil operation way setting

press ⑥ or ⑦key to choose ON/OFF. ON:fan coil uncontrollable, when room temperature is up to setting temperature, fan coil keep running in setting speed OFF: fan coil controllable,when room temperature is up to setting temperature, fan coil stops.
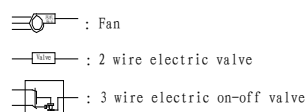
Installation

Chilling/Heating 2 pipe system
(Equip with 2 wire valve)

Chilling/Heating 2 pipe system
(Equip with 3 wire valve)

Icons

⊏⊐ : Fan

⊏⊐ : 2 wire electric valve

⊏⊐ : 3 wire electric on-off valve

Power:220V±10% 50/60Hz 5A

Functions of wiring terminals

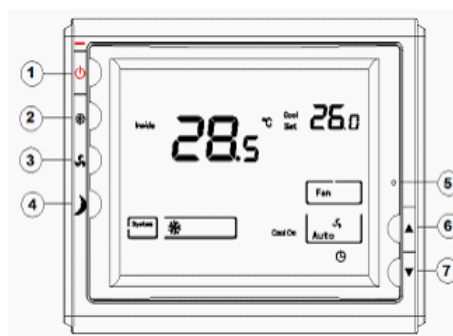| 1 | L/Live wire |
2	HI/High speed
3	MI/Middle speed
4	LO/Low speed
5	Valve close
6	Valve open
7	Spare
8	Spare
9	N/Neutral wire

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LCD Fan Coil Controller
—TROOM-10

- Temperature range: 5℃~35℃
- Current loading: <2A
- Accuracy: ±0.5℃
- Power supply: 220VAC±10%   50/60Hz
- Heating and cooling valev Max.reactive current: 0.5A
- Hole spacing: 60mm
- Case: ABS
- Dimension: 115×90×16mm

Feature

TROOM-10 controller take the way of Electronic logic circuit to compare stated temperature and real temperature in the room, then control water valve and fan coil to keep constant temperature in the room.

This controller combines functions of correction coefficient setting, up and down limit temperature setting, running type setting and sleep. It is used for controlling switch of electric valve in fan coil, wind speed or damper actuator. It is suitable for central air-conditioning system of 2 pipe line or 3 line.
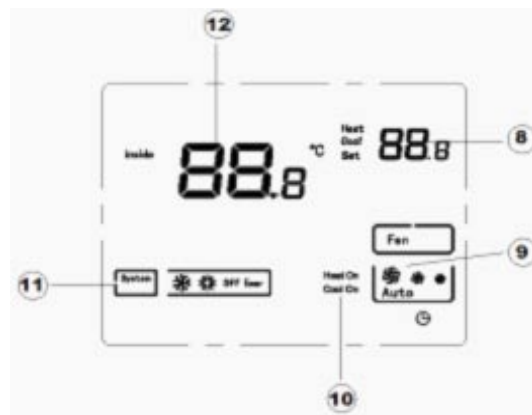
Control panel

① power key
② mode key
③ speed key
④ sleep key
⑤ reset key
⑥ plus key
⑦ minus key

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Function of keys

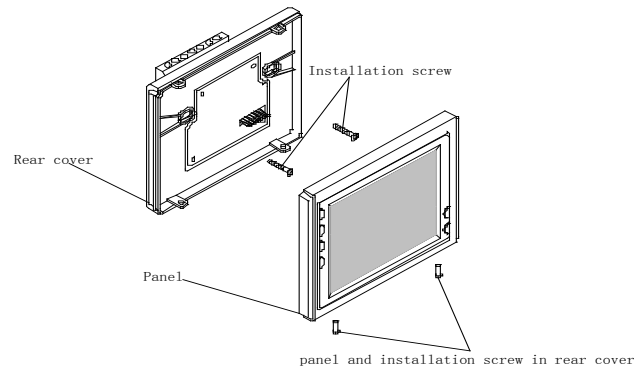1. Temperature setting: press ▲ when controller is on, setting temperature +0.5℃. Press▼, setting temperature -0.5℃
2. Operating mode setting: alternate between cooling mode and heating mode.
3. Speed setting: select high, middle, low and auto wind speed.
4. Sleep fuction: when controller is on, press ④ key shortly, then enter sleep mode, press ④ key shortly again, exit sleep mode (sleep icon disappear)
5. Initialization setting: when controller is off, press ④ key more than 4 seconds, then enter menu, press ④ key shortly can enter parameter recurrently, press ④ key for 4 seconds again, dEF displays and flickers 3 times, all the setting value go back to initialization.

Display instruction

(8) setting temperature
(9) speed signal
(10) cooling/heating display
(11) operating mode
(12) temperature in the room

Installation

1. Wiring: maximum terminals is 2 mm2 wire, 1mm2 single copper wire is recommended

2. Installation after power off,or elements are easy to be damaged

3. Installation steps: plug terminal into terminal block→rembed rear cover to 86 junction box→fix the screw→put panel into rear cover→finished;

4. Choose proper installation position,put it in a cool,dry place away from sunlight

5. Operating temperature: 0℃—50℃ RH: Max. RH< 92%(no condensation)

6. If it is installed in the washroom, please use specialized water shield

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Operation proces

1) Sleep mode operating way:

Cooling mode: timing after enter sleep mode,when the value≥1h,setting temperature will increase 1℃ automatically,when the value≥2h,setting temperature will increase 1℃ again.timing value=8h,go back to the setting temperature before sleep mode.(decrease 2℃) and exit sleep mode.

Heating mode: timing after enter sleep mode,when the value≥1h,setting temperature will decrease 1℃ automatically,when the value≥4h,setting temperature will decrease 1℃ again.Timing value=8h,go back to the setting temperature before sleep mode.(increase 3℃) and exit sleep mode.

2) Auto wind mode instruction:

cooling mode: room temperature－setting temperature≥3℃,operate high speed wind. room temperature－setting temperature=2℃, operate middle speed wind,other situations, operate low speed wind.

heating mode: setting temperature－room temperature≥3℃,operate high speed wind. setting temperature－room temperature=2℃, operate middle speed wind,other situations, operate low speed wind.

Parameter setting

When controller is off, press ④ key for more than 4 seconds can diaplay parameter, press it shortly can enter parameter: 1.room temperature correction coefficient setting 2.upper temperature limit setting 3.lower temperature limit setting 4.memory choice of status before power off. 5. back light display control setting 6.fan coil operating way

After modify all the parameters, press ④ key to confirm and exit parameter setting, then go back to off status

1) Parameter 1: room temperature correction coefficient setting: (factory default is 0)

It is needed to revise and compansate room temperature because of installation position and cross ventilation. Operating steps: enter parameter 1 setting, press ⑥ or ⑤ key to set temperature compansation value (settable compensation range: -3°C—3°C)

2) Parameter 2, 3--- upper and lower temperature limit setting

Enter parameter 2 setting, press ⑥ or ⑤ key to set upper temperature limit (the range is 20°C-35°C, default : 35°C)

Lower temperature limit setting: enter parameter 3 setting, press ⑥ or ⑤ key to set lower limit temperature value. (settable temperature range is 5°C~20°C, default is 5°C)

3) parameter 4---- memory choice of status before power off. (default: rE)

Enter parameter 4 setting, press ⑥ or ⑤ key to choose rd or rE. rd is booting up without memory, no matter what status it is before power off, it keeps off after power on.

rE is memorizing status before power off. If it is on before power off, it will keep on after power on, it's the same in reverse.

4) parameter 5---- back light display control setting (default: 1)

Enter parameter 5 setting, press ⑥ or ⑤ key to choose 1,2 or 3. 1.backlight is on when press keys 2.backlight is unlit 3.backlight is always on.

5) parameter 6--- fan coil operating way (default: ON)

Enter parameter 5 setting, press ⑥ or ⑤ key to choose ON or OFF. ON: fan coil is uncontrolled. When room temperature is up to setted temperature, fan coil keep running with the setted speed. OFF: fan coil controlled, when room temperature is up to setted temperature, fan coil stops.

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Reset function

If it is disturbed, display and working are unnormal, prick (5) reset key with cuspidal and hard object, when there is a sound of the key, release it. Procedure will restart.

Installation drawing

Chilling/Heating 2 pipe system
(Equip with 3 wire valve)

Chilling/Heating 2 pipe system
(Equip with 2 wire valve)

Icons

⊙ Fan : Fan

[Valve] : 2 wire electric valve

: 3 wire electric on-off valve

Power: 220VAC ±10% 50/60HZ