

BEOK CONTROLS TCR7 IPS Colorful LCD Screen Smart Thermostat Owner's Manual



Version:TCR7 1.3(12/2023)

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IPS Colorful LCD Screen Smart Thermostat

- ✓ Quick configuration of Wi-Fi connection via BLE Technology super convenient
- ✓ Programmable device, multiple periods allowed to set per day.
- ✓ 2.8 inches large colorful LCD screen, delicate visual effect.
- ✓ The device can be controlled by voice via Amazon Alexa and Google Assistant

Parameter

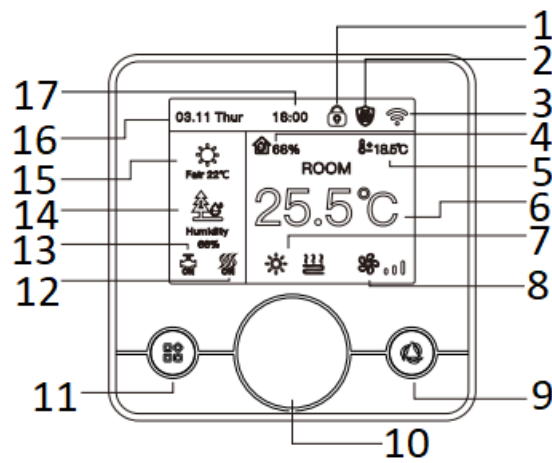
Supply voltage	AC100~240V; 50/60Hz
Power consumption	Wi-Fi 3W Max
Temp. setting range	5~95°C (41~203°F)
Floor limited range	20~90°C (68~194°F)
On/off deviation	0.5~10°C (1~10°F), Factory setting 1°C
Ambient temperature	-5~50°C (68~122°F)
Protection level	IP20
Shell material	Anti-Flammable PC

Product Overview

This series of thermostat has Floor Heating, Fan Coil, and Integrated version, meeting the requirements under different scenarios.

Version	System mode	Model	Application
Floor heating	Floor heating	EP	Built-in & floor sensor, floor limit sensor + Weekly programming
		WP	A NC/NO dual-output + Weekly programming
		WP B	A NC/NO dual-output + Weekly programming + Potential-free output
Fan Coil	Heating /Cooling / Ventilation	AC 2	Timer task + 2-pipe system
		AC 2-485	Timer task + 2-pipe system + Timer task + Potential-free output + 485 Modbus (optional) + Room card (optional)
		AC 4	Timer task + 4-pipe system + Timer task + Potential-free output + 485 Modbus (optional) + Room card (optional)
Integrated	Fan-Coil with Floor-Heating air condition system	AW Y	Floor heating & fan coil, weekly programming + Potential-free output + Timer task + 485 Modbus (optional) + Room card (optional)

Display Symbols



1. Child-lock Mode
2. Frost Protection
3. Wi-Fi
4. Room humidity
5. Set Temp.
6. Room Temp.
7. Working mode
8. Fan
- Auto Mode
- Manual Mode
- Temporary Mode
9. Fan Speed (back)
10. Knob (Power on/off)
11. (next) Mode
12. Floor Heating valve
13. Fan Coil valve
14. Outdoor humidity
15. Outdoor Temp.
16. Date Week
17. Time Display

Temperature Control Mode(Floor Heating/Integrated)

Auto Mode

Weekly-circled programme, up to 6 heating events can be set per day.
Heating events, workdays and temperature can be separately customized based on personal routines.

Manual Mode

Thermostat works based on manually-set temperature, disconnecting from auto mode.


Temporary Mode


Thermostat works based on manually-set temperature temporarily and then shifts back to auto mode till next event.

User Operation

Power on/off : Press “” for 3 seconds to turn on/off the thermostat.

Temp setting: Rotate handwheel “” to change setting temperature by 0.5°C.



System mode: Press “” shortly to switch manual/auto mode. (Floor heating)

Press “” shortly to switch cooling/heating/ventilation. (Fan Coil)




Press “” shortly to switch cooling/heating/ventilation/floor heating/ floor heating + heating. (Integrated)

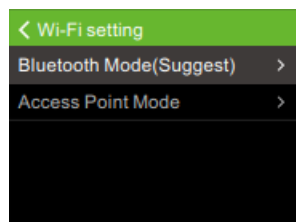
Enter menu: Press “” for 3 seconds to enter the menu interface.

Temp control mode: Press “” shortly to switch manual/auto mode. (Integrated, floor heating)

Child-lock: Press “” + “” for 3 seconds to activate child-lock.

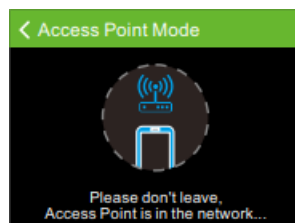
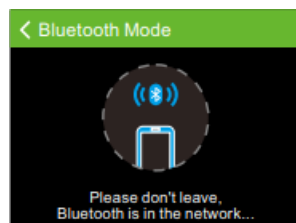
Wi-Fi setting

Press “” for 3 seconds to enter the menu page. Turn the knob “”, choose ‘Wi-Fi setting’, and then choose “Bluetooth Mode “, press “” and confirm. The device enters the distribution network state.






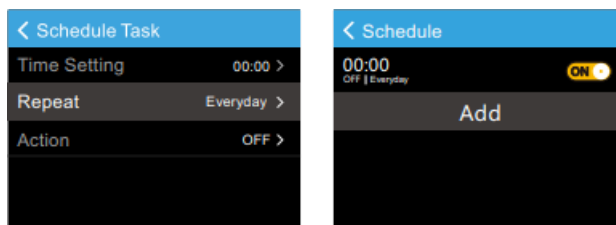
Bluetooth Mode

Access Point Mode






Timer Task Setting (Fan Coil/Integrated)

Under power-on status, long press menu button “” to enter the menu page, choose Auto Mode, then choose Schedule and set the parameters, press menu button “” to return to the previous page. Finally, press wind speed button “” to activate the timer switch function.



Advanced Setting (Usually for Professional Technicians)



Under power-on status, long press menu button “” to enter the menu page, choose Engineer Mode, enter the advanced setting page. After setting the parameters, press menu button “” to save and exit.



function list	Handwheel “  ”	Default Value	Integrat ed	Fan Coil			Floor Heating		
			AWY	AC2-4 85	AC 4	AC 2	E P	W P	WP B
ModBus Address	Adjustment range 0~250	0	✓	✓	✓	✗	✓	✓	✓
Sensor Calibration	-9.9~9.9°C(-9.9~9.9°F)	0°C	✓	✓	✓	✓	✓	✓	✓
Temp. Dif.	0.5~10°C (1~10°F)	1°C	✓	✓	✓	✓	✓	✓	✓
Max Setting Value	5~95°C (41~203°F)	50°C	✓	✓	✓	✓	✓	✓	✓
Min Setting Value	5~47°C (41~117°F)	5°C	✓	✓	✓	✓	✓	✓	✓
Anti-Freeze Protec tion	ON/OFF	OFF	✓	✓	✓	✓	✓	✓	✓
Temperature Unit	°C/°F	°C	✓	✓	✓	✓	✓	✓	✓
Sensor Mode	Built-in sensor Floor sensor Built-in Control & Floor Limit ation	IN	✓	✗	✗	✗	✓	✓	✓
Floor limited Value	20~90°C (68~194°F)	35°C	✓	✗	✗	✗	✓	✓	✓
Weekday Mode	Monday to Friday Monday to Saturday Monday to Sunday	2-day	✓	✗	✗	✗	✓	✓	✓

Fan control settings	00: Fan speed controllable 01: Fan speed uncontrollable	00	✓	✓	✓	✓	✗	✗	✗
Linkage Time Delay	0~5min	0min	✓	✗	✗	✗	✓	✓	✓
Child-lock Type	None Lock All All but power	None	✓	✓	✓	✓	✓	✓	✓
Boot Type	Function Off Function On Function Saved	Last	✓	✓	✓	✓	✓	✓	✓
Air-Condition Mode	All/Cold Only	All	✓	✓	✓	✓	✗	✗	✗
Temp Control	Manual/Auto	Manual	✓	✗	✗	✗	✗	✗	✗
Reset All Settings	Yes/No	/	✓	✓	✓	✓	✓	✓	✓

Installation instructions

Auto-mode Setting (Floor Heating/Integrated)

Under power-on status, long press menu button “” to enter the menu page, choose Auto Mode, then choose Weekly Programming and set the period parameters, press menu button “” to save and exit.

Events		Time		Temperature	
		Default value	Modify	Default value	Modify
Workdays	Sunrise	06:00	 Rotate handwheel	20°C	 Rotate handwheel
	Morning	08:00		15°C	
	Nooning	11:30		15°C	
	Afternoon	12:30		15°C	
	Evening	17:00		22°C	
	Night	22:00		15°C	
Weekends	Sunrise	08:00		20°C	
	Night	22:00		15°C	

Dimensions (Unit: mm)

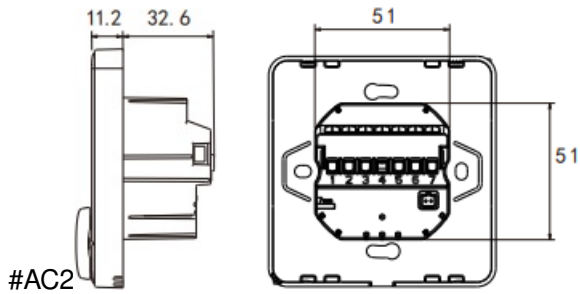
Floor Heating

#EP

#WP

#WPB

Fan Coil

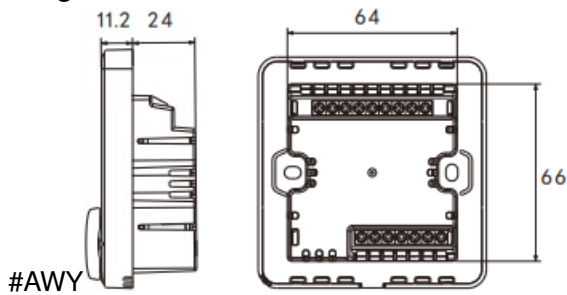


Fan Coil

#AC2-485

#AC4

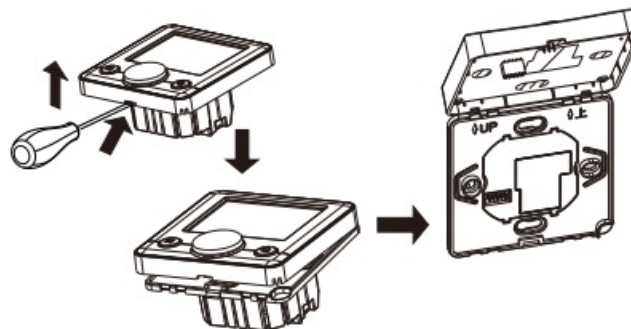
Integrated



Mounting Steps

The thermostat adopt pre-guide and limited snap-fit design. It is easy to mount.

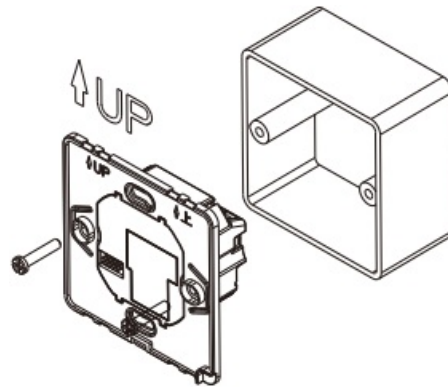
1) Release front cover by inserting a head screw-driver into bottom crack.



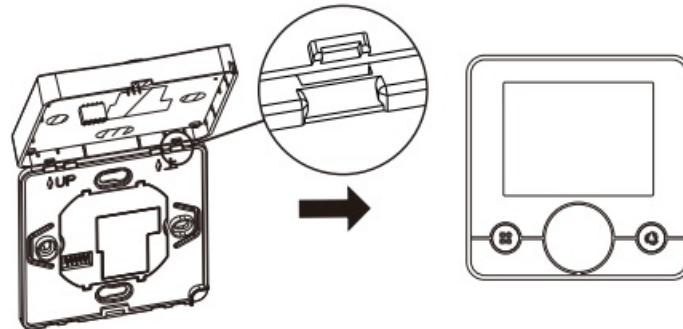
2) Insert the wires and then fix these wires with screws. Suggested wire-stripping length is 7-9mm.

3) Mount backing plate into wall-cassette, put screws and then fix thermostat.

Make sure that the thermostat is fixed without deformation. Suggested torque is 0.2~0.4N.m (2.0~4. 1kgf.cm).



4) Re-mount the front cover via snap-fit connection.



Sensor failure

Please select work mode of sensors correctly. When it shows **Er0/Er1** error, thermostat will stay power-off till the error is eliminated. **Er0**: built-in sensor is short-circuited or disconnected. **Er1**: floor sensor is short-circuited or disconnected.

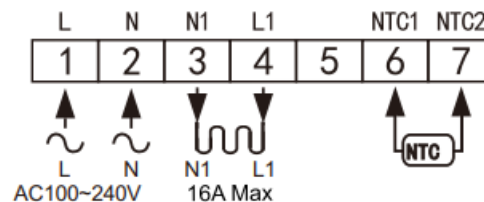
Connecting Diagram

The thermostat operates in full capacity in areas with the altitude of less than 2500 above sea level. Power rating of external load should be less than or equal to 80% rated power of the thermostat in areas with altitude of 2500m to 4200m.

Floor Heating

#TCR7-WIF-EP

TCR7-EP



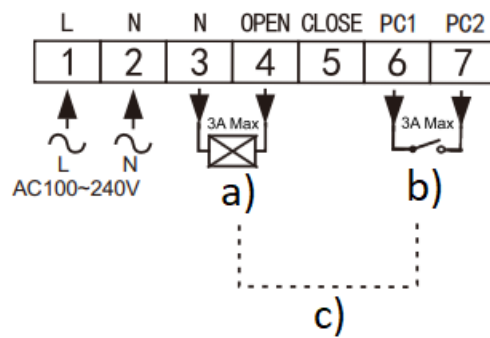
#TCR7-WIFI-WP

TCR7-WP

#TCR7-WIFI-WPB

TCR7-WPB

(1)



a) Normally-closed electric actuator

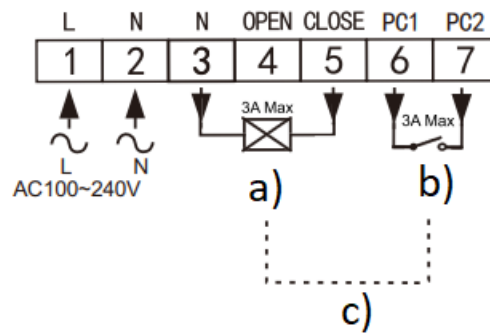
b) Potential-free

(Potential-free output, for model WPB only)

Dry contact signal to control boiler

c) Linkage control; delay time of linkage control is adjustable

(2)



a) Normally-open electric actuator

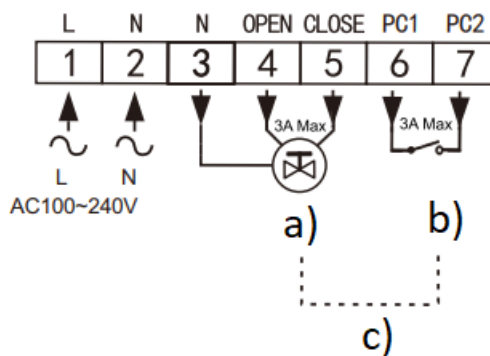
b) Potential-free

(Potential-free output, for model WPB only)

Dry contact signal to control boiler

c) Linkage control; delay time of linkage control is adjustable

(3)



a) Three-wire electrical ball valve

b) Potential-free

(Potential-free output, for model WPB only)

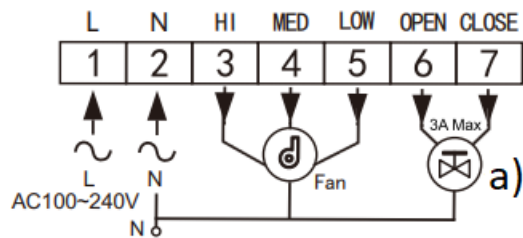
Dry contact signal to control boiler

c) Linkage control; delay time of linkage control is adjustable

Fan Coil

#TCR7-WIFI-AC2

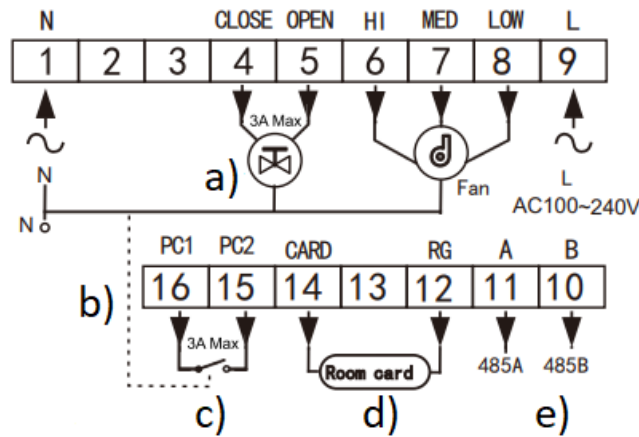
TCR7-AC2



a) Air conditioner valve

#TCR7-WIFI-AC2-485

TCR7-AC2-485



a) Air conditioner valve

b) Linkage control; delay time of linkage control is adjustable

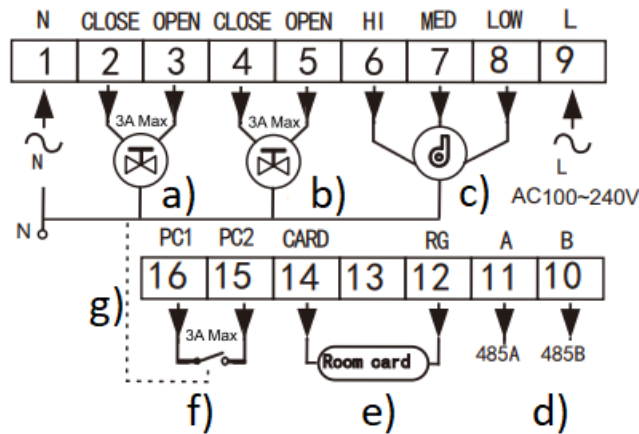
c) Dry contact signal to control heat pump

d) room card linkage (optional)

e) (optional)

#TCR7-WIFI-AC4

TCR7-AC4



a) Heat valve

b) Cool valve

c) Fan

d) (optional)

e) room card linkage (optional)

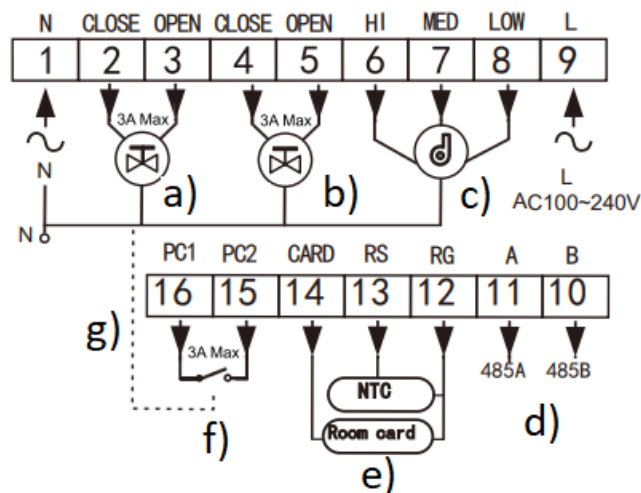
f) Dry contact signal to control heat pump

g) Linkage control; delay time of linkage control is adjustable

Integrated

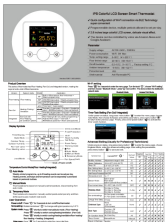
#TCR7-WIFI-AWY

TCR7-AWY



- a) Floor system valve
- b) Air conditioner valve
- c) Fan
- d) (optional)
- e) room card linkage(optional)
- f) Dry contact signal to control heat pump
- g) Linkage control; delay time of linkage control is adjustable

Documents / Resources



[BEOK CONTROLS TCR7 IPS Colorful LCD Screen Smart Thermostat](#) [pdf] Owner's Manual
TCR7, TCR7 IPS Colorful LCD Screen Smart Thermostat, IPS Colorful LCD Screen Smart Thermostat, Colorful LCD Screen Smart Thermostat, LCD Screen Smart Thermostat, Screen Smart Thermostat, Smart Thermostat, Thermostat

References

- [User Manual](#)

[Manuals+](#), [Privacy Policy](#)

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