



BEOK 2025 CATALOG

Underfloor Heating Thermostat



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 www.beoks.com

About BEOK

CE RoHS RED EAC

Shanghai Beok Controls Co., Ltd, founded in 2010, has over 10 years experience to integrate the research, development and production of HVAC control system products. We adhere to the strict and practical product requirements, and take a serious and responsible attitude to provide every customer with better products and better services.



BEOK Service



Customize
Program



Customize
App



Design/
Printing



Customize
Product Color



Customize
Package



ODM
Service

Underfloor Heating Thermostat

Thermostat for Electric Underfloor Heating

Controls heating mat, heating film,
heating cable, etc.



Thermostat for Water Underfloor Heating

Controls heating actuators and valves.



Main Functions of BEOK Thermostats



App control

(Wi-Fi model only)

Control the heater remotely by smart phone.



Voice control

(Wi-Fi model only)

Controlling the heater via smart speakers.



Programmable schedule

Set the temperature for each time of day and make it cycle automatically every day.



Temperature calibration

Calibrate thermostat display to actual room temperature.



Child lock

Lock the keypad when you need it to avoid misuse.



Non-volatile memory

Various current settings of the thermostat can be memorized in case of power failure.



Anti-freeze

Maintains room temperature at 5°C to prevent electronic devices from freezing. Can be turned on or off in the advanced settings.



Adjustable backlight

The brightness of the backlight can be adjusted so that the glare does not affect your rest.



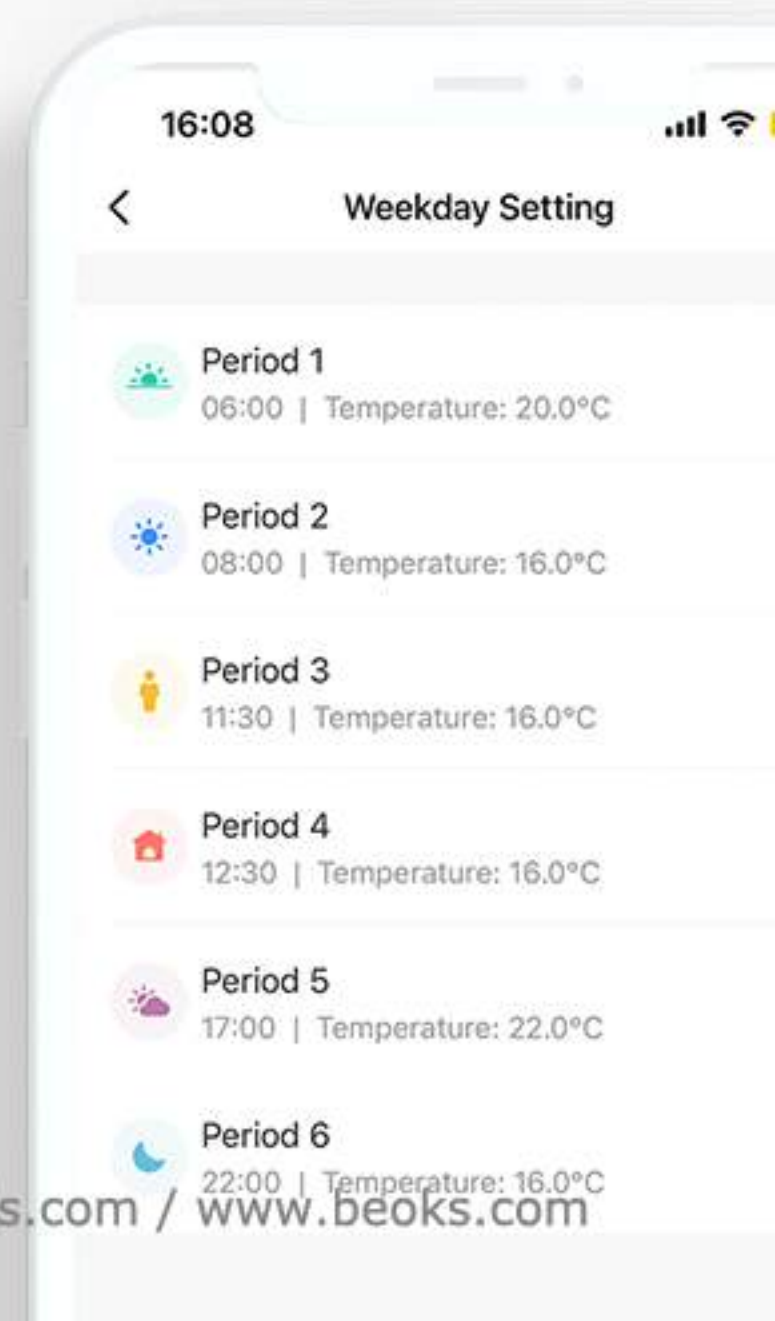
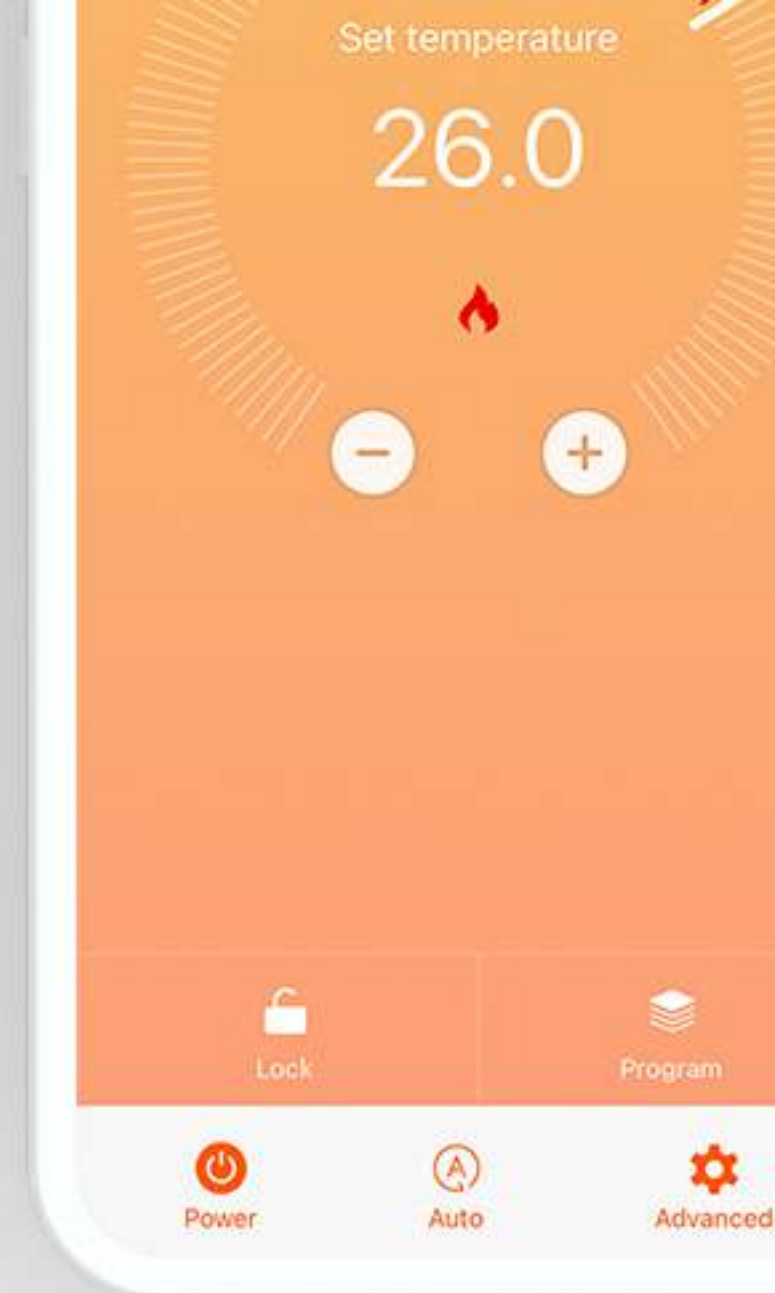
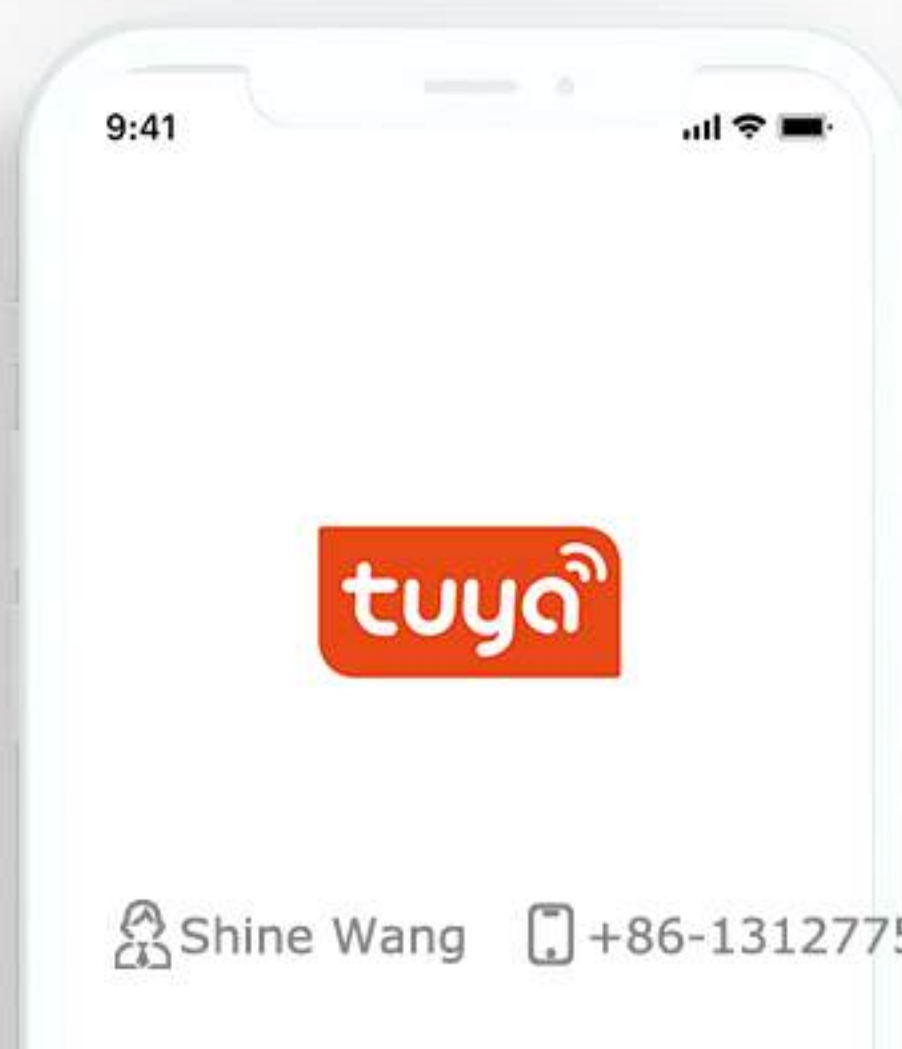
Constant temperature

The temperature hysteresis can be set to a minimum of 0.5°C, effectively preventing indoor temperature differences.

Individual functions may vary depending on the model, please refer the product introduction page for details.

BEOK Products

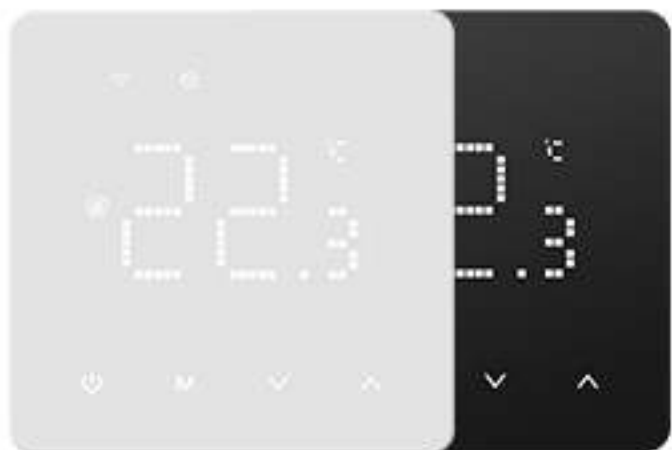
Thermostat App Interface



Contents



TOL47
P09



TGM50
P10



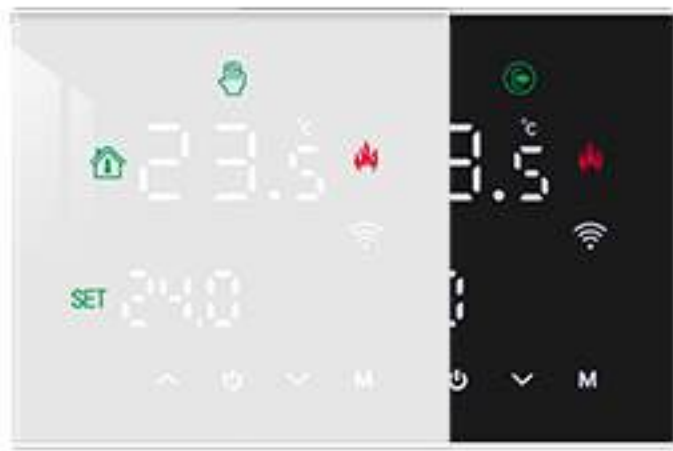
TGP53
P11



TGP508
P11



TGP51G
P13



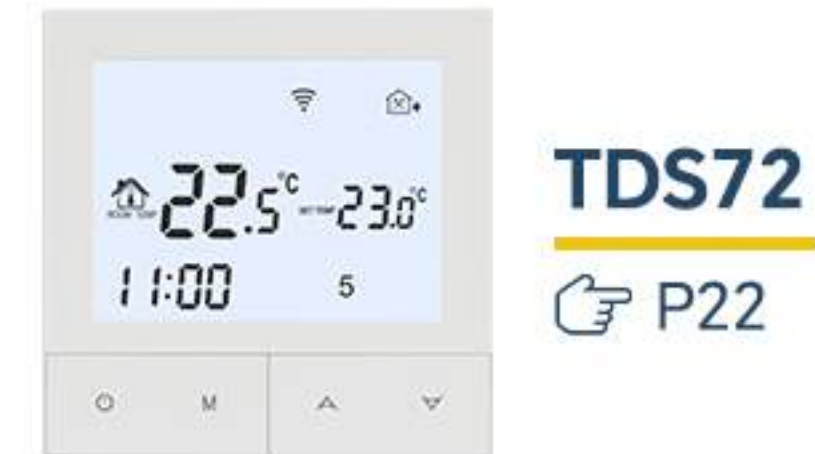
TGW60
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TGR85
P15



TGR86
P15



BEOK Underfloor Heating Thermostat



86x86x14mm. Frosted case with large anti-reflective LCD screen. 5 mechanical keys.

Work with Tuya apps  | iOS & Android

Support smart speakers   



Technical Data

Power supply
AC100~240V; 50/60Hz

Load current
Water heater 3A
Electric heater 16A

External material
PC+ABS (flame retardant)

Working environment
-5~50°C

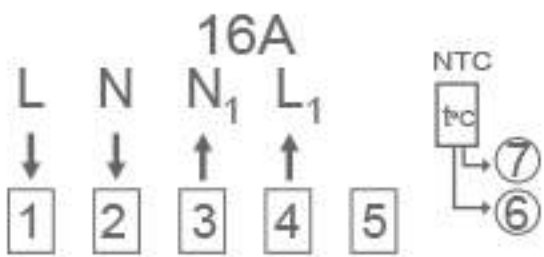
Set temp. range
5~95°C (default 60°C)

Temperature hysteresis
±0.5~±9.9°C Adjustable
(default ±1°C)

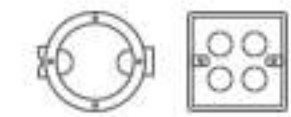
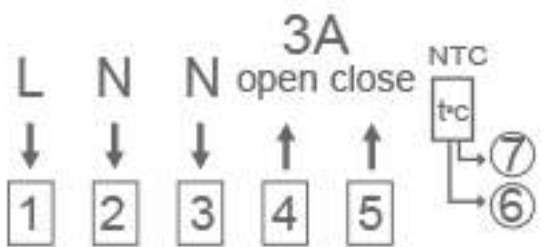
Temperature sensor
NTC

Wiring Diagram

For Electric
Underfloor
Heating



For Water
Underfloor
Heating



Suitable for
standard 86mm
junction box or
European
60mm box.

Selection Table

Model	Power Supply	Application		Recmote Control	Additional
	AC 100~240V	Electric Heating(16A)	Water Heating(3A)	Wi-Fi	External Sensor
TOL47-EP	✓	✓	✗	✗	✓
TOL47-WP	✓	✗	✓	✗	Optional
TOL47-WIFI-EP	✓	✓	✗	✓	✓
TOL47-WIFI-WP	✓	✗	✓	✓	Optional

BEOK Underfloor Heating Thermostat

Model No. **TGM50** 86x86x12.5mm. Frosted one-piece body with 4 touch keys. 2 colors optional.

Work with Tuya apps  | iOS & Android

 **zigbee** | Zigbee Model Optional | Support smart speakers   



TGM50



TGM50B



Special Feature



Open-window Detection

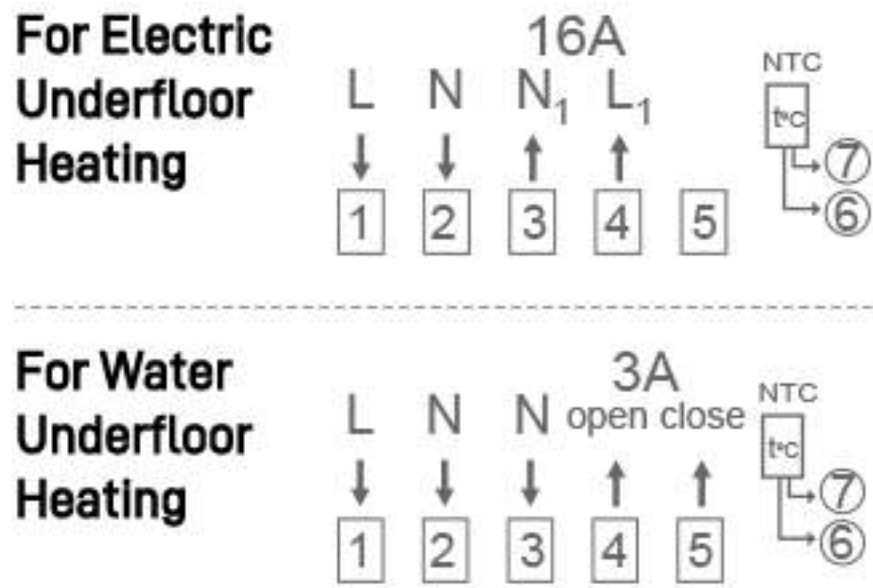
This thermostat stops heating when there is a sudden drop in room temperature to minimize wasted energy due to open windows.

Technical Data

Power supply
AC100~240V;
50/60Hz
Load current
Water heater 3A
Electric heater 16A
External material
PC+ABS (flame
retardant)

Working environment
-5~50°C
Set temp. range
5~95°C (default 60°C)
Temperature hysteresis
±0.5~±9.9°C Adjustable
(default ±1°C)
Temperature sensor
NTC

Wiring Diagram




Suitable for standard 86mm junction box or European 60mm box.

Selection Table

Model	Power Supply	Application		Recmote Control		Additional
	AC 100~240V	Electric Heating(16A)	Water Heating(3A)	Wi-Fi	Zigbee	External Sensor
TGM50-EP / TGM50B-EP	✓	✓	✗	✗	✗	✓
TGM50-WP / TGM50B-WP	✓	✗	✓	✗	✗	Optional
TGM50-WIFI-EP / TGM50B-WIFI-EP	✓	✓	✗	✓	✗	✓
TGM50-WIFI-WP / TGM50B-WIFI-WP	✓	✗	✓	✓	✗	Optional
TGM50-ZB-EP / TGM50B-ZB-EP	✓	✓	✗	✗	✓	✓
TGM50-ZB-WP / TGM50B-ZB-WP	✓	✗	✓	✗	✓	Optional

TGP5 Series Thermostats

Work with Tuya apps  | iOS & Android  Support smart speakers   

Technical Data

- Power supply**
AC100~240V; 50/60Hz

Load current
Water heater 3A
Electric heater 16A

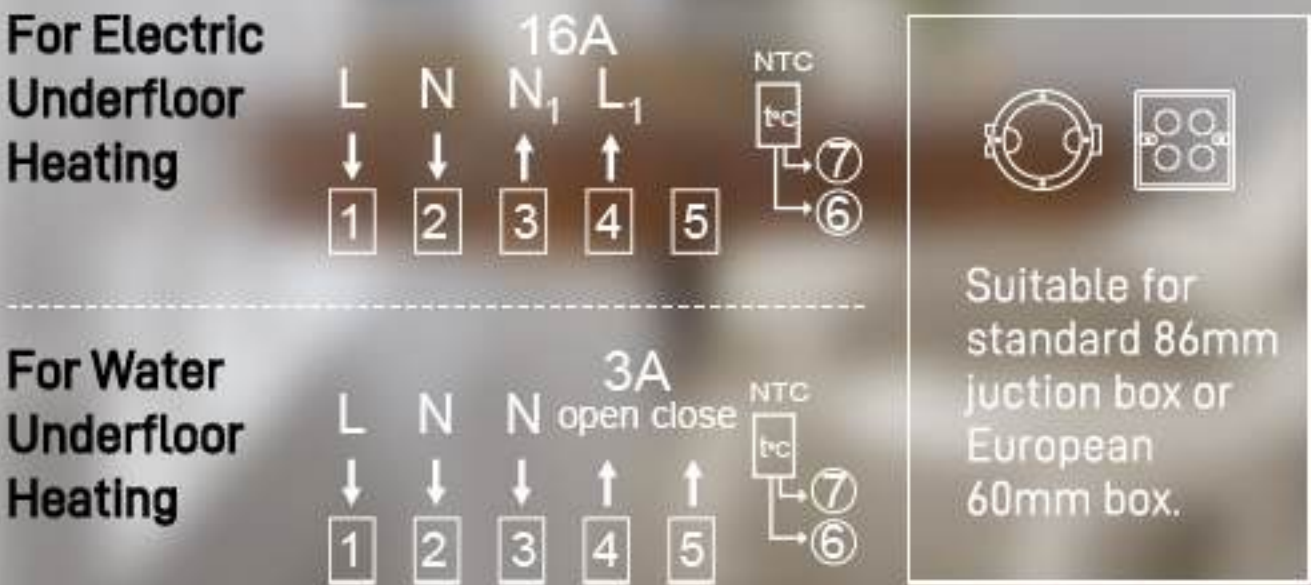
External material
PC+ABS (flame retardant)

Working environment
-5~50°C
- Set temp. range**
5~95°C (default 60°C)

Temperature hysteresis
±0.5~±9.9°C Adjustable
(default ±1°C)

Temperature sensor
NTC

Wiring Diagram



TGP53



TGP508



86x86x13mm.
Glass screen, 3 subtle shiny silver physical buttons with icons that light up when woken up.

Selection Table

Model	Power Supply	Application		Recmote Control	Additional
	AC 100~240V	Electric Heating(16A)	Water Heating(3A)	Wi-Fi	External Sensor
TGP53-EP	✓	✓	✗	✗	✓
TGP53-WP	✓	✗	✓	✗	Optional
TGP53-WIFI-EP	✓	✓	✗	✓	✓
TGP53-WIFI-WP	✓	✗	✓	✓	Optional



86x86x14mm. 3 vertically distributed touch keys.

Selection Table

Model	Power Supply	Application		Recmote Control	Additional
	AC 100~240V	Electric Heating(16A)	Water Heating(3A)	Wi-Fi	External Sensor
TGP508-EP	✓	✓	✗	✗	✓
TGP508-WP	✓	✗	✓	✗	Optional
TGP508-WIFI-EP	✓	✓	✗	✓	✓
TGP508-WIFI-WP	✓	✗	✓	✓	Optional

BEOK Underfloor Heating Thermostat



Model No.
TGP51G



86x86x13mm.
Glass screen, 4 touch keys with silver icons.

Work with Tuya apps or BEOK Home    | iOS & Android

Support smart speakers   

Technical Data

- Power supply**
AC200~240V; 50/60Hz

Load current
Water heater 3A
Electric heater 16A

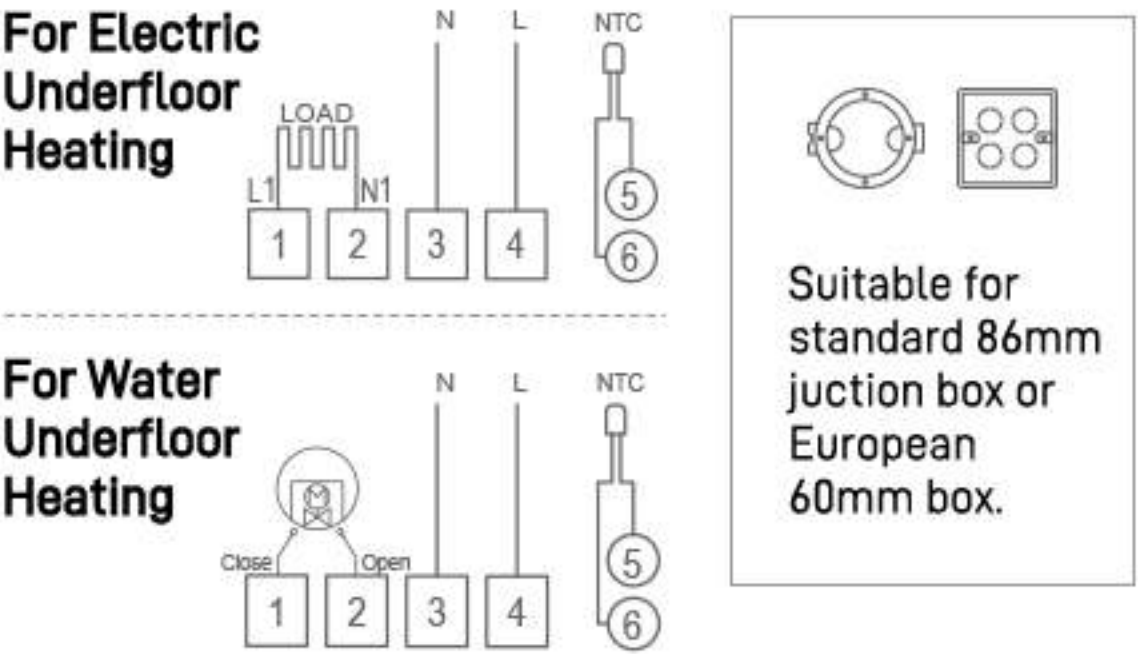
External material
PC+ABS (flame retardant)

Working environment
-5~50°C
- Set temp. range**
5~95°C (default 60°C)

Temperature hysteresis
±0.5~±9.9°C Adjustable
(default ±1°C)

Temperature sensor
NTC

Wiring Diagram



Selection Table

Model	Power Supply	Application		Recmote Control	Additional
	AC 200~240V	Electric Heating(16A)	Water Heating(3A)	Wi-Fi	External Sensor
TGP51G-EP	✓	✓	✗	✗	✓
TGP51G-WP	✓	✗	✓	✗	Optional
TGP51G-WIFI-EP	✓	✓	✗	✓	✓
TGP51G-WIFI-WP	✓	✗	✓	✓	Optional

BEOK Underfloor Heating Thermostat

Model No. **TGW60** 86x86x12.5mm. LCD glass display with touch keys.
2 colors optional.

Work with Tuya apps  | iOS & Android

Support smart speakers   



TGW60W



TGW60B



Technical Data

Power supply
AC100~240V; 50/60Hz

Load current
Water heater 3A
Electric heater 16A

External material
PC+ABS (flame retardant)

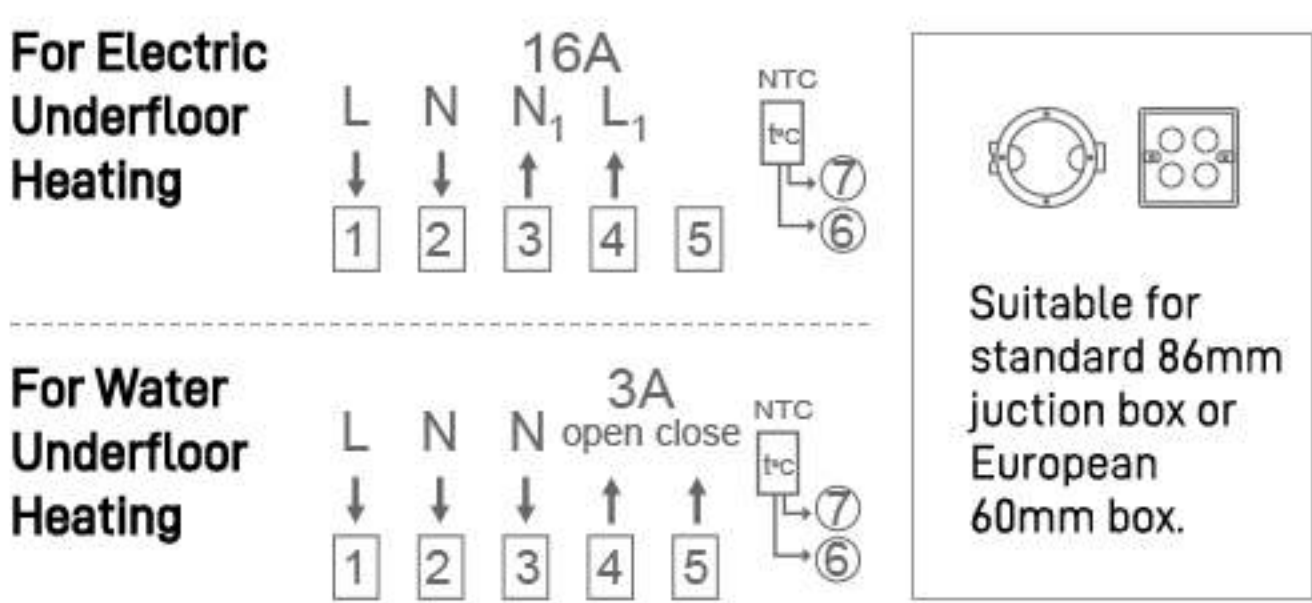
Working environment
-5~50°C

Set temp. range
5~95°C (default 60°C)

Temperature hysteresis
±0.5~±9.9°C Adjustable (default ±1°C)

Temperature sensor
NTC

Wiring Diagram



Selection Table

Model	Power Supply	Application		Recmote Control	Additional
	AC 100~240V	Electric Heating(16A)	Water Heating(3A)	Wi-Fi	External Sensor
TGW60W-EP / TGW60B-EP	✓	✓	✗	✗	✓
TGW60W-WP / TGW60B-WP	✓	✗	✓	✗	Optional
TGW60W-WIFI-EP / TGW60B-WIFI-EP	✓	✓	✗	✓	✓
TGW60W-WIFI-WP / TGW60B-WIFI-WP	✓	✗	✓	✓	Optional

TDR8 Series Thermostats

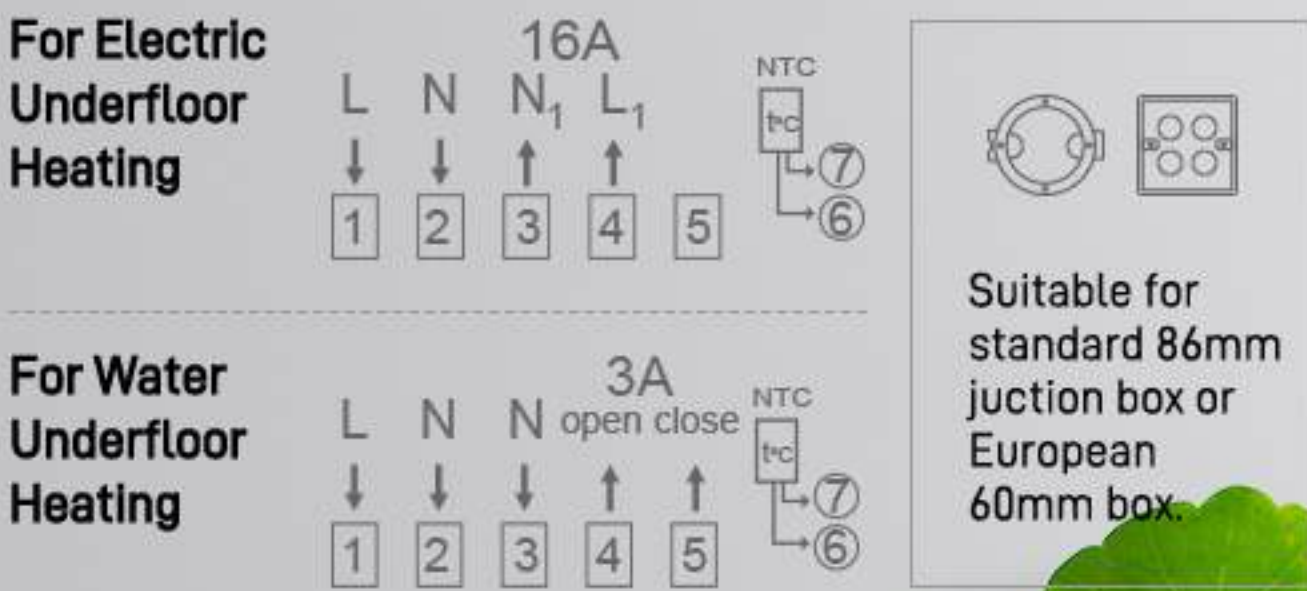
Work with Tuya apps  | iOS & Android

Support smart speakers   

Technical Data

- Power supply**
AC100~240V; 50/60Hz
- Load current**
Water heater 3A
Electric heater 16A
- External material**
PC+ABS (flame retardant)
- Working environment**
-5~50°C
- Set temp. range**
5~95°C (default 60°C)
- Temperature hysteresis**
±0.5~±9.9°C Adjustable
(default ±1°C)
- Temperature sensor**
NTC

Wiring Diagram



TGR86



TGR85



TDR83



TDR89

Model No. **TGR85** 86x90x14mm.
Glass mirror surface with touch keys.

 **zigbee** | Zigbee Model Optional



Selection Table

Model	Power Supply	Application		Remote Control		Additional
	AC 100~240V	Electric Heating(16A)	Water Heating(3A)	Wi-Fi	Zigbee	External Sensor
TGR85-EP	✓	✓	×	×	×	✓
TGR85-WP	✓	×	✓	×	×	Optional
TGR85-WIFI-EP	✓	✓	×	✓	×	✓
TGR85-WIFI-WP	✓	×	✓	✓	×	Optional
TGR85-ZB-EP	✓	✓	×	×	✓	✓
TGR85-ZB-WP	✓	×	✓	×	✓	Optional

Model No. **TDR83** 86x86x18mm.
Touch keys. 2 colors optional.



Selection Table

Model	Power Supply	Application		Remote Control	Additional
	AC 100~240V	Electric Heating(16A)	Water Heating(3A)	Wi-Fi	External Sensor
TDR83W-EP	✓	✓	×	×	✓
TDR83W-WP	✓	×	✓	×	Optional
TDR83W-WIFI-EP	✓	✓	×	✓	✓
TDR83W-WIFI-WP	✓	×	✓	✓	Optional
TDR83B-EP	✓	✓	×	×	✓
TDR83B-WP	✓	×	✓	×	Optional
TDR83B-WIFI-EP	✓	✓	×	✓	✓
TDR83B-WIFI-WP	✓	×	✓	✓	Optional

Model No. **TGR86** 86x86x18mm.
Glass mirror surface with touch keys.



Selection Table

Model	Power Supply	Application		Recmote Control	Additional
	AC 100~240V	Electric Heating(16A)	Water Heating(3A)	Wi-Fi	External Sensor
TGR86-EP	✓	✓	✗	✗	✓
TGR86-WP	✓	✗	✓	✗	Optional
TGR86-WIFI-EP	✓	✓	✗	✓	✓
TGR86-WIFI-WP	✓	✗	✓	✓	Optional

Model No. **TDR89** 86x86x14mm.
2 colors optional. TDR89W: white backlight with silver touch keys.
TDR89B: negative display with touch keys that glows red when woken up.

 **zigbee** | Zigbee Model Optional



Selection Table

Model	Power Supply	Application		Recmote Control		Additional
	AC 100~240V	Electric Heating(16A)	Water Heating(3A)	Wi-Fi	Zigbee	External Sensor
TDR89W-EP	✓	✓	✗	✗	✗	✓
TDR89W-WP	✓	✗	✓	✗	✗	Optional
TDR89W-WIFI-EP	✓	✓	✗	✓	✗	✓
TDR89W-WIFI-WP	✓	✗	✓	✓	✗	Optional
TDR89W-ZB-EP	✓	✓	✗	✗	✓	✓
TDR89W-ZB-WP	✓	✗	✓	✗	✓	Optional
TDR89B-EP	✓	✓	✗	✗	✗	✓
TDR89B-WP	✓	✗	✓	✗	✗	Optional
TDR89B-WIFI-EP	✓	✓	✗	✓	✗	✓
TDR89B-WIFI-WP	✓	✗	✓	✓	✗	Optional
TDR89B-ZB-EP	✓	✓	✗	✗	✓	✓
TDR89B-ZB-WP	✓	✗	✓	✗	✓	Optional

BEOK Underfloor Heating Thermostat

Model No. **TS4** 86x86x14mm. 2 colors optional.
TS4W: Black screen with glossy white touch key area.
TS4G: Black screen with frosted gray touch key area.

Work with Tuya apps  | iOS & Android

Support smart speakers   



Technical Data

Power supply
AC100~240V; 50/60Hz

Load current
Water heater 3A
Electric heater 16A

External material
PC+ABS (flame retardant)

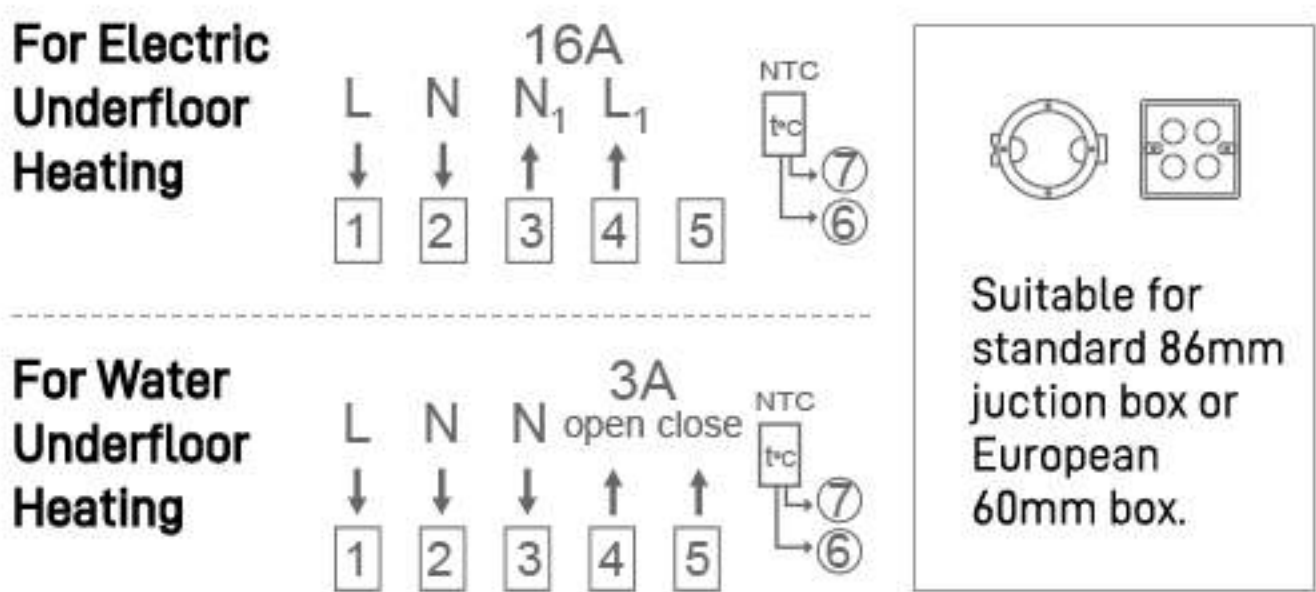
Working environment
-5~50°C

Set temp. range
5~95°C (default 60°C)

Temperature hysteresis
±0.5~±9.9°C Adjustable (default ±1°C)

Temperature sensor
NTC

Wiring Diagram



Selection Table

Model	Power Supply	Application		Recmote Control	Additional
	AC 100~240V	Electric Heating(16A)	Water Heating(3A)	Wi-Fi	External Sensor
TS4W-EP / TS4G-EP	✓	✓	✗	✗	✓
TS4W-WP / TS4G-WP	✓	✗	✓	✗	Optional
TS4W-WIFI-EP / TS4G-WIFI-EP	✓	✓	✗	✓	✓
TS4W-WIFI-WP / TS4G-WIFI-WP	✓	✗	✓	✓	Optional

TDS Series Thermostats

Work with Tuya apps or BEOK Home  | iOS & Android

Support smart speakers 

Technical Data

- Power supply**
AC200~240V; 50/60Hz

Load current
Water heater 3A
Electric heater 16A

External material
PC+ABS (flame retardant)

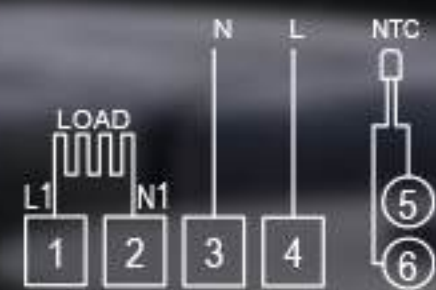
Working environment
-5~50°C
- Set temp. range**
5~95°C (default 60°C)

Temperature hysteresis
±0.5~±9.9°C Adjustable
(default ±1°C)

Temperature sensor
NTC

Wiring Diagram

For Electric Underfloor Heating



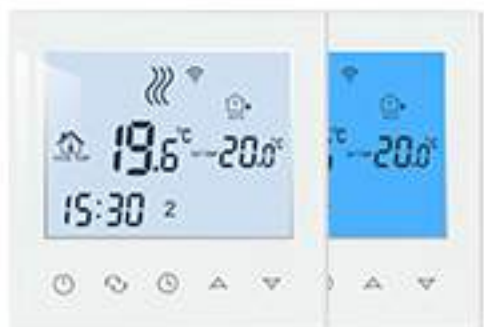
For Water Underfloor Heating



Suitable for standard 86mm junction box or European 60mm box.



TGT70



TDS21



TDS23



TOL313

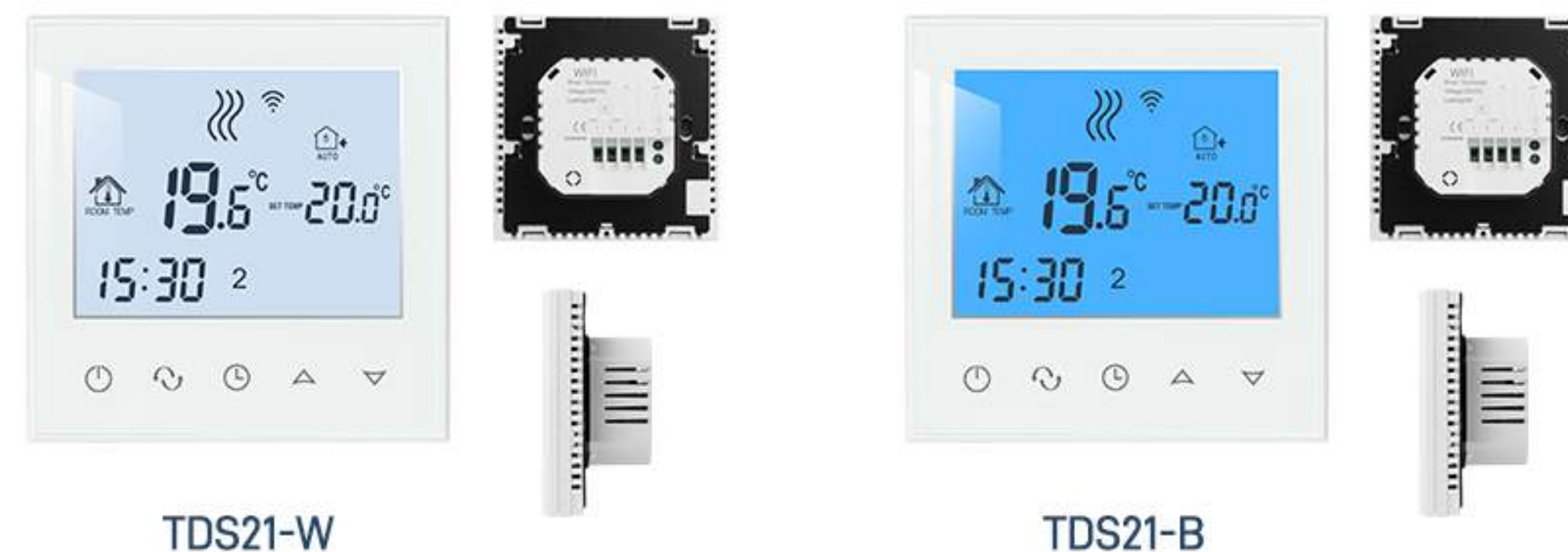
Model No. **TGT70** 86x86x16mm.
Glass screen with touch keys.



Selection Table

Model	Power Supply	Application		Recmote Control	Additional
	AC 200~240V	Electric Heating(16A)	Water Heating(3A)	Wi-Fi	External Sensor
TGT70-EP	✓	✓	✗	✗	✓
TGT70-WP	✓	✗	✓	✗	Optional
TGT70-WIFI-EP	✓	✓	✗	✓	✓
TGT70-WIFI-WP	✓	✗	✓	✓	Optional

Model No. **TDS21** 86x86x16mm.
Touch keys. 2 backlight colors optional.



Selection Table

Model	Power Supply	Application		Recmote Control	Additional
	AC 200~240V	Electric Heating(16A)	Water Heating(3A)	Wi-Fi	External Sensor
TDS21-EP-W	✓	✓	✗	✗	✓
TDS21-WP-W	✓	✗	✓	✗	Optional
TDS21-WIFI-EP-W	✓	✓	✗	✓	✓
TDS21-WIFI-WP-W	✓	✗	✓	✓	Optional
TDS21-EP-B	✓	✓	✗	✗	✓
TDS21-WP-B	✓	✗	✓	✗	Optional
TDS21-WIFI-EP-B	✓	✓	✗	✓	✓
TDS21-WIFI-WP-B	✓	✗	✓	✓	Optional

Model No. **TDS23** 86x86x16mm.
Touch keys. 2 backlight colors optional.



Model No. **TOL313** 86x86x16mm.
5 Mechanical keys. 2 backlight colors optional.



Selection Table

Model	Power Supply	Application		Recmote Control	Additional
	AC 200~240V	Electric Heating(16A)	Water Heating(3A)	Wi-Fi	External Sensor
TDS23-EP-W	✓	✓	✗	✗	✓
TDS23-WP-W	✓	✗	✓	✗	Optional
TDS23-WIFI-EP-W	✓	✓	✗	✓	✓
TDS23-WIFI-WP-W	✓	✗	✓	✓	Optional
TDS23-EP-B	✓	✓	✗	✗	✓
TDS23-WP-B	✓	✗	✓	✗	Optional
TDS23-WIFI-EP-B	✓	✓	✗	✓	✓
TDS23-WIFI-WP-B	✓	✗	✓	✓	Optional

Selection Table

Model	Power Supply	Application		Recmote Control	Additional
	AC 200~240V	Electric Heating(16A)	Water Heating(3A)	Wi-Fi	External Sensor
TOL313-EP-W	✓	✓	✗	✗	✓
TOL313-WP-W	✓	✗	✓	✗	Optional
TOL313-WIFI-EP-W	✓	✓	✗	✓	✓
TOL313-WIFI-WP-W	✓	✗	✓	✓	Optional
TOL313-EP-B	✓	✓	✗	✗	✓
TOL313-WP-B	✓	✗	✓	✗	Optional
TOL313-WIFI-EP-B	✓	✓	✗	✓	✓
TOL313-WIFI-WP-B	✓	✗	✓	✓	Optional

TDS7 Series Thermostats

Work with Tuya apps or BEOK Home    | iOS & Android

Support smart speakers  

Technical Data

Power supply
AC200~240V; 50/60Hz

Load current
Water heater 3A
Electric heater 16A

External material
PC+ABS (flame retardant)

Working environment
-5~50°C

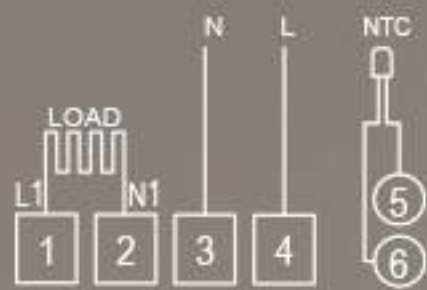
Set temp. range
5~95°C (default 60°C)

Temperature hysteresis
±0.5~±9.9°C Adjustable
(default ±1°C)

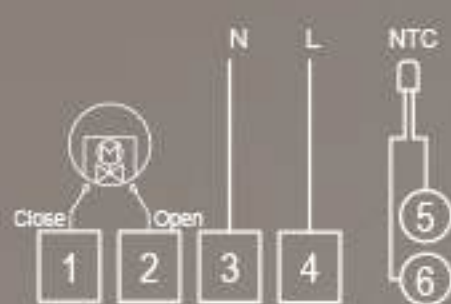
Temperature sensor
NTC

Wiring Diagram

For Electric Underfloor Heating



For Water Underfloor Heating



Suitable for
standard 86mm
junction box or
European
60mm box.



TDS72



TDS75



TGT79



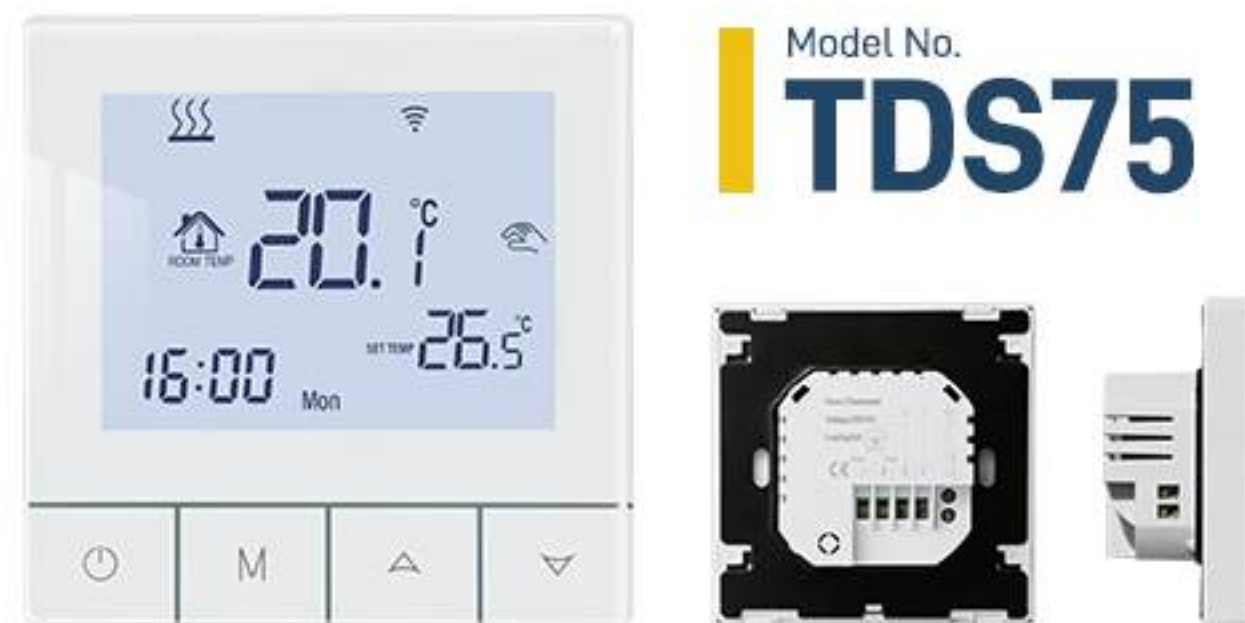
Model No.

TDS72

86x86x13mm.
Frosted tactile shell with mechanical keys.

Selection Table

Model	Power Supply	Application		Recmote Control	Additional
	AC 200~240V	Electric Heating (16A)	Water Heating (3A)	Wi-Fi	External Sensor
TDS72-EP	✓	✓	✗	✗	✓
TDS72-WP	✓	✗	✓	✗	Optional
TDS72-WIFI-EP	✓	✓	✗	✓	✓
TDS72-WIFI-WP	✓	✗	✓	✓	Optional



Model No.

TDS75

86x86x15mm.
Glossy panel with touch keys.

Selection Table

Model	Power Supply	Application		Recmote Control	Additional
	AC 200~240V	Electric Heating (16A)	Water Heating (3A)	Wi-Fi	External Sensor
TDS75-EP	✓	✓	✗	✗	✓
TDS75-WP	✓	✗	✓	✗	Optional
TDS75-WIFI-EP	✓	✓	✗	✓	✓
TDS75-WIFI-WP	✓	✗	✓	✓	Optional



Model No.

TGT79

86x86x15mm.
Glossy panel with touch keys. Negative display screen.

Selection Table

Model	Power Supply	Application		Recmote Control	Additional
	AC 200~240V	Electric Heating (16A)	Water Heating (3A)	Wi-Fi	External Sensor
TGT79-EP	✓	✓	✗	✗	✓
TGT79-WP	✓	✗	✓	✗	Optional
TGT79-WIFI-EP	✓	✓	✗	✓	✓
TGT79-WIFI-WP	✓	✗	✓	✓	Optional

BEOK Underfloor Heating Thermostat

Model No. **TC38** 86x86x15mm. 2 colors optional. White: glossy panel with silver touch keys. Black: dark mirrored panel with silver touch keys.

Work with Tuya apps or BEOK Home  iOS & Android

Support smart speakers 



TCW38



TCB38



Technical Data

Power supply
AC200~240V; 50/60Hz

Load current
Water heater 3A
Electric heater 16A

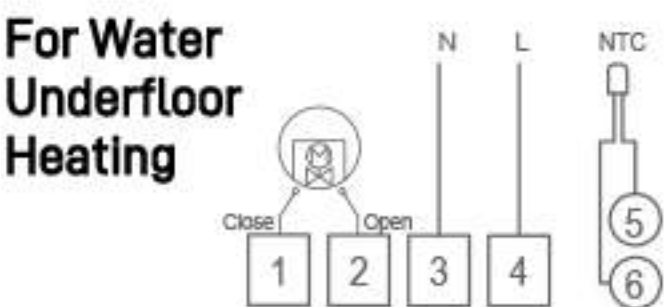
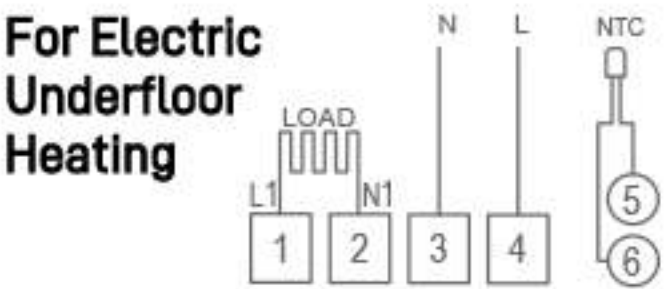
External material
PC+ABS (flame retardant)

Working environment
-5~50°C

Set temp. range
5~95°C (default 60°C)
Temperature hysteresis
±0.5~±9.9°C Adjustable
(default ±1°C)

Temperature sensor
NTC

Wiring Diagram




Suitable for standard 86mm junction box or European 60mm box.

Selection Table

Model	Power Supply	Application		Remote Control	Additional
	AC 200~240V	Electric Heating(16A)	Water Heating(3A)	Wi-Fi	External Sensor
TCW38-EP / TCB38-EP	✓	✓	✗	✗	✓
TCW38-WP / TCB38-WP	✓	✗	✓	✗	Optional
TCW38-WIFI-EP / TCB38-WIFI-EP	✓	✓	✗	✓	✓
TCW38-WIFI-WP / TCB38-WIFI-WP	✓	✗	✓	✓	Optional



Beok Controls

