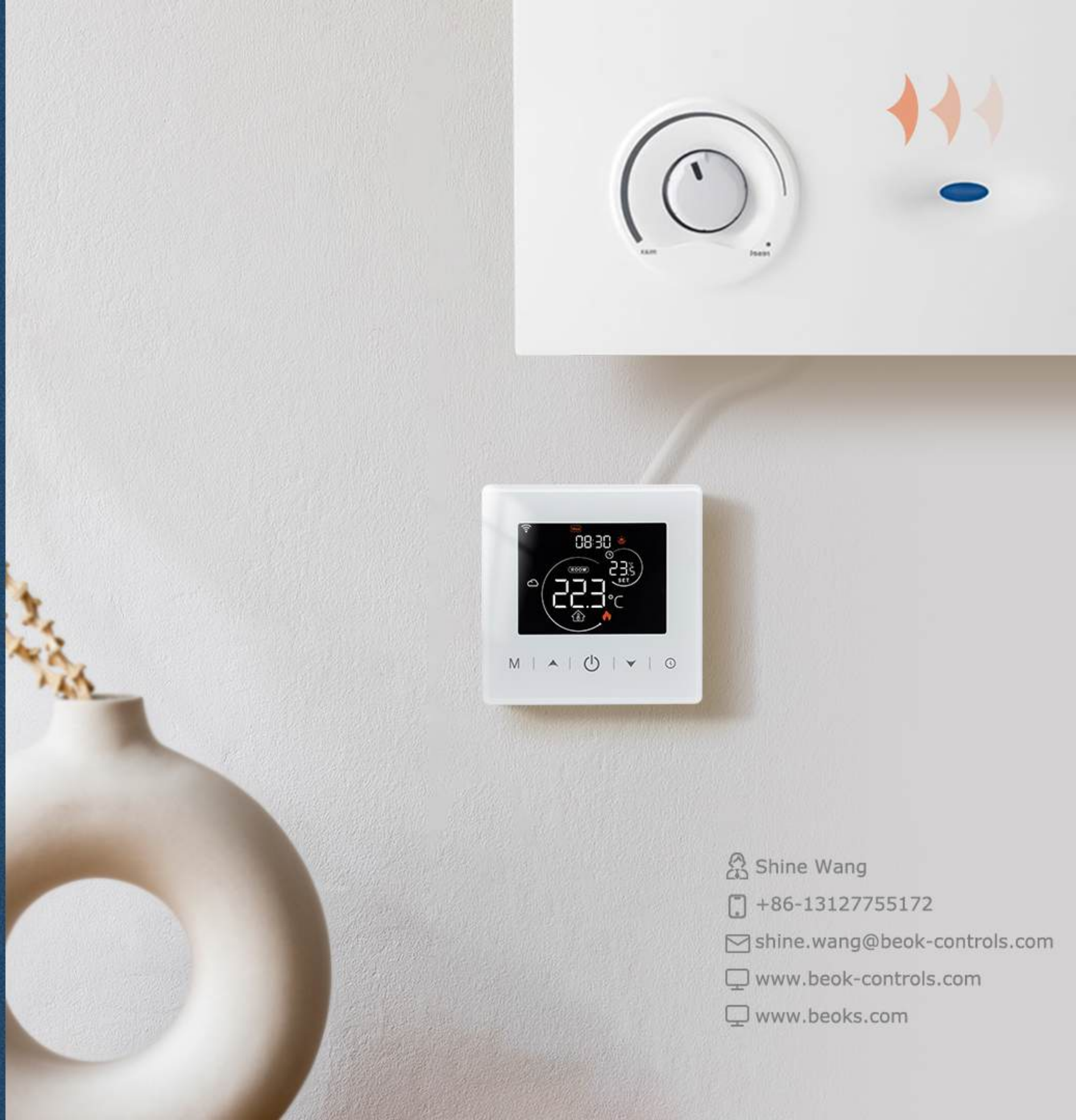




BEOK 2025 CATALOG

Wired Thermostat for Gas Boiler



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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

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.



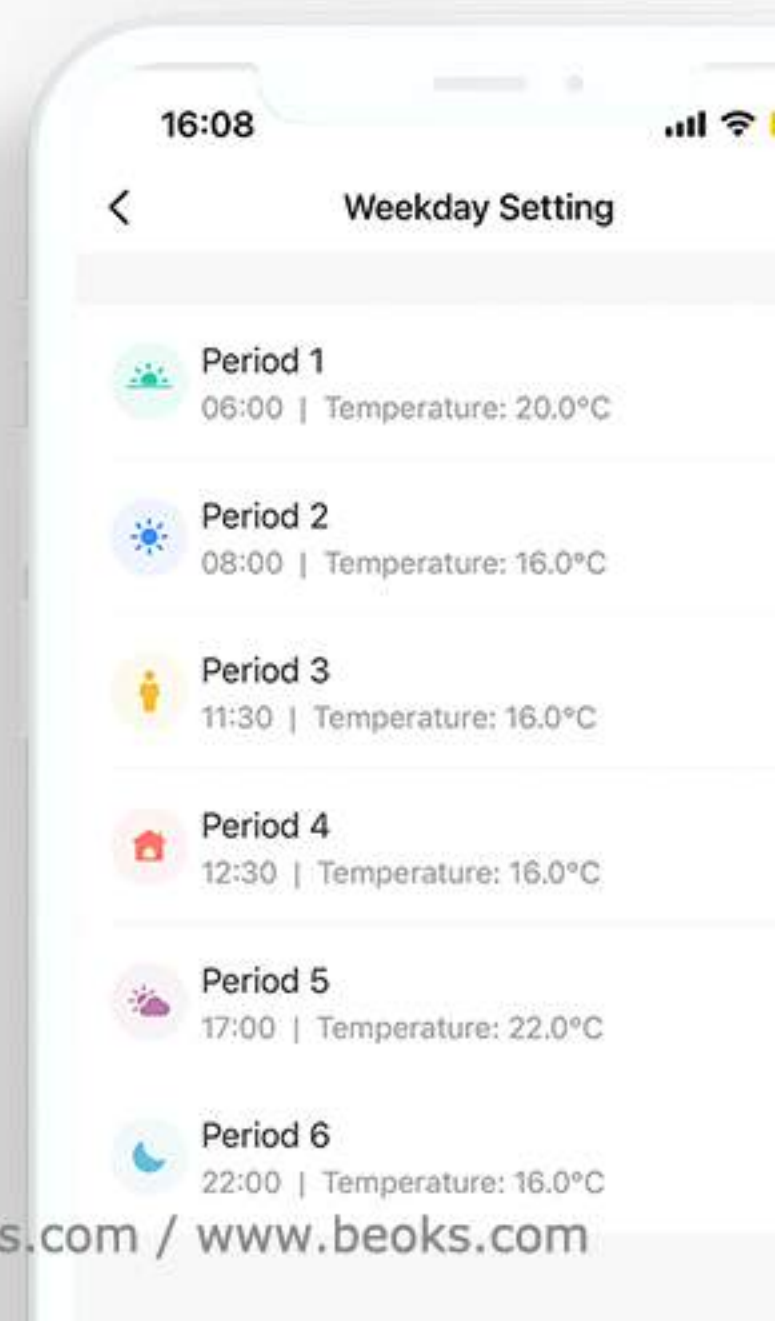
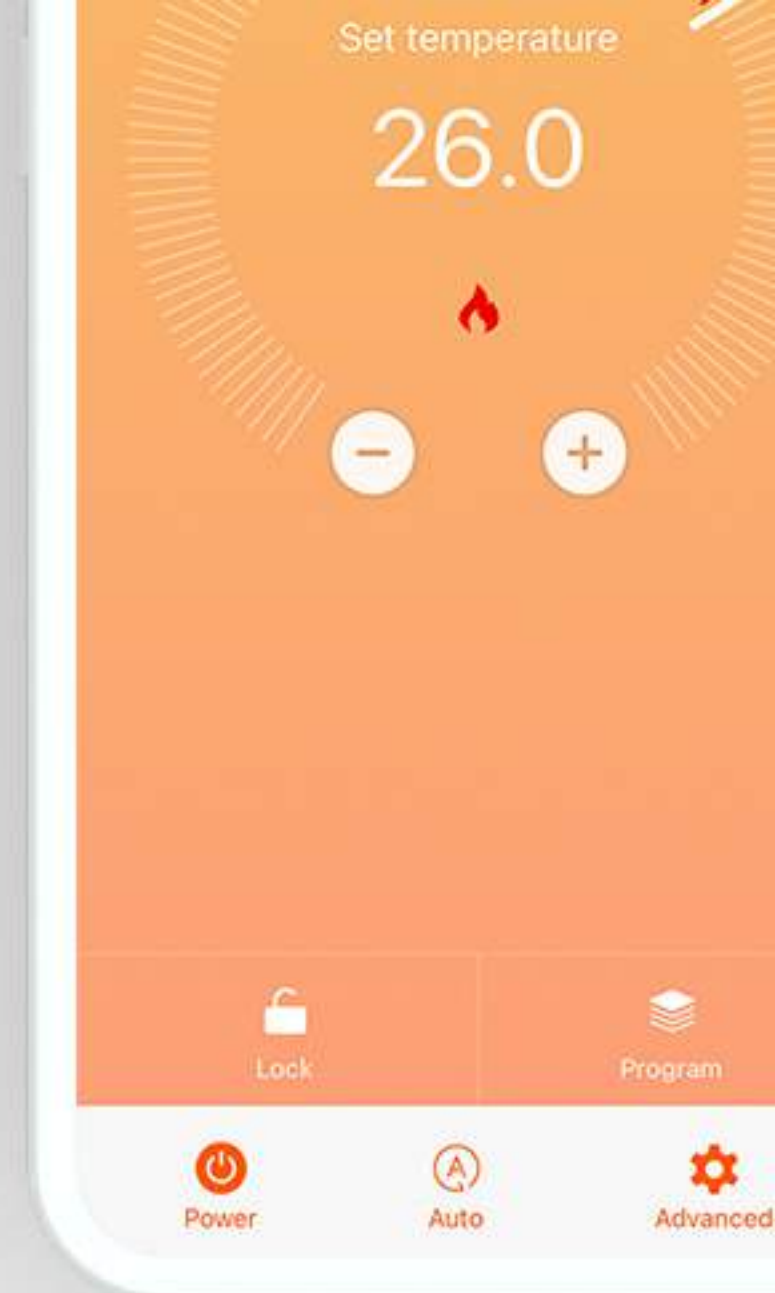
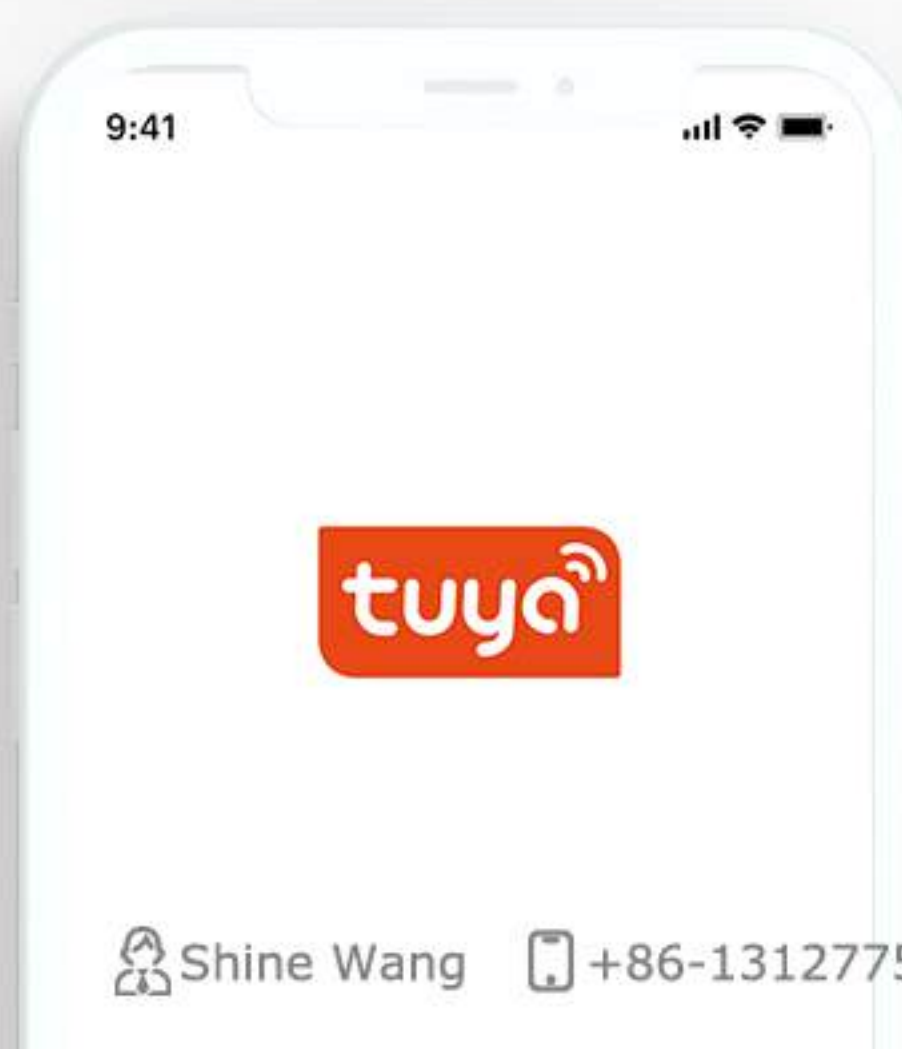
Constant temperature

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



Gas Boiler Thermostat

There are two types of gas boiler thermostats, wired and wireless.

Wired

Thermostat for Gas Boiler

The thermostat is connected directly to the boiler.

Gas boiler with dry contact

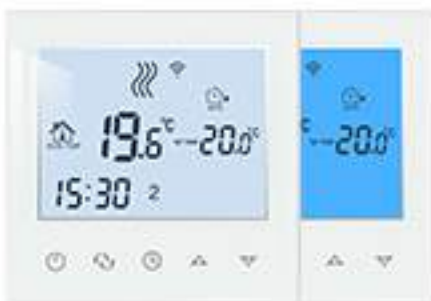
⚡ AC 230 V



Passive connection

BEOK Products

Contents

 TOL47-WPB P08	 TGM50-WPB P09	 TGP53-WPB P10	 TGP508-WPB P10	 TGP51G-WPB P12
 TGW60-WPB P13	 TGR85-WPB P14	 TGR86-WPB P14	 TDR83-WPB P14	 TDR89-WPB P14
 TS4-WPB P17	 TGT70-WPB P18	 TDS21-WPB P18	 TDS23-WPB P18	 BOT-313WIFI P18
 TDS72-WPB P21	 TDS75-WPB P21	 TGT79-WPB P21	 TC38-WPB P23	 BOT-323W P24
 BOT-313W P25	 BOT-R6W P26	 BOT-W306 P27	 BOT-R9V-WIFI P28	

Model No.

TOL47-WPB



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
3A

External material
PC+ABS (flame retardant)

Working environment
-5~50°C

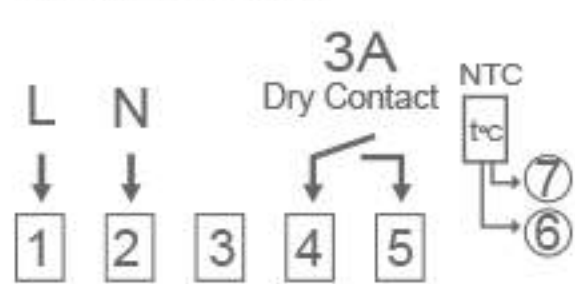
Set temp. range
5~95°C (default 60°C)

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

Temperature sensor
NTC

Wiring Diagram

For Gas Boiler



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

Selection Table

Model	Power Supply	Application	Recmote Control	Additional
	AC 100~240V	Gas Boiler	Wi-Fi	External Sensor
TOL47-WPB	✓	✓	✗	✗
TOL47-WIFI-WPB	✓	✓	✓	✗

Model No.

TGM50-WPB

86x86x12.5mm. Frosted one-piece body with touch keys.

Work with Tuya apps



iOS & Android

 zigbee

Zigbee Model Optional

Support smart speakers









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
3A

External material
PC+ABS (flame retardant)

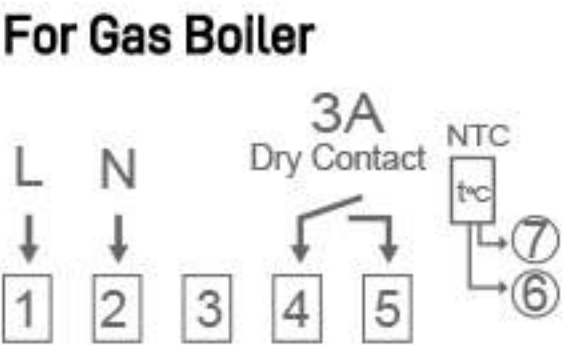
Working environment
-5~50°C

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	Gas Boiler	Wi-Fi	Zigbee	External Sensor
TGM50-WPB	✓	✓	✗	✗	✗
TGM50-WIFI-WPB	✓	✓	✓	✗	✗
TGM50-ZB-WPB	✓	✓	✗	✓	✗
TGM50B-WPB	✓	✓	✗	✗	✗
TGM50B-WIFI-WPB	✓	✓	✓	✗	✗
TGM50B-ZB-WPB	✓	✓	✗	✓	✗

TGP5 Series Boiler Thermostats

Work with Tuya apps  | iOS & Android

Support smart speakers   

Technical Data

Power supply

AC100~240V; 50/60Hz

Load current

3A

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 Gas Boiler



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



TGP53-WPB



TGP508-WPB



Model No.
TGP53-WPB



86x86x13mm.

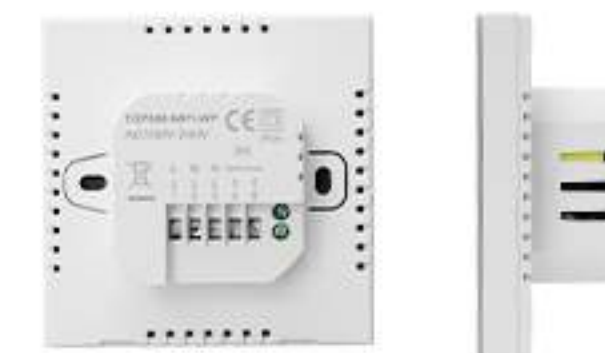
Glass screen, 3 subtle shiny silver physical buttons with icons that light up when woken up.

Selection Table

Model	Power Supply	Application	Recmote Control	Additional
	AC 100~240V	Gas Boiler	Wi-Fi	External Sensor
TGP53-WPB	✓	✓	✗	✗
TGP53-WIFI-WPB	✓	✓	✓	✗



Model No.
TGP508-WPB



86x86x14mm.

3 vertically distributed touch keys.

Selection Table

Model	Power Supply	Application	Recmote Control	Additional
	AC 100~240V	Gas Boiler	Wi-Fi	External Sensor
TGP508-WPB	✓	✓	✗	✗
TGP508-WIFI-WPB	✓	✓	✓	✗

Model No.

TGP51G-WPB

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
3A

External material
PC+ABS (flame retardant)

Working environment
-5~50°C

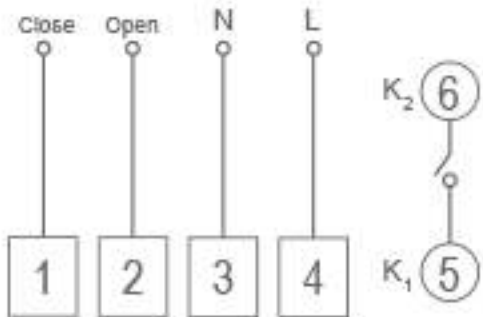
Set temp. range
5~95°C (default 60°C)

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

Temperature sensor
NTC

Wiring Diagram

For Gas Boiler



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

Selection Table

Model	Power Supply	Application	Recmote Control	Additional
	AC 200~240V	Gas Boiler	Wi-Fi	External Sensor
TGP51G-WPB	✓	✓	✗	✗
TGP51G-WIFI-WPB	✓	✓	✓	✗

Model No.
TGW60-WPB

86x86x12.5mm. LCD glass display with touch keys.
2 colors optional.

Work with Tuya apps  | iOS & Android

Support smart speakers   



TGW60W-WPB



TGW60B-WPB



Technical Data

Power supply
AC100~240V; 50/60Hz

Load current
3A

External material
PC+ABS (flame retardant)

Working environment
-5~50°C

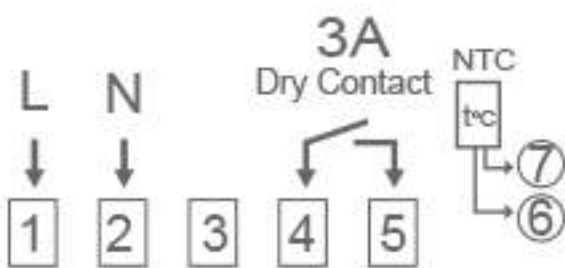
Set temp. range
5~95°C (default 60°C)

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

Temperature sensor
NTC

Wiring Diagram

For Gas Boiler



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

Selection Table

Model	Power Supply	Application	Recmote Control	Additional
	AC 100~240V	Gas Boiler	Wi-Fi	External Sensor
TGW60W-WPB	✓	✓	✗	✗
TGW60W-WIFI-WPB	✓	✓	✓	✗
TGW60B-WPB	✓	✓	✗	✗
TGW60B-WIFI-WPB	✓	✓	✓	✗

TDR8 Series Gas Boiler Thermostats

Work with Tuya apps  | iOS & Android

Support smart speakers   

Technical Data

Power supply

AC100~240V; 50/60Hz

Load current

3A

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 Gas Boiler



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



TGR85-WPB



TDR83-WPB



TGR86-WPB



TDR89-WPB

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

 **zigbee** | Zigbee Model Optional



Selection Table

Model	Power Supply	Application	Recmote Control		Additional
	AC 100~240V		Wi-Fi	Zigbee	
TGR85-WPB	✓	✓	✗	✗	✗
TGR85-WIFI-WPB	✓	✓	✓	✗	✗
TGR85-ZB-WPB	✓	✓	✗	✓	✗

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



Selection Table

Model	Power Supply	Application	Recmote Control	Additional
	AC 100~240V			
TDR83W-WPB	✓	✓	✗	✗
TDR83W-WIFI-WPB	✓	✓	✓	✗
TDR83B-WPB	✓	✓	✗	✗
TDR83B-WIFI-WPB	✓	✓	✓	✗

Model No. **TGR86-WPB** 86x90x14mm.
Glass mirror surface with touch keys.



Selection Table

Model	Power Supply	Application	Recmote Control	Additional
	AC 100~240V	Gas Boiler	Wi-Fi	External Sensor
TGR86-WPB	✓	✓	✗	✗
TGR86-WIFI-WPB	✓	✓	✓	✗

Model No. **TDR89-WPB** 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



TDR89W-WPB



TDR89B-WPB



Selection Table

Model	Power Supply	Application	Recmote Control		Additional
	AC 100~240V	Gas Boiler	Wi-Fi	Zigbee	External Sensor
TDR89W-WPB	✓	✓	✗	✗	✗
TDR89W-WIFI-WPB	✓	✓	✓	✗	✗
TDR89W-ZB-WPB	✓	✓	✗	✓	✗
TDR89B-WPB	✓	✓	✗	✗	✗
TDR89B-WIFI-WPB	✓	✓	✓	✗	✗
TDR89B-ZB-WPB	✓	✓	✗	✓	✗

BEOK Gas Boiler Thermostat **Wired**

Model No. **TS4-WPB** 86x86x14mm. 2 colors optional.
TS4W: Glossy white touch key area.
TS4G: Frosted gray touch key area.

Work with Tuya apps  | iOS & Android

Support smart speakers   

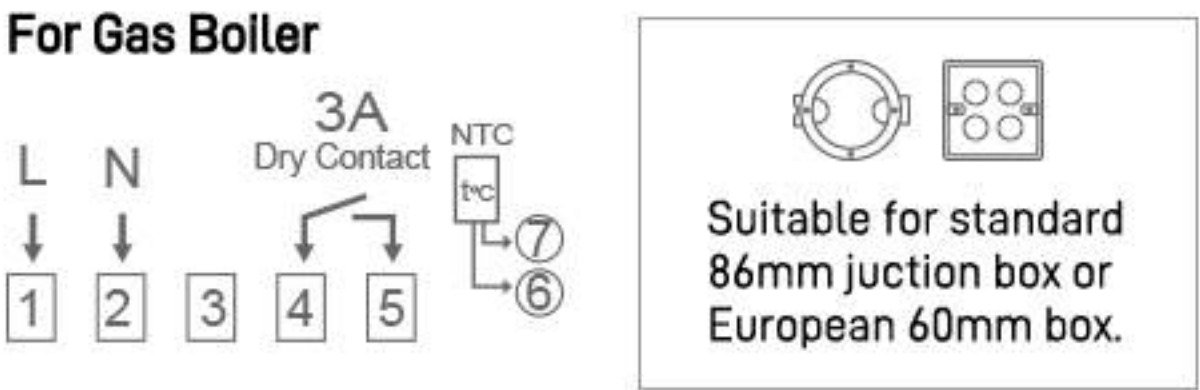


Technical Data

Power supply
AC100~240V; 50/60Hz
Load current
3A
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	Gas Boiler	Wi-Fi	External Sensor
TS4W-WPB	✓	✓	✗	✗
TS4W-WIFI-WPB	✓	✓	✓	✗
TS4G-WPB	✓	✓	✗	✗
TS4G-WIFI-WPB	✓	✓	✓	✗

TDS Series Gas Boiler Thermostats

Work with Tuya apps or BEOK Home  | iOS & Android

Support smart speakers 

Technical Data

Power supply
AC200~240V; 50/60Hz

Load current
3A

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

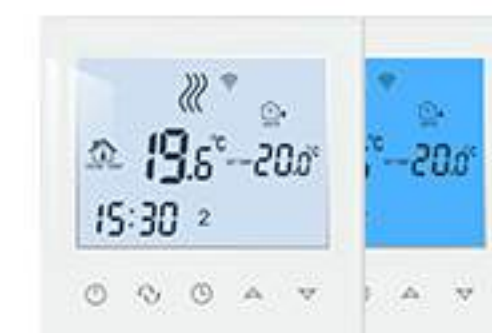
For Gas Boiler



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



TGT70-WPB



TDS21-WPB



TDS23-WPB



BOT-313WIFI

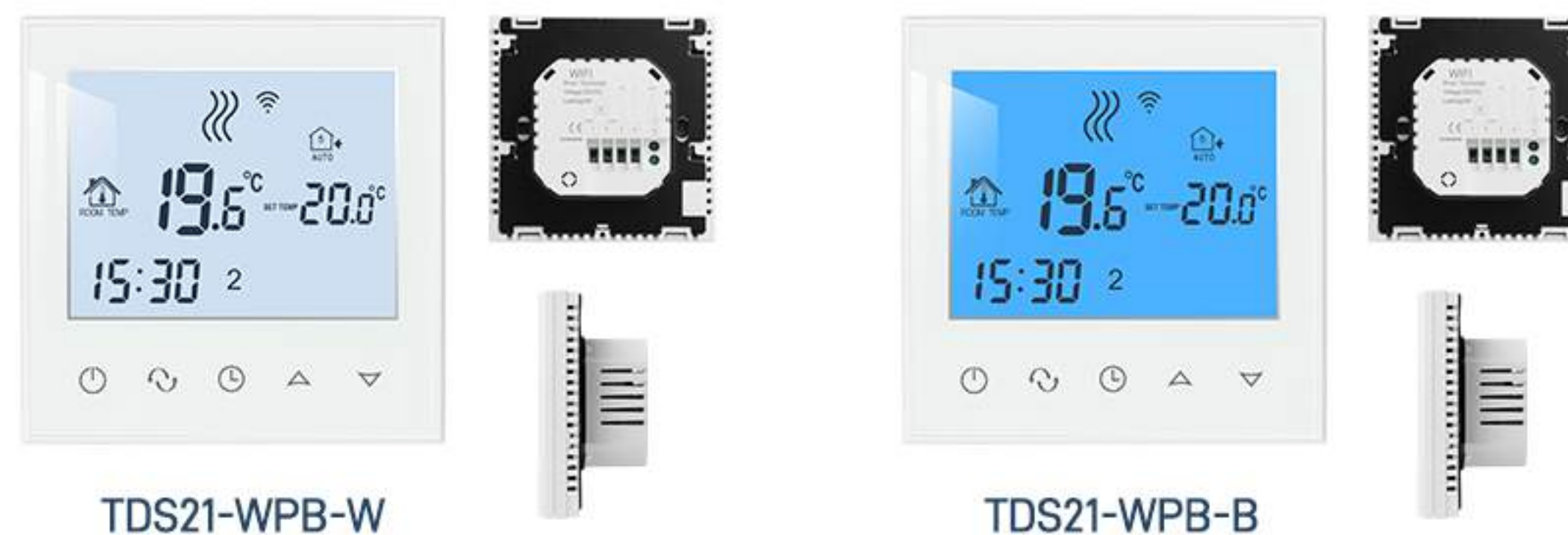
Model No. **TGT70-WPB** 86x86x16mm.
Glass screen
with touch keys.



Selection Table

Model	Power Supply	Application	Recmote Control	Additional
	AC 200~240V	Gas Boiler	Wi-Fi	External Sensor
TGT70-WPB	✓	✓	✗	✗
TGT70-WIFI-WPB	✓	✓	✓	✗

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



Selection Table

Model	Power Supply	Application	Recmote Control	Additional
	AC 200~240V	Gas Boiler	Wi-Fi	External Sensor
TDS21-WPB-W	✓	✓	✗	✗
TDS21-WIFI-WPB-W	✓	✓	✓	✗
TDS21-WPB-B	✓	✓	✗	✗
TDS21-WIFI-WPB-B	✓	✓	✓	✗

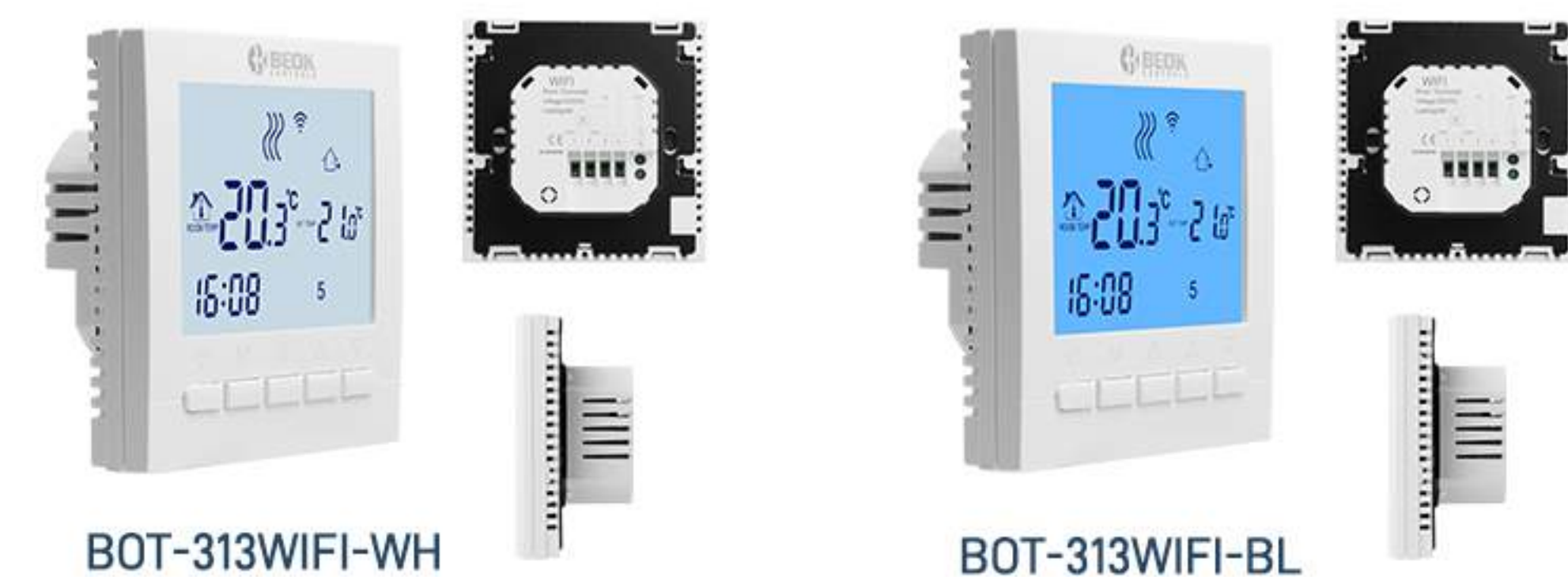
Model No. **TDS23-WPB** 86x86x16mm.
Touch keys. 2 backlight colors optional.



Selection Table

Model	Power Supply	Application	Recmote Control	Additional
	AC 200~240V	Gas Boiler	Wi-Fi	External Sensor
TDS23-WPB-W	✓	✓	×	×
TDS23-WIFI-WPB-W	✓	✓	✓	×
TDS23-WPB-B	✓	✓	×	×
TDS23-WIFI-WPB-B	✓	✓	✓	×

Model No. **BOT-313WIFI** 86x86x16mm.
5 Mechanical keys. 2 backlight colors optional.



Selection Table

Model	Power Supply	Application	Recmote Control	Additional
	AC 200~240V	Gas Boiler	Wi-Fi	External Sensor
BOT-313WIFI-WH	✓	✓	✓	×
BOT-313WIFI-BL	✓	✓	✓	×

TDS7 Series Gas Boiler Thermostats

Work with Tuya apps  | iOS & Android

Support smart speakers   

Technical Data

Power supply
AC200~240V; 50/60Hz

Load current
3A

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 Gas Boiler



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



TDS72-WPB



TDS75-WPB



TGT79-WPB

Model No.
TDS72-WPB

86x86x13mm.
Frosted tactile shell with mechanical keys.



Selection Table

Model	Power Supply	Application	Recmote Control	Additional
	AC 200~240V	Gas Boiler	Wi-Fi	External Sensor
TDS72-WPB	✓	✓	✗	✗
TDS72-WIFI-WPB	✓	✓	✓	✗

Model No.
TDS75-WPB

86x86x15mm.
Glossy panel with touch keys.



Selection Table

Model	Power Supply	Application	Recmote Control	Additional
	AC 200~240V	Gas Boiler	Wi-Fi	External Sensor
TDS75-WPB	✓	✓	✗	✗
TDS75-WIFI-WPB	✓	✓	✓	✗

Model No.
TGT79-WPB

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



Selection Table

Model	Power Supply	Application	Recmote Control	Additional
	AC 200~240V	Gas Boiler	Wi-Fi	External Sensor
TGT79-WPB	✓	✓	✗	✗
TGT79-WIFI-WPB	✓	✓	✓	✗

Model No.

TC38-WPB

86x86x15mm. 2 colors optional. White: glossy panel with silver touch keys. Black: dark mirrored panel wiht silver touch keys.

Work with Tuya apps

 | iOS & Android

Support smart speakers



TCW38-WPB



TCB38-WPB



Technical Data

Power supply
AC200~240V; 50/60Hz

Load current
3A

External material
PC+ABS (flame retardant)

Working environment
-5~50°C

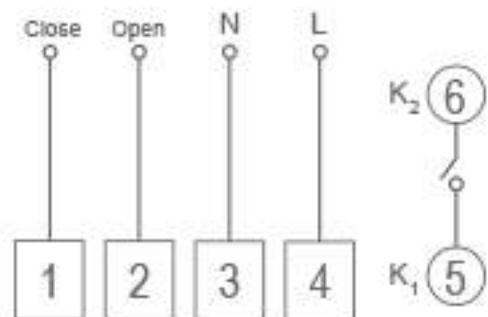
Set temp. range
5~95°C (default 60°C)

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

Temperature sensor
NTC

Wiring Diagram

For Gas Boiler



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

Selection Table

Model	Power Supply	Application	Recmote Control	Additional
	AC 200~240V	Gas Boiler	Wi-Fi	External Sensor
TCW38-WPB / TCB38-WPB	✓	✓	✗	✗
TCW38-WIFI-WPB / TCB38-WIFI-WPB	✓	✓	✓	✗

Model No.

BOT-323W

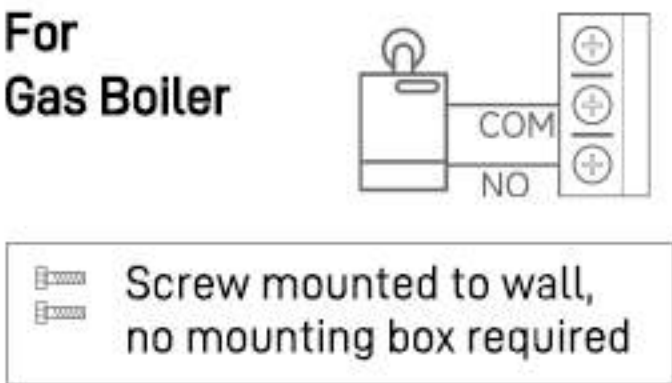
86x86x27mm. Touch keys. 2 backlight colors optional.



Technical Data

Power Supply 1.5V×2 (2 sections of 1.5V AA battery)	Limiting temp. range 5-99°C
Current Load 3A	Power Consumption <0.15W
Temp. control accuracy ±1°C	Temperature hysteresis ±0.5~±9.9°C Adjustable (default ±1°C)
Setting temp. range 5-99°C (factory default 5-35°C)	Temperature sensor NTC

Wiring Diagram



Selection Table

Model	Power Supply	Application	Recmote Control	Additional
	2 sections of 1.5V AA battery	Gas Boiler	Wi-Fi	External Sensor
BOT-323W-WH	✓	✓	✗	✗
BOT-323W-BL	✓	✓	✗	✗

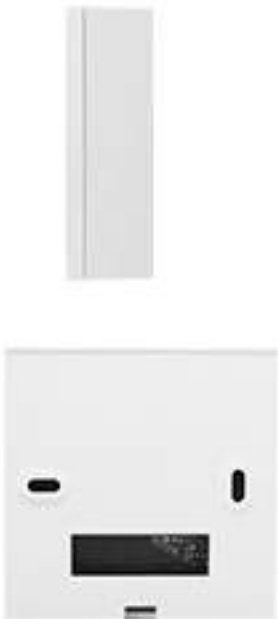
Model No.

BOT-313W

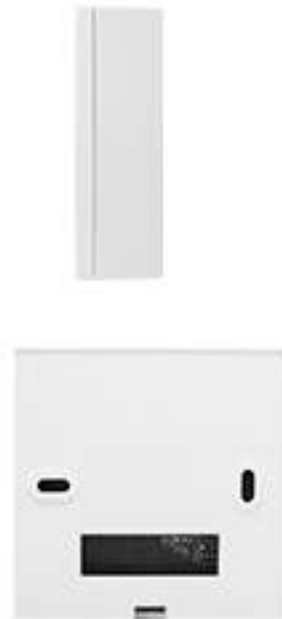
86x86x27mm. 5 mechanical keys. 2 backlight colors optional.



BOT-313W-WH



BOT-313W-BL



Technical Data

Power Supply
1.5V×2 (2 sections of 1.5V AA battery)

Current Load
3A

Temp. control accuracy
±1°C

Setting temp. range
5-99°C (factory default 5-35°C)

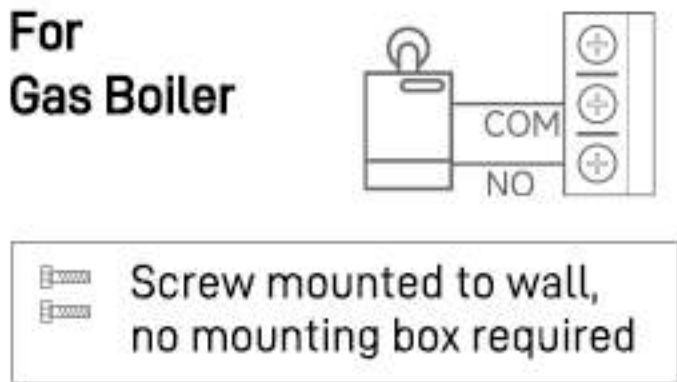
Limiting temp. range
5-99°C

Power Consumption
<0.15W

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

Temperature sensor
NTC

Wiring Diagram



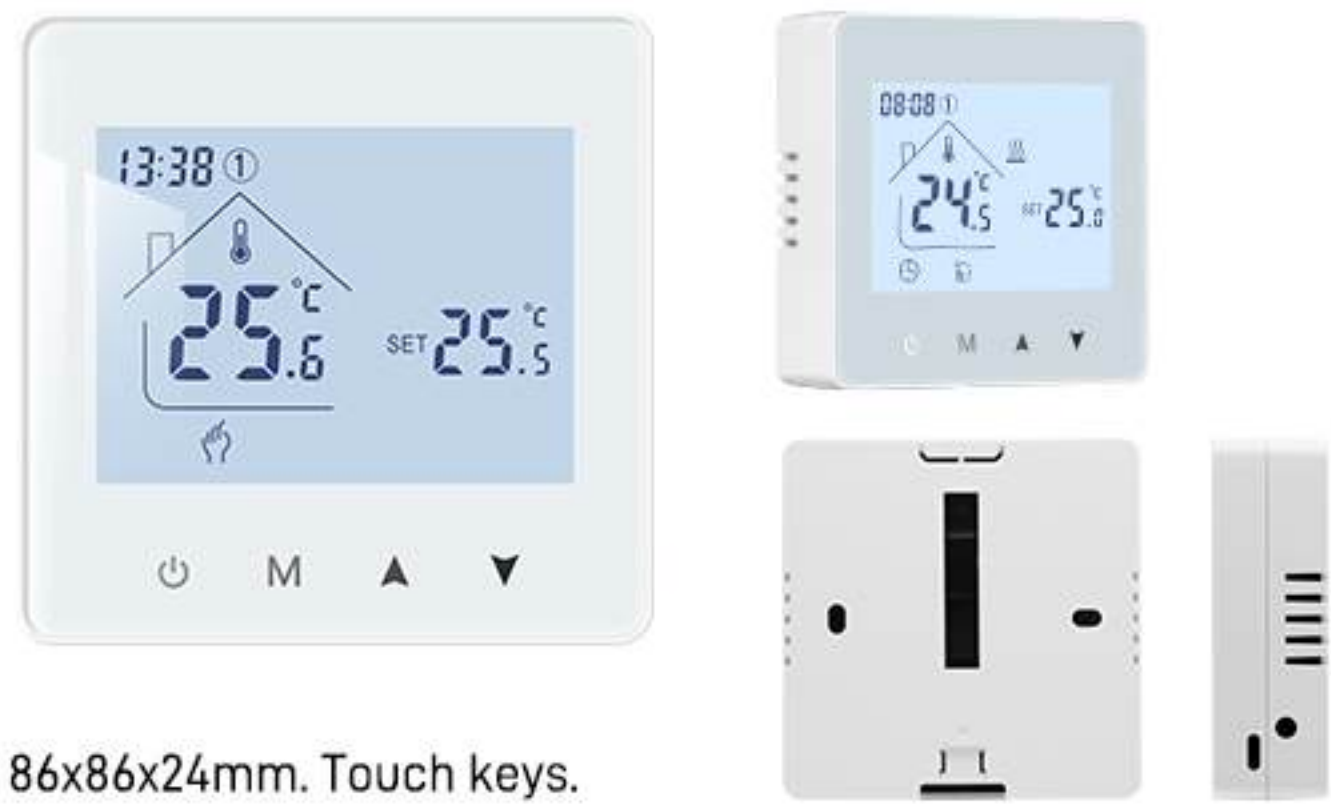
Selection Table

Model	Power Supply	Application	Recmote Control	Additional
	2 sections of 1.5V AA battery	Gas Boiler	Wi-Fi	External Sensor
BOT-313W-WH	✓	✓	✗	✗
BOT-313W-BL	✓	✓	✗	✗



Model No.

BOT-R6W



Technical Data

- Power supply

Three 1.5V AA batteries
- Current load

3A (Resistive)
- Temperature sensor

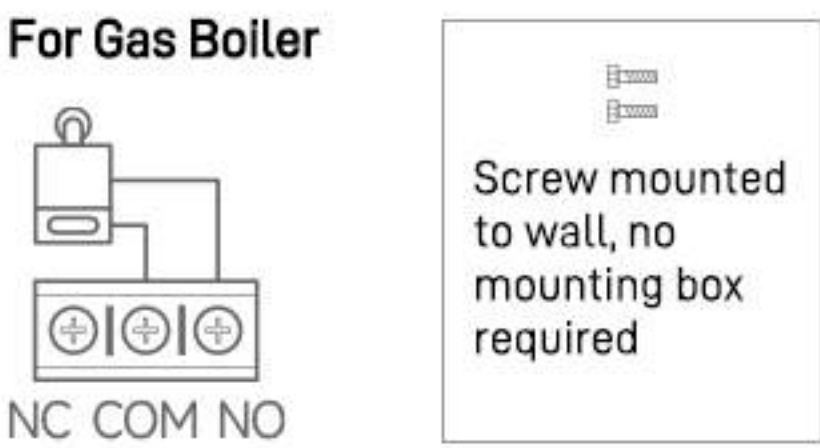
NTC
- Power consumption

<170 uW
- Temperature accuracy

±1°C
- Temperature hysteresis

±0.5~±9.9°C Adjustable (default ±1°C)

Wiring Diagram



Selection Table

Model	Power Supply	Application	Recmote Control	Additional
	3 sections of 1.5V AA battery	Gas Boiler	Wi-Fi	External Sensor
BOT-R6W	✓	✓	✗	✗



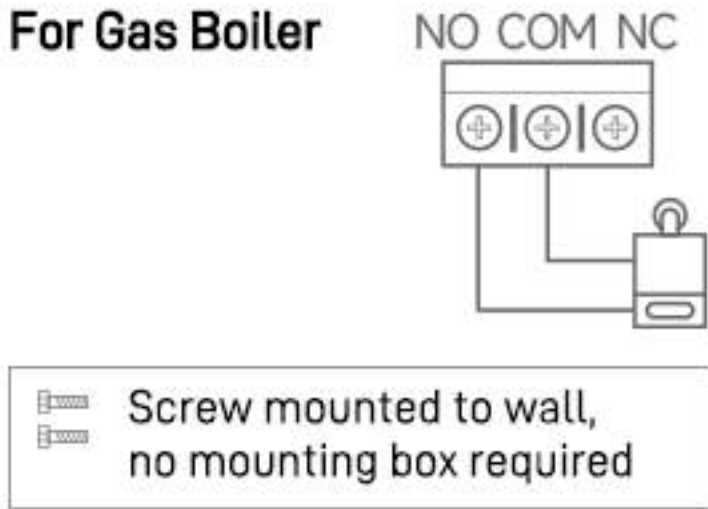
Model No.
BOT-W306  130x91x21mm.
Touch keys.



Technical Data

Power Supply Two 1.5V AA batteries	Temp. control accuracy 0.5-5°C
Current Load 3A	Sensing Element NTC
Power Consumption <0.15W	Temperature hysteresis ±0.5~±9.9°C Adjustable (default ±1°C)
Setting temp. range 5-35°C	

Wiring Diagram



Selection Table

Model	Power Supply	Application	Recmote Control	Additional
	2 sections of 1.5V AA battery	Gas Boiler	Wi-Fi	External Sensor
BOT-W306	✓	✓	✗	✗

Model No.

BOT-R9V-WIFI



86x86x24mm.
Touch keys.

Work with Tuya apps



iOS & Android

Support smart speakers





Technical Data

Power Supply
Two 1.5V AA batteries

Current Load
3A

Power Consumption
<0.15W

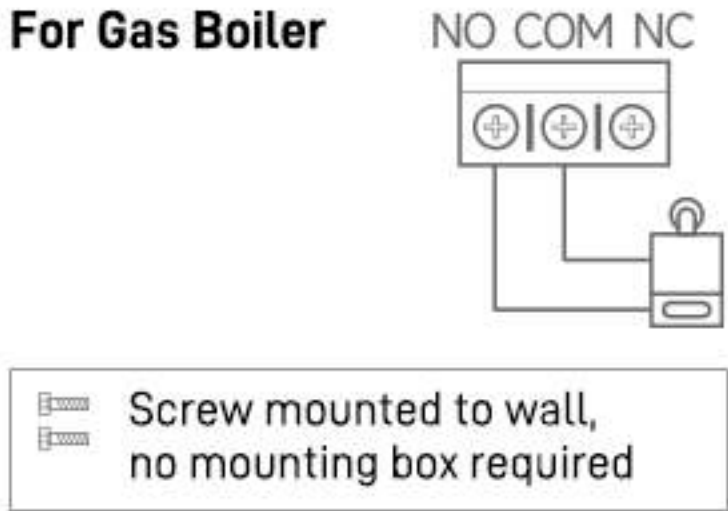
Setting temp. range
5-99°C

Temp. control accuracy
0.5-5°C

Sensing Element
NTC

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

Wiring Diagram



Selection Table

Model	Power Supply	Application	Recmote Control	Additional
	2 sections of 1.5V AA battery	Gas Boiler	Wi-Fi	External Sensor
BOT-R9V-WIFI	✓	✓	✓	✗





Beok Controls

