

# ROOM THERMOSTAT KONVEKA TW24

# INSTALLATION AND USER GUIDE





# **PRODUCT OVERVIEW**

Konveka TW24 is dedicated for regulating the heating and/or cooling in one zone (room) of a building. This enables the setting of a specific temperature within the zone and allows for the creation of a weekly time-temperature schedule, delivering enhanced comfort and significant energy savings.

It can control:

- convectors, fan coils or other heating - cooling devices with 0-10V speed control fans.

- Heating - cooling devices or manifolds with 24VDC actuators.

The thermostat can be controlled by smartphone using mobile applications: Smart Life or Tuya Smart.

Power supply	95 ~240 VAC, 50~60Hz
Currentload	Fan Relay Resistance: 5A; Inductive: 3A
	Valve Relay Resistance: 3A; Inductive: 1A
Sensor	NTC3950, 10K
Accuracy	± 0,5°C
Power consumption	< 1,5W
Set temperature range	5 - 35°C
Ambient temperature	0 - 45°C
Ambient and storage humidity	5 - 95% RH (Non-condensing)
Storage temperature	-10 to 45°C

# TECHNICAL SPECIFICATIONS





Shell material	PC + ABS (Fireproof)
Protection class	IP20
Buttons	Capacitive Touch Buttons
Dimensions	88 x 88 x 41,8 mm

#### **STANDARD SET**

Thermostat	1 pc.
Floor sensor	1 pc.
Screws	2 pc.
User Guide	1 pc.

#### DIMENSIONS

AND USER GUIDE



# INSTALLATION

Thermostat is suitable for installation in standard 86 x 86 mm square box or 60 mm European round box. Only shielded cables can be used for all connections of this thermostat.



Installation or maintenance work on the thermostat must only be undertaken after disconnecting the power cables! Contacts with live power cables could result in serious injury or even death! All installation and wiring work must be performed by a professional electrician!







#### WIRING





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# THERMOSTAT CONTROL



1. Power on/off. Press 🖉 to turn thermostat on/off.

#### 2. Manual and Programmable settings

Press and hold  $\mathbb{H}$ ,  $\emptyset$  will flash. Press  $\wedge$  to select manual and press  $\vee$  to select weekly programmable.

#### 3. Setting the temperature

In the mode of manual, press  $\diamondsuit$  to set temperature.  $\P$  will display in below the middle of the screen.





#### 4. Selecting System Mode

Press **H** to change the system mode HEATING, COOLING and VENTILIATION. In the mode of VENTILIATION, the valve is off but the fan runs.

#### 5. Setting the Fan Speed

Press 🏖 go to select the fan speed AUTO, HIGH, MED, LOW.

#### 6. Set Clock

Press and hold  $\mathbb{H}$ ,  $\mathfrak{N}$  will flash. Press  $\mathbb{H}$  to set minute, hour and weekday by using the  $\wedge \mathbb{V}$  arrows, after 3 seconds the value will be confirmed automatically.

#### 7. Locking the thermostat

Press and hold  $\bigotimes$  for 5 seconds to lock/unlock your thermostat. In Function selection mode No. 3, it is possible to select full lock or half lock.

#### 8. Setting weekly programs in programmable mode

Press 🔠, to select programmable mode.

Then press  $\blacksquare$  to change the different items. Press  $\diamondsuit$  or  $\circlearrowright$  to set the relative values.

Thermostat provides six scheduled heating and cooling periods each day – three Comfort periods – 1, 3 and 5 (the temperature required when room is occupied) and three Economy periods – 2, 4 and 6 (the temperature required when room is unoccupied). You can set both: the time and the temperature, for each of these six daily periods. Adjusting/setting the schedules can only be carried out when in program mode. Touch **B** to change between manual mode and programmable mode. In manual mode  $\mathfrak{N}$  will show in the bottom left of the screen. Touch the icon **B** for four times until the weekday schedule settings appear (1 2 3 4 5 will show along the top of the screen).

Use  $\bigotimes$  arrows to adjust the time for the 1st (Comfort) period. Press the icon **B** and use  $\bigotimes$  arrows to set the temperature for the 1st period. Repeat this





process for periods 2 - 6. Press the icon  $\blacksquare$  once more to enter the weekend schedule settings (6 and 7 will show along the top of the screen). Repeat the above process to set the weekend schedule. Press  $\blacksquare$  once more to confirm and exit.

Time display	Weekday (1 2 3 4 5)		Saturday (6)		Sunday (7)	
	Time	Temp.	Time	Temp.	Time	Temp.
Period 1	06:00	20°C	06:00	20°C	06:00	20°C
Period 2	08:00	15°C	08:00	20°C	08:00	20°C
Period 3	11:30	15°C	11:30	20°C	11:30	20°C
Period 4	13:30	15°C	13:30	20°C	13:30	20°C
Period 5	17:00	22°C	17:00	20°C	17:00	20°C
Period 6	22:00	15°C	22:00	15°C	22:00	15°C

# Default settings for program schedule

#### 9. Function selection

During power off hold **H** and **a** at the same time for 5 seconds in order to reach system function. Then press **H** to change the different items. All settings will confirm automatically when power is on.

Code	Function	Setting and Options	Default
1	Temperature compensation	-9 to 9 °C for internal sensor	-3
2	Fan control	00: When room temp. reaches the set point, the fan will turn off 01: When room temp. reaches the set point, the fan will keep low speed running	00
3	Button locking	00: All bottoms are locked except power button 01: All bottoms are locked	01
4	Mode Select Custom	00: Cooling / Ventilation 01: Cooling / Heating / Ventilation	01



5	Min Set Temperature	5 to 15°C			
6	Max Set Temperature	15 to 45°	15 to 45°C		
7	12/24 hours	00: 12h 01: 24h		01	
8	Display mode	00: Displo 01: Displo	y both set temperature and room temperature y set temperature only	00	
9	Energy saving mode	00: ON 01: OFF		00	
10	Heating Energy saving temperature	10 to 30°	0	20	
11	Cooling Energy saving temperature	10 to 30°	C	26	
12	Daytime display brightness	0-8	When set to 0, the device will run for 10 seconds	6	
13	Nighttime display brightness	0-8	The screen will go completely off with no display.	3	
14	Fan low speed voltage	0-10V			
15	Fan medium speed voltage	0-10V			
16	Fan high speed voltage	0-10V			
17	Cooling mode	When the thermostat is connected to an external sensor, set item 21 to 0, and the temperature differ- ence between the temperature detected by the external sensor and the room temperature is used as the condition for the fan to be turned on. <b>Cooling mode</b> : if pipe temperature is lower or higher less than by 3°C than set temperature, fan will not operate. If the pipe temperature is more than 3°C lower than the set temperature, the fan will start working.		3	
18	Heating mode	<ul> <li>Heating mode: if pipe temperature is lower or higher less than by 3°C than set temperature, fan will not operate.</li> <li>If the pipe temperature is more than 3°C higher than the set temperature, the fan will start working.</li> <li>This setup ensures that the fan only operates when there is a significant temperature difference between the water pipe and the set temperature, which helps to prevent fan for idle operating.</li> </ul>		3	





19	Modbus IP address	1-225		1	
20	Baud rate	1: 9600 2: 19200 3: 38400 4: 57600 5: 115200	1 : 9600 2: 19200 3: 38400 4: 57600 5: 11 5200		
21	2-pipe or 4-pipe	0: 4-pipe 1: 2-pipe		0	
22	External sensor function selection	00: Restric 01: Detec	30: Restrict fan operation, see item 16 31: Detect room temperature, test internal sensor is invalid		
23	Delayed fan start in cooling mode	0-120	In cooling mode, when the device is turned on, the fan starts with a delayed time. Delayed time=value*5s	0	
24	Delayed fan shutdown in cooling mode	0-120	In cooling mode, when the device is turned off, the fan is delayed turning off. Delayed time=value*5s	120	
25	Delayed fan start in heating mode	0-120	In heating mode, when the device is turned on, the fan starts with a delayed time. Delayed time=value*5s	12	
26	Delayed fan shutdown in heating mode	0-120	In heating mode, when the device is turned off, the fan is delayed turning off. Delayed time=value*5s	24	
27	Version number			U7	

## WI-FI CONNECTION

Before using your Wi-Fi thermostat for the first time, you must configure the Wi-Fi signal and settings through your smartphone or ta-



blet. This will allow communication between your connected devices. Search for "Smart Life App" or "Tuya Smart App" in Apple Store or Google Play.





## Open the app.

16:51					4.5	# 205 <b>#</b>
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Select "Add Device"



In the left menu select **"Small Home** Appliances", In the right menu select **"Thermostat (Wi-Fi)**"

17:07		+ %178%
×		
Select 2.4 and e	GHz Wi enter pas	-Fi Network sword. set it to be 2.40Hz. ng method
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🗟 Wifi net	work	
A Passwor	d	
	Next	

Select Wi-Fi network, enter password and select "**Next**". If your network is working on 5 GHz, you must switch to 2.4 GHz. If you don't know how to do it, please consult your network provider

Switch off the thermostat, push and hold > until blinking  $\widehat{\uparrow}$  icon will appear.







#### WARRANTY

The thermostat comes with a 24-month warranty. If the thermostat breaks down either during the warranty period or afterwards, or if you have any uncertainties, please contact us:

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