

Apus Room Thermostat



Heating+Cooling

RT-A1



Apus is a high-quality room thermostat with a modern design for regulating the room temperature required by the user for maximum comfort.

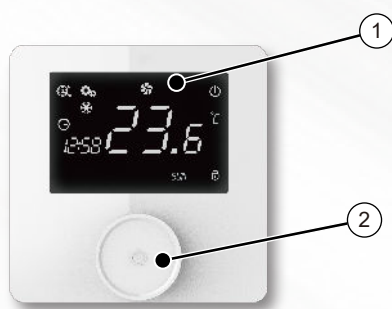
Apus room thermostat is available for an operating voltage of 230 V. Room-by-room temperature control is possible through a direct connection to the actuator. In conjunction with the connection base station direct, a perfectly matched overall system for surface temperature adjustment can be realized.

The appearance is simple, the setting and operation of the desired room temperature can be carried out comfortably only by turning the button and pressing it. There are vertical cut lines on the side of the control knob, which can increase friction and prevent slipping. The well-structured and language-neutral display of the high-quality display always shows all symbols clearly. The user-friendly interface with various modes and simple switching process greatly enhances the user experience.

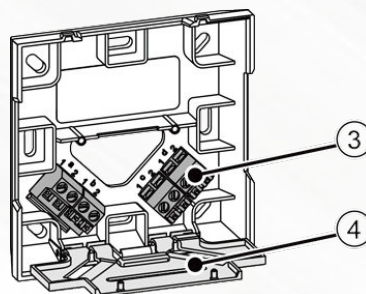
Features

- Large, clear LCD display with backlight
- Stylish design and small size
- Equipment for heating and cooling systems
- Adjustable reduction temperature
- Comfort programs for heating and cooling operation
- Correction of actual temperature registration
- Limitation of the target temperature setting range
- Low temperature protection
- Descaling function
- Suitable for NC and NO operation
- High-quality, modern OEM design

Device overview




















Top view

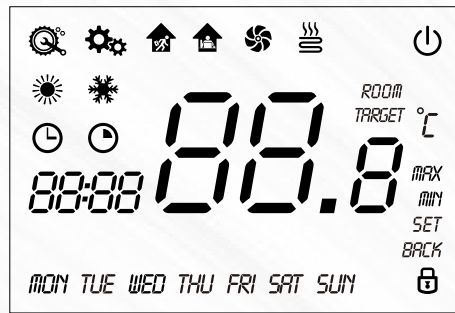


Clamp contacts

1 Display	<ul style="list-style-type: none"> • Indication of all displays and menus
2 Rotary control	<ul style="list-style-type: none"> • Rotary-push mechanic system with fine ratchet • Operation and navigation through menus • Target temperature specification <ul style="list-style-type: none"> - Setting the target temperature for the operating modes heating and cooling
3 Connection terminals	<ul style="list-style-type: none"> • Screw terminals for the connection lines <ul style="list-style-type: none"> - Quick connection of a multi-core connection line for voltage supply and signal transmission
4 Protective cover	<ul style="list-style-type: none"> • Protection against accidental contact of live components

Display

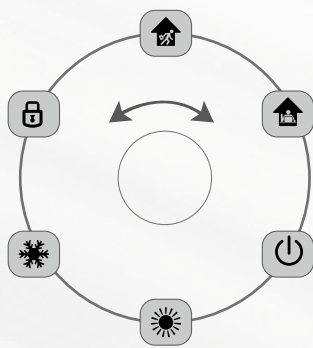
-  Function menu
-  Settings menu
-  Away mode
-  Home mode
-  Switching off
-  Heating
-  Cooling
-  Time Setting
-  Cooling work indicator
-  Heating work indicator
-  Lock
-  Temperature unit
-  Maximum temperature
-  Minimum temperature
-  Weekdays
-  Time
-  Room/Target temperature









User Operation

Apus thermostat has two operating windows, which are functions and setting, users need to enter these two menus to change parameters or function selection, the details as below:

Function Menu: Click on the thermostat, rotate to , and click to enter.

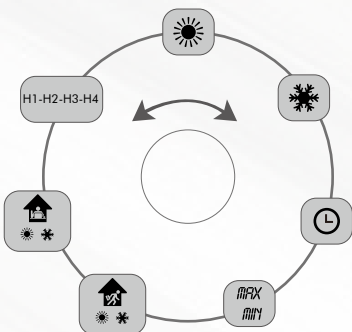









- ▲  Away mode: the default temperature is 22°C in the cooling, the default temperature is 16°C in the heating, it can adjust in setting mode.
- ▲  Home mode: Cooling and heating default setting is 22°C, it can adjust in setting mode.
- ▲  Power on/off: click to switch off, double clicks to restart
- ▲  Heating mode
- ▲  Cooling mode
- ▲  Screen lock: after lock, long press 5s to unlock

Tips:

Under this menu, rotate the knob to move different function icons, and click to confirm the selection of the function, long press to exit.

Setting Menu: Click on the thermostat, rotate to , and click to enter.



- ▲  Heating mode: In heating mode, user can choose a temperature to function menu.
- ▲  Cooling mode: In cooling mode, user can choose a temperature to function menu.
- ▲  Time setting: year, month, day and 24h setting
- ▲  Max and Min target temperature setting: The default value is 35°C for max target temperature, 5°C for min target temperature.
- ▲  Home mode temperature setting in heating or cooling mode
- ▲  Away mode temperature setting in heating or cooling mode
- ▲  H1-H2-H3-H4 each code means is different advanced setting, the details as below:

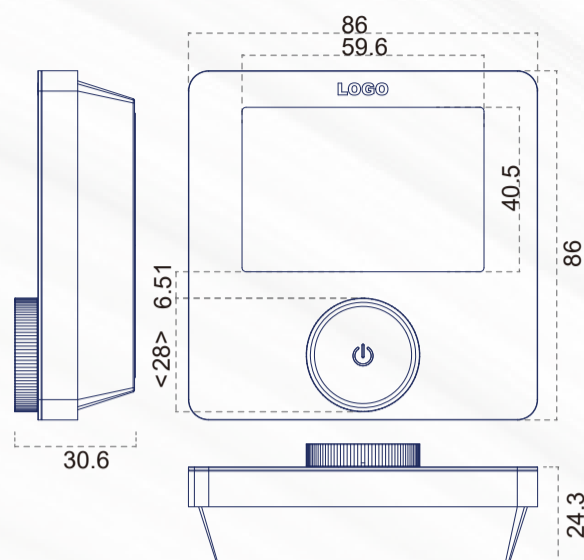
Display code	Option contents	Default setting	Rotated the knob to adjust, long press the knob to save
H1	temperature compensation	0°C	-9°C ~ +9°C
H2	start-up temperature difference	2°C	0°C ~ 9°C
H3	High temperature protection	45°C	30 ~ 60°C
H4	Low temperature protection	5°C	5 ~ 10°C

Tips:

Under this menu, rotate the knob to move different targets and adjust parameter, and click to confirm, long press to exit.

Technical data


Dimensions (all indications in mm)



The technical data listed relate to the maximum functional equipment of the Apus thermostats.

Operating voltage	230VAC±10%,50/60HZ
Output	230VAC 5A
Power consumption	<1W
Fuse	Slow break 1A/250V
Max. number of connectible actuators	5
Control direction of connectible actuators	NC/NO
Target temperature setting range	5 to 35°C
Target temperature resolution	1°C
Actual temperature measuring range	0 to 90°C
Correction of actual temp. registration	-9 to 9°C
Measuring accuracy of actual temperature	0.1°C
Control accuracy	±1°C
Antifreeze temperature	5°C
Admissible ambient temperature	0 to 50°C
Admissible storage temperature	-20 to +70°C
Admissible ambient humidity	80%, not condensing
Sensor	NTC100K 1%
Switching element	Photoelectric thyristor, solid state relay
Switching power	High voltage LDO
Color	White/black
Screen	LCD
Backlight	LED
Size	86*86*31mm
Type of installation	On-surface wall installation
Background illumination	No any operation after 8s, the screen will be off

Other operations and tips

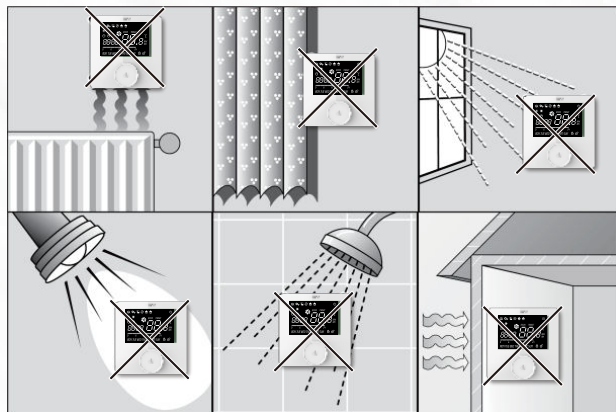
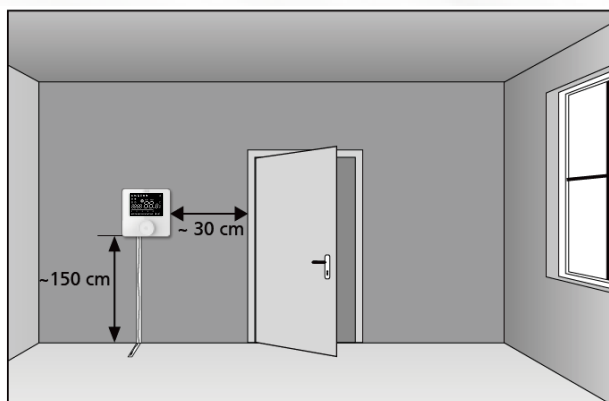
- High temperature protection tip: When the room temperature is higher than the protection value, the temperature display value starts flashing and the load is automatically switched off. When the indoor temperature is lower than the protection value, the temperature display value stops flashing and the the protection status is cancelled automatically.
- Low temperature protection tip: When the indoor temperature is lower than the protection value, the temperature display value starts flashing and the load turns on automatically. When the indoor temperature is higher than the protection value, the temperature display stops flashing and the protection status is cancelled automatically.
- Temperature sensor failure prompt:
E1 and E2 represent that the sensor is faulty, the thermostat will stop working until the fault is eliminated if the display interface appear E1 and E2.
- Valve protection function included in the device.
- Restore factory value: In the function, long press  for 5s, the thermostat will be restored to the factory default value.

Installation notes

Apus room thermostat can be performed in just a few simple and intuitive steps.

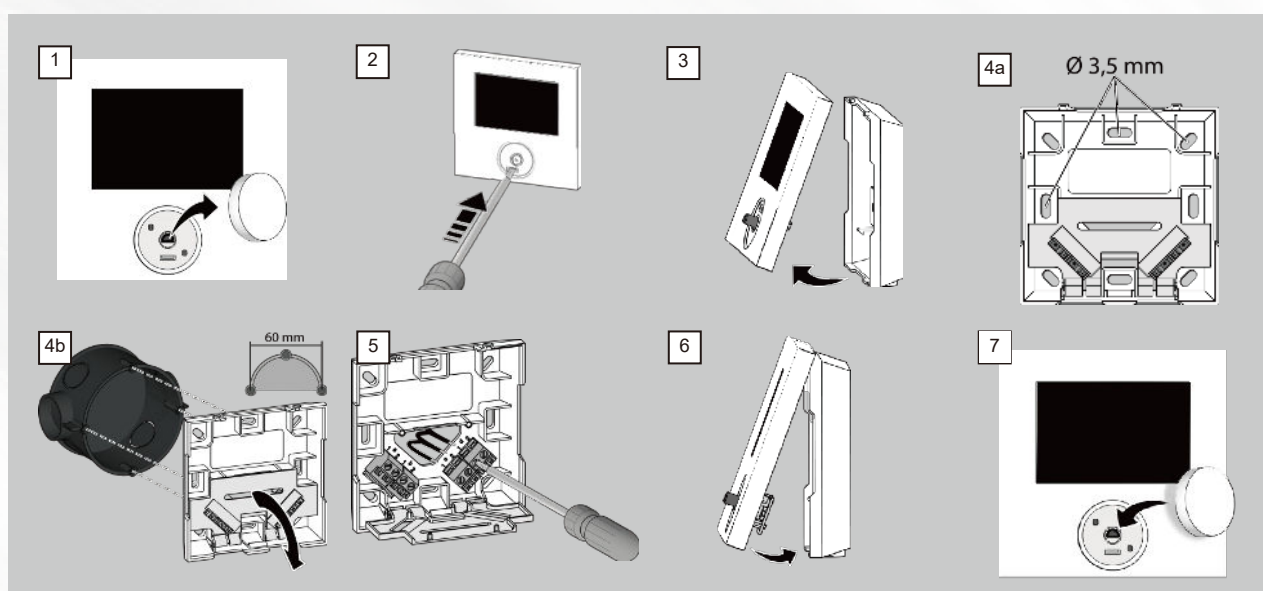
Installation place

It is recommended that the installation be done in a place with free access so that Apus room thermostat can detect the correct room temperature.



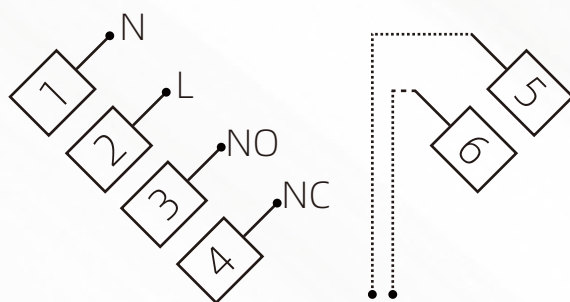
Installation

Apus room thermostat can be comfortably installed on a surface or in a embedded box in just a few simple steps.



Electric connection

The wiring between Legom Room Thermostat and the components to be connected is realised with a multi-core cable.



1:L line 2:N line 3:Normally closed 4:Normally open
5/6:Dry contact

Warning: Wiring must be properly wired according to the electrical wiring diagram. Do not put water, mud and other impurities into the Thermostat, otherwise the device will be damaged!