

# BT730

User manual  
Wireless thermostat  
with touch buttons



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# Content

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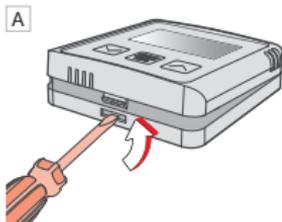
BT730 is a wireless thermostat (transmitter), that depending on the desired temperature in the room, controls the receiver unit BT001, BT002, BT002A, BT003, BT005 or PH-BP1-P9, which switches the connected heating device.

The BT730 is able to controll up to 9 switching elements (receivers). It switches the elements gradually and thus prevents current peaks in the network. Range in buildings is min. 35 m - depending on the receiver used.

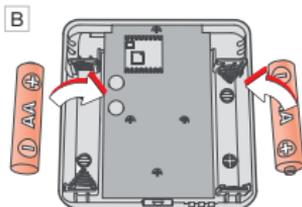
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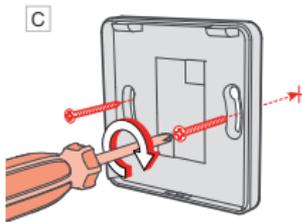
# Assembly



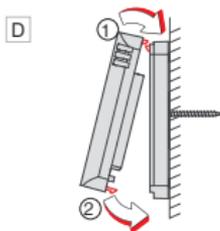
**A**  
Open the front cover of the transmitter.



**B**  
Insert 2 x 1.5 V AA alkaline batteries.

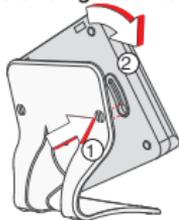


**C**  
Attach the back cover to the wall.



**D**  
Clap the front cover onto the back.

## Free standing assembly:



Slide the thermostat onto the stand and secure by turning.

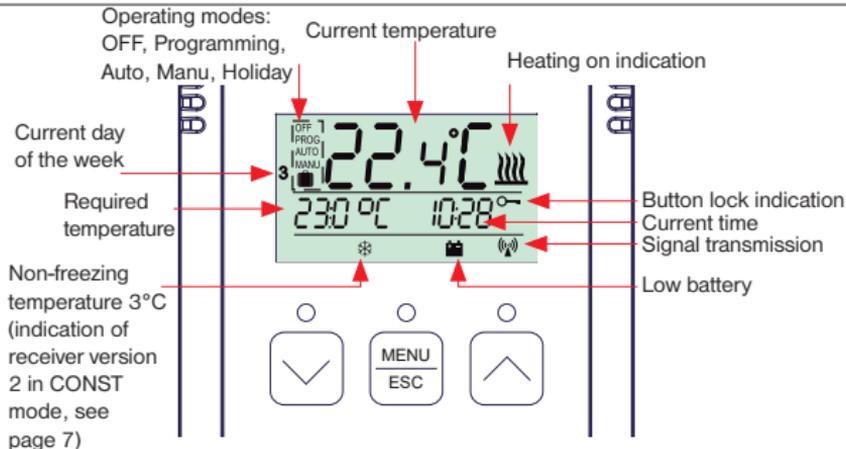
**!** Avoid placing near locations such as window sills, televisions, PCs or devices with hot or cold radiation.

**!** Always use only 2 x 1.5 V batteries, type AA! (do not use rechargeable batteries).

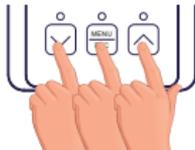
**!** Dispose of used batteries in accordance with the regulations for handling hazardous waste!



# Control (overview)



## Functions of the control buttons



### 1. press

The first press on any button activates the backlight of the display.



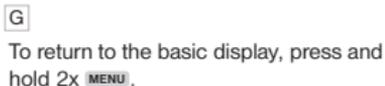
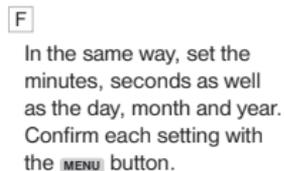
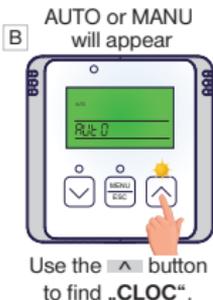
### 2. press

**short press** on the MENU button = **ENTER** (confirmation)

**long press** on the MENU (approx. 3 s) = **step back**

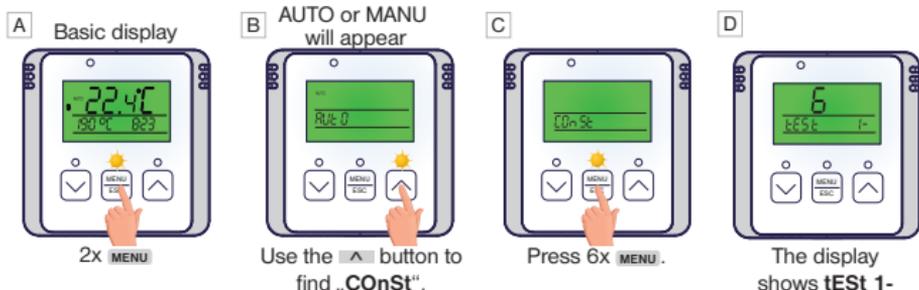


# Time setting





# Pairing with receivers



**E** On the receiver\*, press briefly for approx. 1s function button.



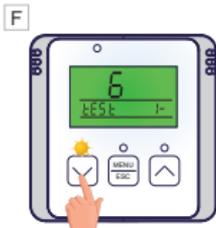
After pressing the FUNCTION BUTTON, both LEDs start flashing alternately.



## NOTICE:

To use all available functions, always use version 2 receivers. These receivers react to SUMMER MODE (p.16), in this mode the heating is not switched on.

\* The receiver must be connected according to the diagram - see the instructions for the receiver and must be under voltage. Types of receivers on page 23.



Press the button to send a signal to the receiver.



Both LEDs on the receiver will light up several times simultaneously and the output relay will turn on and off several times. „Test On / Test Off“ appears alternately on the transmitter display.

Wait about 10 seconds for synchronization will be finished  
**THEREBY IS THE 1ST RECEIVER PAIRED.**

H **Do you wish to pair 2nd receiver with this transmitter?**

**NO** Press and hold the **MENU** button twice to return to the basic display.

**YES**



Press 1x button and „test 2-“ will appear on the display.

On the **second receiver** briefly press the **FUNCTION** button for approx. 1s, this will cause both diodes to flash.

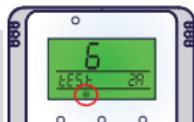


Press the button to send the signal to the second receiver.

To return to the basic display, press longer 2x .

If the message Ertr (communication error) appears on the display, the learning process did not proceed correctly and the entire learning process must be repeated.

**symbol** : indicates a version 2 receiver that enables the **SUMMER MODE** function, see page 16 \*



\* If you activate the receiver of an older version, the sign will not appear and the constant **SUMMER** mode cannot be used! **ALWAYS USE Version 2 RECEIVERS!**



# Deleting receivers

- i** If you are using more receivers, all receivers can be deleted at once or individual receivers one after the other.

**A** Basic display



2x **MENU**

**B** AUTO or MANU will appear



Use the **▲** button to find „COnt“.

**C**



Press 6x **MENU**.

**D** tEST 1A will appear



**to delete all the receivers**

Press 9x **▲**.

**E** tEST dEL appears



Press the **▼** button

tEST 1- appears on the display

**This deletes the receivers from the thermostat.**

**to delete just one selected receiver**

Use the **▲** button to select the given receiver.

**D**



**E** The selected receiver is deleted.

Then press and hold the **▼** button for more than 10s.





# Program settings

A Basic display



2x MENU

B AUTO or MANU will appear



Use the button to find „PROG“.

C



Press 1x MENU.

D



P1 flashes on the display (= first week program\*)

E



1 (=Monday) flashes on the right side. Using the / buttons select the day(s) to program.

After selection press the MENU button 1x.

1 = Monday  
2 = Tuesday  
.  
6 = Saturday  
7 = Sunday  
12345 = Mo - Fri  
67 = Sat-Sun  
1234567 = whole week

Press 1x MENU button.

**\* Up to 7 week programs can be set.**

F



Required temperature



Time

G



U1 (1st temperature change) appears on the display. Set the temperature with the / buttons and confirm with the MENU button.

Set the time for this temperature using the / buttons.

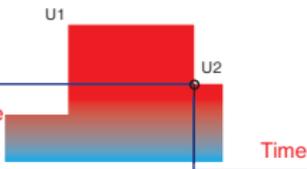
Confirm with the MENU button.

H

**U2 (2nd temperature change)**  
appears on the display.



Required  
temperature



I



**Set the time**

for this temperature  
using the **▲**/**▼** buttons.  
Confirm with the **MENU** button.

Set the temperature using the **▲**/**▼**  
buttons and confirm with the **MENU** button.

U3 will now appear on the display to set the third temperature change. Use the same method as when setting the previous temperature sections. In this way, up to six temperature changes per day can be set.

To select other days press 1x longer the **MENU** button or to return to the basic display press 3x longer the **MENU** button.

**i** In order the thermostat to work according to the set program, the AUTO operating mode must be activated.



See page 11 for setting the thermostat's operating modes.

**i** You can find an example of setting a weekly program on page 21.



# Operating modes

**AUTO**



In **AUTO** mode, the thermostat works according to the set weekly program.

**MANU**



In **MANU** mode, the thermostat operates according to one set temperature until it is manually changed.

**OFF**



The thermostat is switched off

- i** We recommend using the **OFF** working mode for permanent shutdown.
- i** Anti-freeze protection (3 °C) is still active.

## CHANGE OF OPERATING MODE

**A** Basic view



2x **MENU**

**B**



The **▲** / **▼** buttons can be used to select the desired **AUTO** or **MANU** or **OFF** mode.

Confirm the relevant mode selection with the **MENU** button.



**SUMMER MODE:** It is not allowed to turn on the heating in this mode. It is mainly used in the summer, when it is not necessary to heat. To activate this mode, set constant No. 9, see page 16.



# Holiday mode

The thermostat maintains the set temperature until the set time and date.

A Basic display



2x MENU

B AUTO or MANU will appear



Use the button to find AUTO or MANU .

C



Press 1x MENU.

D



Use the / buttons to set the desired temperature for the holiday period and confirm 1x MENU.

E



Use the / buttons to set the hour of the end of the holiday and confirm 1x MENU.

F

Next, set the minute, day, month and year of the end of the holiday, confirm the setting of each data with the MENU button.

G

After setting, 1x long press the MENU button to return to the basic display.

H



The date of the end of the holiday will be shown on the display.

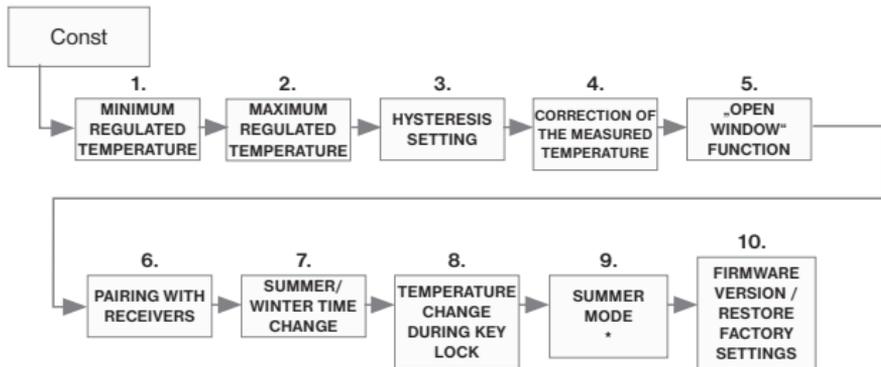
**i** After the set time has elapsed, the thermostat will automatically return to the previously set AUTO or MANU mode.

**i** **Deactivation** of the holiday mode can be done by selecting another working mode AUTO, MANU, OFF (see page 11).



# Setting constants

Graphical display of constants:



## \* SUMMER MODE

IF YOU ACTIVATE A RECEIVER OTHER THAN VERSION 2, THEN THIS CONSTANT WILL NOT APPEAR, IT IS HIGHLY RECOMMENDED TO USE VERSION 2 (v.2) RECEIVERS.



**D** 1. Minimum regulated temperature

(5°C to 10°C, default setting 5°C)



Setting the limitation of the minimum adjustable temperature.

Use the / buttons to set the appropriate value and confirm with the button.



**E** 2. Maximum regulated temperature

(15°C to 39°C, default setting 39°C)



Setting the limitation of the maximum adjustable temperature.

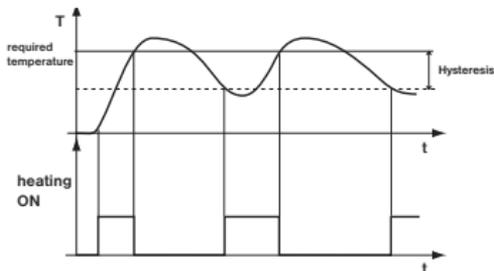
Use the / buttons to set the appropriate value and confirm with the button.



**F** 3. Hysteresis

(0.2°C to +6°C, default setting 0.5°C)

According to the set value, the thermostat will turn on at the temperature:  $T_{\text{switching}} = T_{\text{required}} - \text{HYSTERESIS}$



Use the / buttons to set the appropriate value and confirm with the button.

**G 4. Correction of the measured temperature**

(-5°C to +5°C, default setting 0°C)



This constant is used for manual comparison of deviations between the actual and measured temperature (this can be caused for example by inappropriate positioning of the thermostat).

Use the / buttons to set the appropriate value and confirm with the **MENU** button.



**H 5. „OPEN WINDOW“ function (default setting „-“ no activ )**



If the room temperature suddenly drops by 1.2°C within 2 minutes, the thermostat will send a signal to turn off the heaters and thus save energy. The thermostat will return to normal mode as soon as the temperature rises again.

To activate this function, use the / buttons to select the „y“ symbol, and to deactivate this function, select the „-“ symbol.

Confirm with the **MENU** button.

When this function is activated, **OPEN** appears on the display in the basic display.



**I 6. Pairing with receivers**

see page 7.

Confirm with the **MENU** button.

**J 7. SUMMER/WINTER TIME change (default setting Y)**



If Y (YES) is selected, the SUMMER/WINTER time is automatically changed according to the calendar. You don't have to watch when the time changes, the thermostat will take care of automatically setting the time for the given period.

Use the / buttons to select the „y“ symbol (use) or the „-“ symbol (do not use). Confirm with the **MENU** button.



## K 8. Changing the required temperature when the keys are locked

(--- / 0.5°C to +6°C)



This constant makes it possible to enable or disable the change of the desired temperature within the allowed range even when the keys are locked.

Use the / buttons to select the „---“ symbol (temperature change is not allowed) or set the temperature from 0.5°C to 6°C (temperature change allowed see example). Confirm with the button.

E.g.: Set a value of e.g. 2°C and activate the key lock, see page 19. The desired temperature in AUTO mode is, for example 19°C and the key symbol lights up on the display. Press any button to activate the backlight of the display and then using the / buttons it will be possible to adjust the desired temperature in the range from 17°C to 21°C. In AUTO mode this change is short-term, in MANU mode the change is permanent. **ATTENTION after unlocking the keys (releasing the lock), the desired temperature returns to the original value (i.e. according to the given example to 19°C)!**



## L 9. Summer mode (default setting -)



The constant only appears by activated receivers version 2 that react to this mod. It is not allowed to turn on the heating in this mode. It is mainly used in the summer, when it is not necessary to heat. After activating this mode, the sign SUMMER will appear on the display. **Anti-freeze protection is not functional in this mode!**

Use the / buttons to select the “y” symbol (use) or the „-“ symbol (do not use). Confirm with the button.



## M 10. Firmware Version/Factory Reset



Information about the firmware version is displayed.

A RESET can be performed in this constant.

If you press the button for a long time (for more than 5s), RESET will appear on the display and the thermostat will return to factory settings.



**!** All settings will be deleted by this!

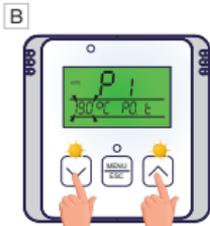


# Changing the required temperature and program, operating hours

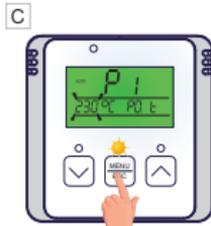
When the AUTO mode is active



2x button   
 or   
 2x button

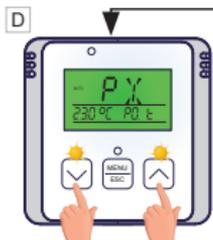


The required temperature will start flashing. The required temperature can be changed with the or buttons.



**Long press**   
 = confirmation and return

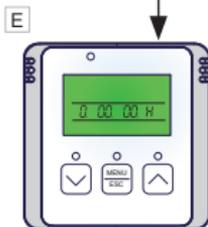
**Short press**   
 = activation of another program



A different weekly program can be activated with the or buttons.

**Long press**   
 = confirmation and return

**Short press**   
 = display of operating hours

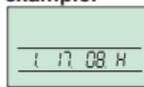


**Long press**   
 = return

**i** The counter can be reset by long pressing the button for 3s.

**!** Changing the desired temperature in AUTO mode remains valid only until the next change in the program.

**i** Operating hours - example:



= 117 hours and 8 minutes

## With MANU mode active

### A Basic display



2x button ▲

or

2x button ▼

### B



The required temperature will start flashing. The required temperature can be changed with the ▲ or ▼ buttons.

### C



**Long press** MENU  
= confirmation and return

**Short press** MENU  
= display of operating hours

Operating hours of the heating system

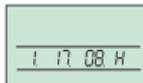
### D



**Long press** MENU  
= return

**i** The counter can be reset by long pressing the ▼ button for 3s.

**i** Operating hours - example:



= 117 hours and 8 minutes



## Key lock



1 x MENU, this activates the display backlight



Long press the  button for more than 5 seconds to activate the key lock.

**i** Deactivation can be done by long pressing the  button for longer than 5s again while the LCD backlight is active.

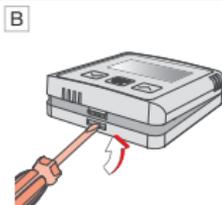
 If you wish to change the desired temperature even when the keys are locked, use the function see page 16.



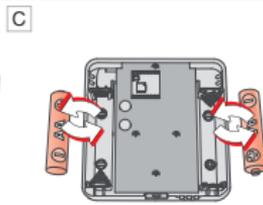
## Battery replacement



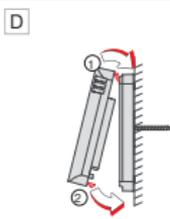
Low batteries are indicated by a symbol .



Unfold the front cover of the transmitter.



Insert 2 x new 1.5 V AA batteries.



Clap the front cover onto the back.

**!** Always use alkaline batteries 2 x 1.5 V, type AA (do not use rechargeable batteries)!

**!** Dispose of used batteries in accordance with the regulations for handling hazardous waste!



## Error messages

Ertr



= Connection error

The number after Ertr indicates which of the receivers does not communicate with the thermostat (e.g. Ertr2 means that the second receiver does not communicate).

Options to remove the error:

**A.** If there was an error when activating the receiver with the transmitter, repeat the activation process one more time - see pages 6-7.

**B.** The error appeared during normal operation after a certain period of use: Check whether the symbol indicating low batteries is displayed on the thermostat .

- ▶ **If YES**, replace the weak batteries with new ones.
- ▶ **If NOT**, check if the green LED1 on the receiver is flashing or constantly shining.
  - ▶ If the green LED1 flashes, the code in the receiver has been deleted and the pairing process must be repeated - see pages 6-7.
  - ▶ If the green LED1 is on, remove the batteries from the thermostat for 2 minutes and unplug the receiver for 2 minutes as well. Then put the batteries back into the thermostat and connect the receiver to power. It should re-pair in a short while.

= Initialization of touch surfaces

This symbol indicates a state where the touch buttons are unable to recognize a press and the processor enters initialization mode.

Options to remove the error:

Wait 40 seconds and the thermostat will return to normal mode.

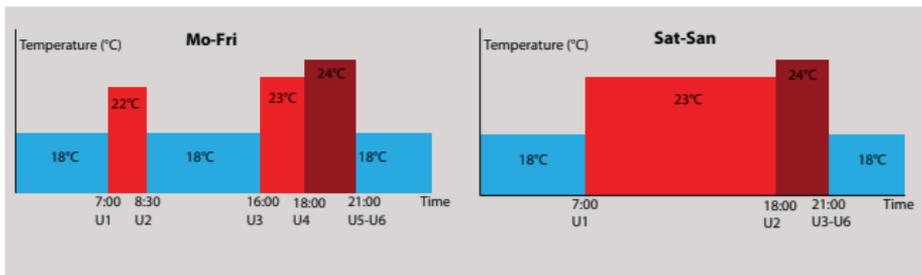


## Tips

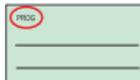
- 💡 In the period outside the heating season, we recommend activating the SUMMER MODE function - see page 16.
- 💡 We do not recommend leaving the paired receiver without voltage, because in this case the thermostat will start sending a so-called search signal after a certain time, which will cause the batteries in the transmitter to quickly discharge.



# An example of setting a weekly program



Press 2x **MENU** button and select the **PROG** mode with the **▲** button.



Press 1x **MENU** button.

P1 (=first weekly program) flashes on the display.



Press 1x **MENU** button.

The small number 1 flashes on the display (= **Monday**)



Press 7x **▲** button

The display now flashes 1,2,3,4,5 (= **Monday to Friday**).



Press 1x **MENU** button.

**U1 (1st temperature change)** appears on the display and 19°C flashes.



Use the **▲** button to set **22°C**.



Press 1x **MENU** button. The time **0:00** is now flashing on the display.



Use the **▲** button to set **7:00**.



Press 1x **MENU** button.

**U2 (2nd temperature change)** appears on the display and 22°C flashes.



Use the **▼** button to set **18°C**.

Press 1x **MENU** button. The time **7:00** is now flashing on the display.



Use the **▲** button to set **8:30**.

Press 1x **MENU** button.



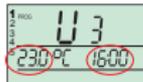
**U3** appears on the display and **18°C** flashes.

Use the **▲** button to set **23°C**.

Press 1x **MENU** button. The time **8:30** is now flashing on the display.

Use the **▲** button to set the time to **16:00**.

Press 1x **MENU** button.



**U4** will now appear on the display and **23 °C** will flash.

Use the **▲** button to set **24°C**.

Press 1x **MENU** button.

Use the **▲** button to set the time to **18:00**.

Press 1x **MENU** button.



**U5** appears on the display and **24 °C** flashes.

Use the **▲** button to set the time to **18°C**.

Press 1x **MENU** button.

Use the **▲** button to set the time to **21:00**.

Press 1x **MENU** button.

**U6** appears on the display.

**Leave U6 unchanged.**

Press 2x **MENU** button.

**U1** will appear on the display.

Hereby we preset program from Monday till Friday.

Press and hold the **MENU** button 1x.

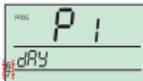
1,2,3,4,5 (Monday to Friday) will flash on the display.



Press 1x **▲** button.

**6.7 (Saturday to Sunday)** is now flashing on the display.

**Note:** In program 1, we will also set Saturday and Sunday. **So we leave P1 unchanged.**



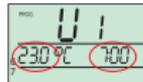
Press 1x **MENU** button.

**U1 (1st temperature change)** appears on the display and **19°C** flashes.

Use the **▲** button to set **23°C**.

Press 1x **MENU** button.

The time **0:00** is now flashing on the display. Use the **▲** button to set the time to **7:00**.



Press 1x **MENU** button. **U2 (2nd temperature change)** appears on the display and **23°C** flashes.

Use the **▲** button to set **24°C**.

Press 1x **MENU** button.

The time **7:00** is now flashing on the display. Use the **▲** button to set the time to **18:00**.

Press 1x **MENU** button.

**U3** appears on the display, **24°C** flashes.

Use the **▲** button to set **18°C**. Press 1x **MENU** button.



The time **18:00** is now flashing on the display. Use the **▲** button to set the time to **21:00**.

**U4** appears on the display. **Leave U4 unchanged.**

Press 2x **MENU** button.

**U5** appears on the display. **Leave U5 unchanged.**

Press 2x **MENU** button.

**U6** appears on the display. **Leave U6 unchanged.**

Press 2x **MENU** button.

**U1** will appear on the display again. Thereby we preset program for weekend. Long press 3x on the **MENU** button to return to the basic display.



# Types of receivers

**ATTENTION:** To use all available functions, always use version 2 receivers (labeled v.2 on the front side). These receivers react to SUMMER MODE (p.16), in which the device is not switched on.

**BT001 wireless receiver -  
under the switch**



**BT002 wireless receiver -  
wall mounted**



**BT002-A wireless dual  
circuit receiver - wall  
mounted**



**BT003 wireless receiver -  
for socket**



**BT005 wireless receiver -  
for socket**



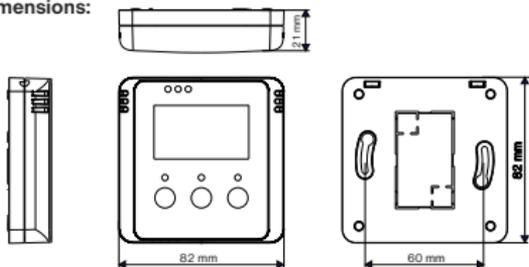
**PH-BP1-P9 nine-channel  
wireless receiver - on a  
DIN rail**



### TECHNICAL PARAMETERS

Power supply	2 x 1.5 V AA alcal. battery
Communication type	two-way
Vf power	< 10 mW
Frequency	433.92 MHz
Hysteresis	0.2°C to 6°C
Number of temperature changes	6 temperature changes per day
Min. programming time	10 minutes
Temperature settings	after 0.5°C
Temperature range	5 to 39°C (antifreeze 3°C)
Min. indication jump	0.1°C
Measurement accuracy	± 0.5°C
Battery life	heating season
Degree of coverage	IP20
Operating temperature	0°C to +40°C

#### Dimensions:



#### EU CERTIFICATE OF CONFORMITY

ELEKTROBOCK CZ s.r.o. hereby states that the BT730 WiFi radio device is in accordance with Regulation No. 2014/53/EU. The entire EU Certificate of Conformity can be found on the website [www.elbock.cz](http://www.elbock.cz)

For the purpose of any warranty and post-warranty service, please, send the product including proof of purchase to the address of the manufacturer. The warranty does not apply to defects caused by improper installation and interference with the equipment design.



LEAD FREE  
in accordance  
with RoHS



**ELEKTROBOCK MTF s.r.o.**

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