



HTRS230
**WIRED NON-PROGRAMMABLE
THERMOSTAT**
QUICK GUIDE



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Introduction

The HTRS230 is a room thermostat that is dedicated to the control of underfloor heating/cooling, characterized by high thermal inertia. It connects to the control strip via wires. The controller does not have a scheduling function – through the wired control strip it lowers the set temperature after receiving an NSB signal from the weekly programmer. Thanks to the built-in algorithm, it offers significantly better temperature regulation accuracy than traditional mechanical thermostats. The controller operates silently.

Product Compliance

The product complies with the following EU directives: GPSR 2023/988/ EU, EMC 2014/30/EU, LVD 2014/35/EU and RoHS 2017/2102/EU. Full information is available on the website: www.saluslegal.com

Safety Information

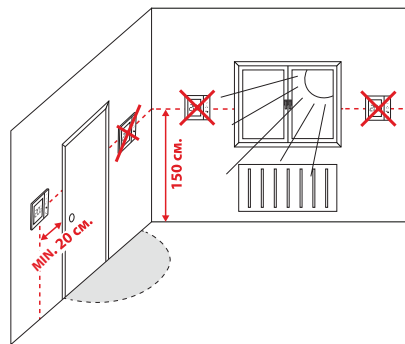
Use in accordance to national and EU regulations. Use the device as intended, keeping it in dry condition. Product for indoor use only. Installation must be carried out by a qualified person in accordance to national and EU regulations.

Installation

Installation must be carried out by a qualified person with appropriate electrical authorizations, in accordance with standards and regulations applicable in the given country and within the EU. The manufacturer is not responsible for actions inconsistent with the instructions.

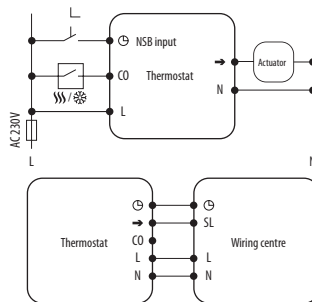
Note: For the entire installation, additional protection requirements may apply, compliance with which is the responsibility of the installer.

Wall mounting



Wiring diagram

Note: The thermostat can be connected to the following Salus wiring centre models: CB500, KLO8NSB 230V, KLO4NSB 230V, or directly to an actuator.



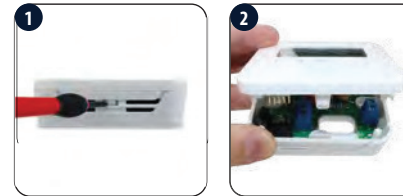
Terminal description

Terminal	Description
L, N	Power supply (230V AC)
NSB	Night setback reduction (230V AC input)
SL	Switch live (230V AC output signal)
CO	Changeover contact heating/cooling (230V AC input)

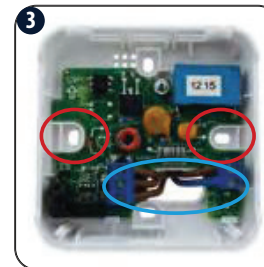
Button functions

Button	Function
Up/Down arrow	Increases/decreases the set temperature, values
Left/Right arrow	Selects the operating mode model, switching between values
Checkmark	Short press - confirm selection Hold down - enter/exit the menu

Installation



Make sure that the thermostat is not connected to 230V AC. Then open the front cover using a screwdriver, as shown in the picture above.

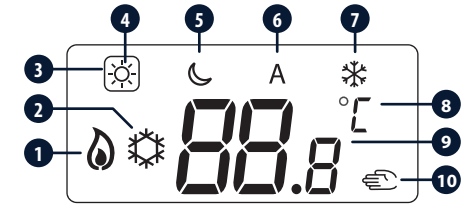


Connect the thermostat according to the diagram in the section "Wiring diagram". Then mount the controller using the mounting holes for screws.



Place the front part of the thermostat onto its rear part. The thermostat is now ready for operation. Using the buttons, you can set the desired temperature.

Icons description

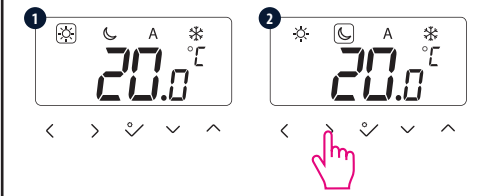


- 1. Heating
- 2. Cooling
- 3. Active operating mode
- 4. Comfort mode
- 5. Economy mode
- 6. Automatic mode
- 7. Frost protection mode
- 8. Temperature unit
- 9. Current / set temperature
- 10. Manual mode / temperature override

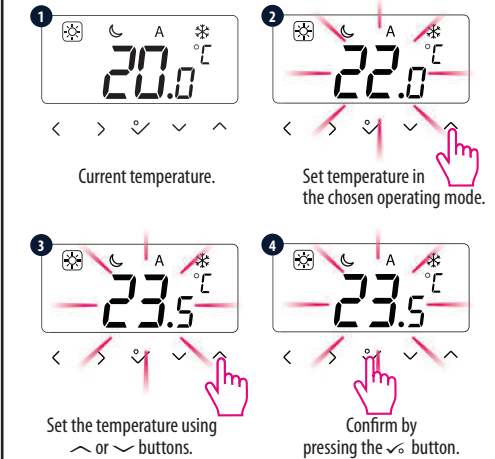
Manual mode - temperature settings

There are 3 temperature levels available. In manual mode, only one temperature level is used around the clock. The ☐ icon indicates which mode is currently active. A different temperature can be set for each of the three levels.

- ☐ - Comfort mode
- ☾ - Economy mode
- ❄️ - Frost protection mode. Usually used during longer periods of absence or during holidays (available only in heating mode).



Setting the temperature

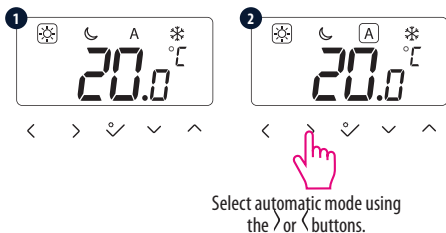


Night Setback (NSB) function

The NSB (Night Setback) function allows you to automatically lower the set temperature on HTRS230(30) thermostats via HTRP230(50) thermostats connected to a control unit (or another unit). The temperature is changed between the comfort temperature and the economy temperature .

To activate automatic mode, select the icon. The display shows the active temperature mode alongside the icon: or .

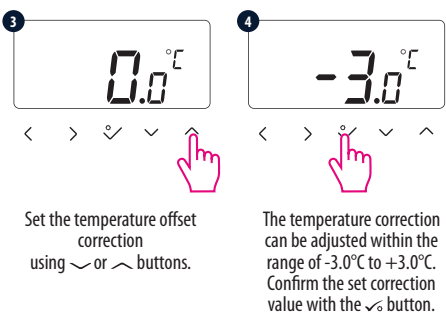
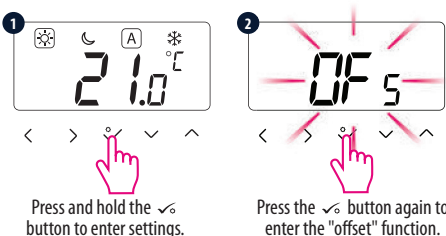
Proper wiring is required for the NSB function to work. Wiring diagrams are provided on the previous page.



Temperature display calibration "offset" function

The controller allows correction of the displayed temperature by $\pm 3.0^{\circ}\text{C}$. Follow the steps below:

Press any button to illuminate the screen, then proceed as follows:



Note: Temperature display calibration can also be set using service parameter d02.

Heating/Cooling mode

Manual change: The modes are indicated by the symbols .

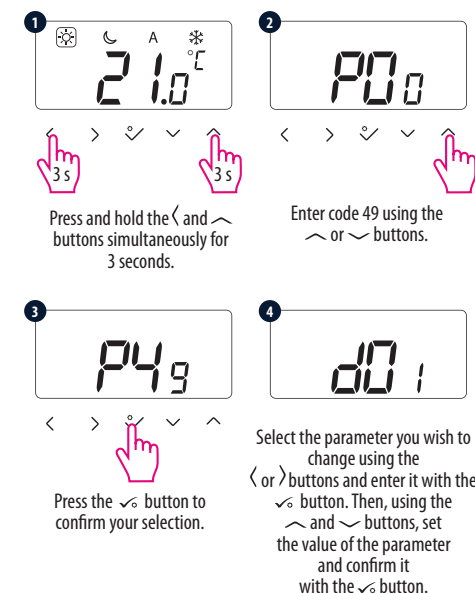
Press and hold the button to enter the settings menu, then use the button to select the heating/cooling setting. Confirm the change with the button. Then use the or buttons to set heating or cooling mode and confirm the change with the button.

Automatic change (via CO contact): The heating/cooling mode can be changed automatically by using the CO contact in the controller. If 230V is applied to the CO contact, the controller will automatically switch to cooling mode. To use this function, service parameter d18 must be set to "1".

Cooling lock: By setting service parameter D19 to "1", cooling can be locked for a specific room. During cooling lock, no message is displayed on the screen.

Installer mode

Press any button to illuminate the screen, then proceed as follows:



Thermostat functions

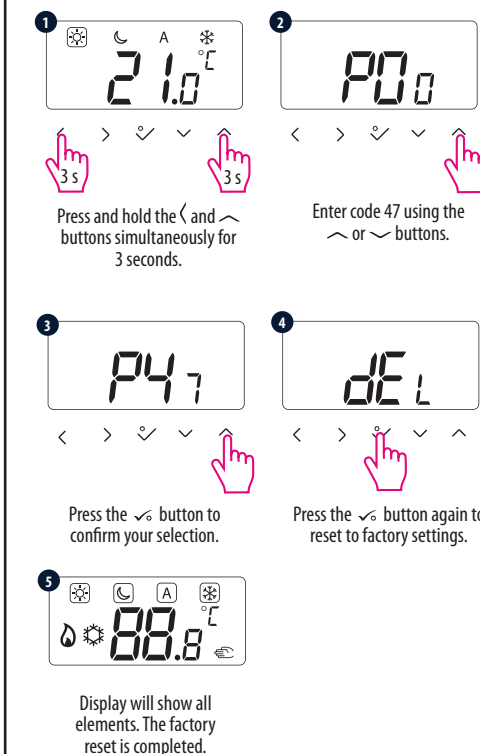
dx	Function	Value	Description	Default value
d01	Temperature control method	0	PWM algorithm	0
		1	Hysteresis $\pm 0.25^{\circ}\text{C}$	
		2	Hysteresis $\pm 0.5^{\circ}\text{C}$	
d02	Displayed temperature correction	from -3°C to $+3^{\circ}\text{C}$	Incorrect temperature, (it can be corrected by $\pm 3.0^{\circ}\text{C}$)	0°C
d05	Cooling control method	1	Hysteresis 0.5°C ($\pm 0.25^{\circ}\text{C}$)	2
		2	Hysteresis 1°C ($\pm 0.5^{\circ}\text{C}$)	
d07	Valve protection function	0	Disabled	1
		1	Enabled	
d08	Anti-freeze temperature	5°C - 17°C	Temperature protection against freezing (used e.g. during holiday mode)	5°C
d12	Heating temperature limit	5°C - 35°C	Maximum heating temperature that can be set	35°C
d13	Cooling temperature limit	5°C - 40°C	Minimum cooling temperature that can be set	5°C
d18	Heating/cooling mode change	0	Manual using buttons	0
		1	Automatic using CO contact	
d19	Automatic heating/cooling change lock	0	Lock disabled	0
		1	Lock active	
d20	Number of actuators connected to the controller	0 - 5	Number of actuators (0-5) connected directly to the controller	0

Factory reset

If you have made a mistake, wish to change the controller parameters or return to its factory settings, follow the steps below.

Note: This action will permanently delete your current settings.

Press any button to illuminate the screen, then follow these steps:



Technical specifications

Model	HTRS2230
Voltage	230 VAC, $\pm 10\%$, 50/60 Hz
Operating performance	230 V: 1.8 W
Temperature setback	Adjustable
Temperature range	5°C - 35°C
Span	$\pm 0.5^{\circ}\text{C}$ OR $\pm 0.25^{\circ}\text{C}$
Degree of protection	IP 30
CE conformity	Class II (EN60730)
Housing material	PC, V2
Colour	RAL 9010 pure white
Connection	Screw terminal
Weight	125 g net / 170 g gross
PWM (pulse wide modulation)	Yes
Profile modules	3 (Sun, Moon, Automatic)
Dimensions	85mm x 85mm x 25mm