8. Setting the Thermostat

Device No	Function	Valves	Definition	Default Value
d01	Heating Control	0	PWM	0
		1	On-Off: 0,5 °C) (+_0,25 °C)	
		2	On-Off: 0,5 °C) (+_0,5 °C)	
d02	Room temp offset	-3.0°C to +3.0°C	Offset room temp measuring error (in 0,5 °C)	0.0°C
d05	Cooling Control	1	On-Off: 0,5 °C) (+_0,25 °C)	2
		2	On-Off: 0,5 °C (+_0,5 °C)	
d07	Valve Protection	0	Disable	1
		1	Enable	
d08	Frost Setpoint	5.0-17.0°C		5.0°C
d12	Max. Heating Setpoint	5.0-35.0°C		35.0°C
d13	Min. Cooling Setpoint	5.0-40.0°C		5.0°C
d18	Heating/Cooling Mode	0	No Connection	0
		1	Connection	
d19	Cooling Blocked	0	Cooling Allowed	0
		1	Cooling Disabled	
d20	Selecting the number of actuators	0	1 to 5 actuators loading	0

9. Setting the Thermostat

Note: The d20 will help you to reduce the power outlet on the thermostat.

Setting the hysteresis
You can set the hysteresis by entering the Installer Mode, accessing d01 and after that selecting the desired value (PWM / 0.5°C / 1.0°C). If your device controls the UFH we recommend to use the PWM algorithm.

Heating and Cooling Selection

Manually
This mode will be indicated by the flashing icons
Press or to change between modes.

Auto
The CO terminal needs to be connected using the same phase as the power supply. After that the heating and cooling functions will be done automatically In Installer Mode, d18 has to be set on 1 (default is 0), when CO wire is connected.

10. Setting the Thermostat

Cooling blocked
When the thermostat is set on Cooling Disabled (d19-->1) it will block the cooling function for single rooms until the device receives the heating command. During the periods of Cooling Blocked no special indicator will be displayed on the LCD screen. Cooling mode indicator will also be turned off.

Protection
When room temperature is over the limit of 36°C, all heating outputs will be turned off regardless of the control pattern and delay timers. When room temperature is under the limit of 4°C, all cooling outputs will be turned off regardless of the control pattern and delay timers.

11. Factory Reset

Press the indicated keys together for 3 seconds.

Select P47 if you want to reset to factory settings.

Press to confirm

Press to confirm

Note: In order to quickly reach 47 you can hold down key. The display will fast forward in steps of 5.

12. Heating/Cooling Mode

Heating Mode

Cooling Mode

Temperature Mode	Heating	Cooling
Sunny	20.0°C	20.0°C
Moon	17.0°C	26.0°C
Frost (heat system)	5°C	--.-

13. Temperature Offset (TemperatureCalibration)

Long press in order to enter the Settings Mode.

Press or in order to set the Temperature Offset.

The Temperature Offset can be set at any value between -3°C and +3°C. Press OK to confirm.

14. Technical Data

Model:	HTRS230
Voltage	230 VAC, +-10 %, 50/60 Hz
Operating performance	230 V: 1,8 W
Temperature setback	Adjustable
Temperature range	5°C – 35°C
Span	+/-0,5C OR +/-0,25C
Storage temperature	-20°C to +60°C
Ambient temperature	0 °C up to 45 °C
Degree of protection	IP 30
CE conformity according to	Class II (EN60730)
Housing material	PC, V2
Color	RAL 9010 pure white
Connection	Screw terminal
Weight	125 g net / 170 g gross
Puls-wide-modulation (PWM)	Yes
Profile Modes	3 (Sun, Moon, Automatic)
Heating and Cooling	Yes, automatically Change Over on the Wiring Centre
Parameter adjustment	Yes, in Installer Mode
Dimensions	85mm*85mm*25mm

Warranty

SALUS Controls warrants that this product (HTRS230) will be free from any defect in materials or workmanship, and shall perform in accordance with its specification, for a period of five years from the date of installation. SALUS Controls sole liability for breach of this warranty will be (at its option) to repair or replace the defective product.

Customer Name: .....

Customer Address: .....

.....

..... Post Code: .....

Tel No: ..... Email: .....

Engineers Company: .....

Tel No: ..... Email: .....

Instalation Date: .....

Engineers Name: .....

Engineers Signature: .....

SALUS Controls plc
SALUS House
Dodworth Business Park South,
Whinby Road,
Dodworth, Barnsley S75 3SP, UK.

Sales: T: +44 (0) 1226 323961
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For PDF Installation guide please go to:
www.salus-manuals.com

Issue Date: Dec 2015
00191

SALUS CONTROLS

Digital Thermostat
Model: HTRS230

INSTALLER MANUAL

Contents of the box

Icons used in this manual:

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HRTS230 Thermostat

Fixing Screws

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Product Description

Thank you for purchasing the SALUS HTRS230 Thermostat. This thermostat is a device that lets you customise the heating and cooling of your home as needed.

The HTRS230 device from SALUS Controls is a stylish and accurate digital room thermostat that is fitted with a large easy to read LCD screen and one touch buttons. You can now simply adjust your home temperature as desired in order to create a comfortable home environment.

We hope you enjoy our product.

Product Compliance & Safety Information

Product Compliance

SALUS Controls hereby declares that the product complies with the essential requirements of the following EC Directives: 2014/30/EU, 2014/35/EU and 2011/65/EU. The full text of the EU Declaration of Conformity is available at the following internet address: www.saluslegal.com.

Safety Information

Use in compliance with safety regulations. The unit is to be used for the control of room temperature inside the house.

Installation

This accessory must be fitted by a competent person, and installation must comply with the guidance, standards and regulations applicable to the city, country or state where the product is installed. Failure to comply with the relevant standards could lead to prosecution.

Note: All electrical installation work should be carried out by a suitable qualified electrician or other competent person.

1. Mounting the Thermostat

Install the HTRS230 digital room thermostat at roughly 1.5m above floor level. It should be mounted in a location where the thermostat is easily accessible and away from direct sunlight. You can mount the thermostat directly on the wall or you can install it on top of a wall-box.

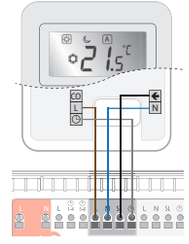
Gently remove front housing and make the wiring connections.

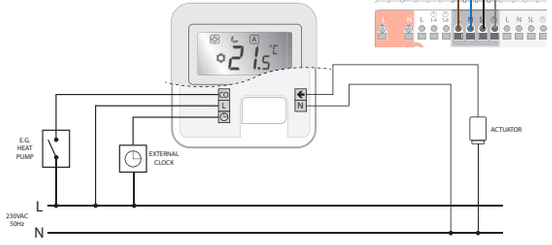
Wall mounting

For wall mounting, mark the correct possition on the wall and mount the rear case to the wall.

2. Terminal Connection

Note: You can wire the thermostat directly to the KL04NSB, KL08NSB wiring centre or to an actuator (purchased separatly).





3. Thermostat Icons

☐	BOX means to select mode. e.g. ☼ means Hi temp is selected ☼ means the Hi temp is not selected.
☼	Sunny: Hi comfortable temperature
☾	Moon: Low comfortable temperature
A	Indicates AUTO ON or AUTO OFF
❄	Frost Protection Indicator: Frost protection is active, not available in cooling mode.
	Temporary override indicator: If the set temperature is changed when in program mode, the hand will appear until the next programs starting time.
	Heat Mode indicator: Indicates heating is running
	Cood Mode indicator: The icon is flashing when cooling mode active
88.8 °C	Temperature indicator • Display the room temperature • Display the set temp

4. Button Functions

‹	Mode selection. Long press to return home without saving.
✓	OK key. Short press to confirm selection. Long press to save and return home. Long press to enter Temperature offset Heat/Cool.
˅ OR ˄	Decrease or increase Setpoint Temperature.

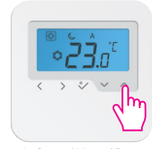
You can change the Modes by tapping ‹ or › and position the box on the desired one.

In Auto Mode by tapping the ˅ or ˄ key you can view the Setpoint Temperature.

In Auto Mode by holding the ˅ or ˄ key you will access Manual Override Mode.

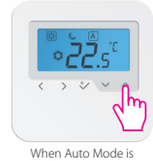
After selecting the temperature press ✓ and the ☜ will appear.

Note: In Auto Mode the change in Manual Override Mode is temporary. This is indicated by the ☜ icon. When used as a stand alone, the change is permanent.



In Sunny/ Moon/ Frost Mode by tapping the ˅ or ˄ key you will access Manual Override Mode.

In Sunny/ Moon/ Frost Mode the change will be permanent.



When Auto Mode is selected again the permanent override will end.

5. Frost Setting

Move the box by tapping ‹ or › on the Frost Mode Indicator The device will enter in Frost Mode.

Press the ˅ or ˄ key to set the temperature.

In Frost Mode you can select a temperature between 5°-17°C.

Note: During the set-up, press ‹ at any time to return to the previous screen or long press ‹ to return to Home display.

6. Night Setback Function (NSB)

NSB Mode depends on the NSB wired connection.

0V=NSB OFF
230V=NSB ON

This function will be activated only when the device is running in Auto Mode.

If the thermostat receives a NSB signal then it will switch to A-☾. If the NSB is turned off, the unit will function in A and ☼. You can manually set the thermostat on NSB by moving the box on the ☾ icon.

Note: The NSB function will be available only when you also have another device that can send a NSB signal (HTRP230 thermostat, external clock, NSB switch or another clock thermostat).

7. Installer Mode

Press the indicated keys together for 3 seconds.

Select P49 if you want to enter Installer Mode.

Press ✓ to confirm.

You have reached the Installer Mode. Select your options by using ˅ or ˄ and then confirm by pressing ✓.

Note: LCD backlight is activated by pressing any key.

Note: This function allows you to customise your thermostat as you desire. To select the device level use › to jump to the next one d1 > d2 > d5. On the desired level press ✓ then you can choose your preferences by using ˅ or ˄.