

PRODUCT ROADMAP

EXPERT NSB SERIES



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VS35W / VS35B p. 22

EXPERT HTR SERIES



BTRP230(50) p. 25
BTR230(20) p. 25
HTRP230(50) p. 24
HTRS230(30) p. 24
HTR230(20) p. 24

EXPERT SERIES



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WHICH THERMOSTATS YOU CAN CONNECT WITH?

EXPERT NSB SERIES



VS30W / VS30B p. 22
VS35W / VS35B p. 22

EXPERT HTR SERIES

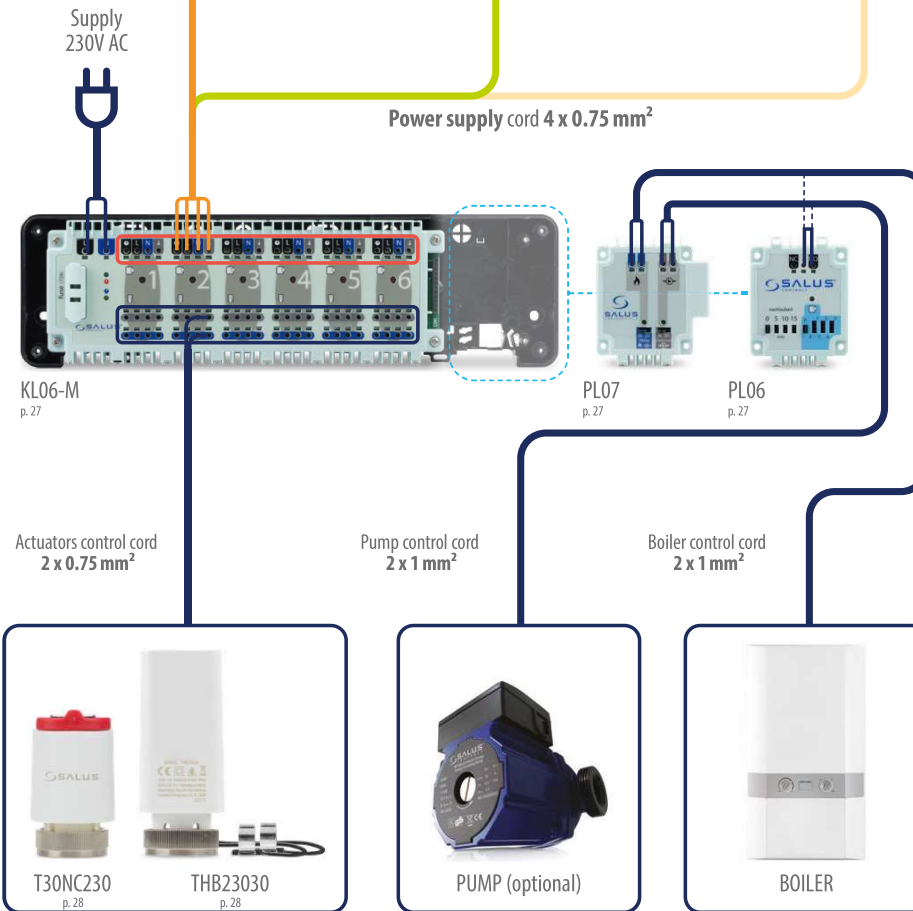
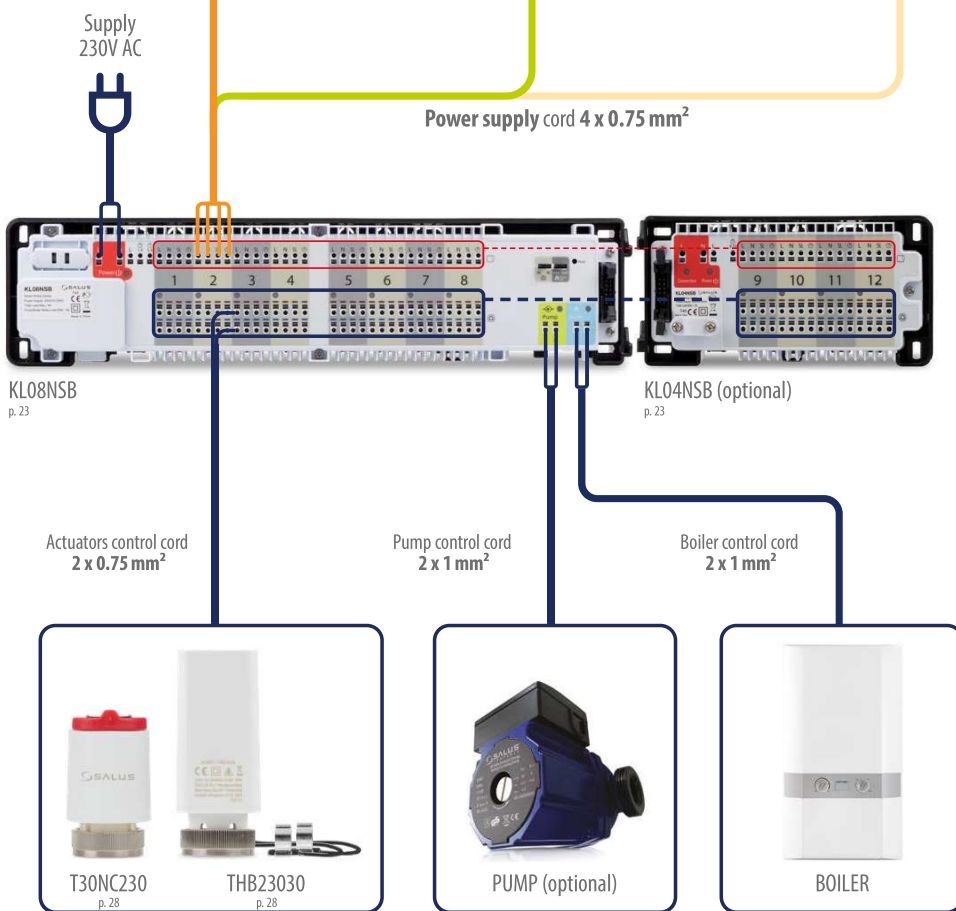


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BTR230(20) p. 25
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HTRS230(30) p. 24
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EXPERT SERIES



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Detailed wiring diagrams on pages: 48-63.

Wired digital programmable thermostat VS30W / VS30B

615132931 / 615132930



Two colour versions: black and white

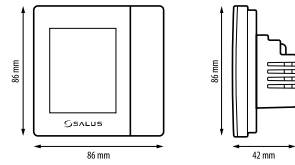
Flush-mounted thermostat dedicated for surface heating / cooling control, characterized by high thermal inertia. It is connected to the wiring centre. It has the function of creating your own schedules. It can control daily thermostats - via wiring centre it sends them an NSB signal and switches them to economic temperature. Then the time schedule is common to all thermostats (according to the weekly thermostat), while temperatures are set individually on each thermostat.

Product advantages:

- has a PWM control algorithm
- protection against too high or too low temperature using an additional FS300 floor sensor
- valve protection function
- an input for the additional temperature sensor
- has frost protection mode
- working with actuators of both types - NC and NO
- mounting in a ϕ 60 mm wall box

The thermostat works with the KL08NSB or KL06-M (230V) wiring centre.

Power supply	230V AC 50 Hz
Rating max	3 A
Output signal	230V AC 50 Hz
Temperature range	5 - 35°C
Display temperature accuracy	0.5°C
Control algorithm	PWM or Hysteresis: $\pm 0.25^\circ\text{C}$ or $\pm 0.5^\circ\text{C}$
Communication	Wired
Dimension (mm)	86 x 86 x 42



Wiring centre, for 8 zones KL08NSB

615131403

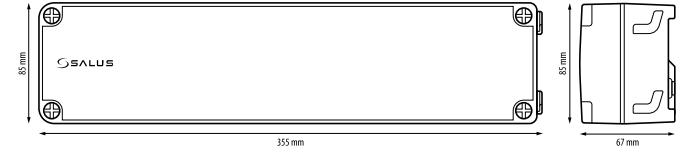


The wiring centre allows easy and quick connection of wired thermostats and actuators by the PLUG-IN method. It has an integrated pump and boiler control module and overload protection. The wiring centre is adapted to work with NC (normally closed) and NO (normally opened) actuators.

Product advantages:

- control of 8 independent heating zones
- 32 outputs for connecting the actuators (4 per zone)
- has the ability to connect an external clock
- it can be expanded with a KL04NSB module
- the ability to control the boiler and pump operation
- it has a protection for wires against breaking out
- adaptation for mounting on a 35 mm DIN rail

Power supply	230V AC 50 Hz
Rating max	3 A
Outputs	Pump (NO/COM) Boiler (NO/COM) UFH thermal actuators (230V)
Dimension (mm)	355 x 85 x 67



Wired digital thermostat - non-programmable VS35W / VS35B

615132933 // 615132932



Two colour versions: black and white

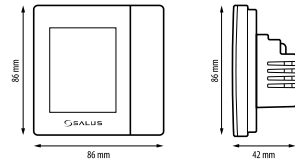
Concealed room thermostat dedicated for surface heating / cooling control, characterized by high thermal inertia. It is connected to the wiring centre. The thermostat does not have the function of creating schedules - it lowers the set temperature via wiring centre after receiving the NSB signal from the weekly thermostat.

Product advantages:

- has a PWM control algorithm
- protection against too high or too low temperature using an additional FS300 floor sensor
- valve protection function
- an input for the additional floor sensor
- working with actuators of both types - NC and NO
- mounting in a ϕ 60 mm wall box

The thermostat works with the KL08NSB or KL06-M (230V) wiring centre.

Power supply	230V AC 50 Hz
Rating max	3 A
Output signal	230V AC 50 Hz
Temperature range	5 - 35°C
Display temperature accuracy	0.5°C
Control algorithm	PWM or Hysteresis: $\pm 0.25^\circ\text{C}$ or $\pm 0.5^\circ\text{C}$
Communication	Wired
Dimension (mm)	86 x 86 x 42



Wiring centre extension for KL08NSB KL04NSB

615131400

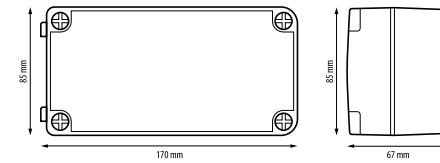


The module is an extension to the KL08NSB wiring centre with another 4 heating zones. Increases the functionality of the combined set to 12 individually controlled heating zones.

Product advantages:

- it can only work with the KL08NSB wiring centre connection
- 4 additional heating zones and 16 outputs for actuators
- has the ability to connect an external clock
- it has a protection for wires against breaking out
- adaptation for mounting on a 35 mm DIN rail

Power supply	230V AC 50 Hz
Dimension (mm)	170 x 85 x 67



Wired digital thermostat - programmable HTRP230(50)*

615122922



Surface-mounted (or on a flush-box) thermostat dedicated for surface heating / cooling control, characterized by high thermal inertia. It is connected to the wiring centre. It has the function of creating your own schedules. It can control daily thermostats - via wiring centre it sends them an NSB signal and switches them to economic temperature. Then the time schedule is common to all thermostats (according to the weekly thermostat), while temperatures are set individually on each thermostat.

Product advantages:

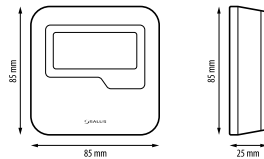
- absolutely silent operation (TRIAC)
- has a PWM control algorithm
- protection against too high or too low temperature using an additional FS300 floor sensor
- protection of thermostatic valves against stagnation (VP)
- an input for the additional temperature sensor
- has frost protection mode

The HTRP230 (50) thermostat works with KL08NSB or KL06-M (230V) wiring centres
The HTRP24 (50) thermostat works with the KL0624V wiring centre

*Available in 24V version - HTRP24(50)
615122924



Model	HTRP230(50)	HTRP24(50)
Power supply	230V AC 50Hz	24V AC 50Hz
Rating max	0.5 A	1.5 A
Output signal	230V AC 50Hz	24V AC 50Hz
Temperature range	5 - 35°C	
Display temperature accuracy	0.5°C	
Control algorithm	PWM or Hysteresis: $\pm 0.25^\circ\text{C}$ or $\pm 0.5^\circ\text{C}$	
Communication	Wired	
Dimension (mm)	85 x 85 x 25	



Wired digital thermostat - non-programmable HTRS230(30)

615122921



Surface-mounted (or on a flush-box) room thermostat dedicated for surface heating / cooling control, characterized by high thermal inertia. It is connected to the wiring centre. The thermostat does not have the function of creating schedules - it lowers the set temperature via wiring centre after receiving the NSB signal from the weekly thermostat.

Product advantages:

- absolutely silent operation (TRIAC)
- has a PWM control algorithm
- protection of thermostatic valves against stagnation (VP)
- has frost protection mode

The HTRS230 (30) thermostat works with KL08NSB or KL06-M (230V) wiring centres

Wired electronic thermostat - non-programmable HTR230(20)*

615122920



Surface-mounted (or on a flush-box) room thermostat dedicated for surface heating / cooling control, characterized by high thermal inertia. It is connected to the wiring centre, through which you can lower the set temperature on it, receiving a signal NSB (night temperature reduction) from the weekly thermostat.

Product advantages:

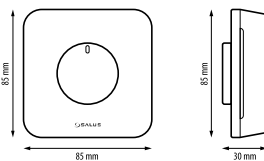
- absolutely silent operation (TRIAC)
- has a PWM control algorithm
- has the function of lowering the NSB temperature at night
- protection of thermostatic valves against stagnation (VP)

The HTRP230 (20) thermostat works with KL08NSB or KL06-M (230V) wiring centres
The HTRP24 (20) thermostat works with the KL0624V wiring centre

*Available in 24V version - HTR24(20)
615122923



Model	HTR230(20)	HTR24(20)
Power supply	230V AC 50Hz	24V AC 50Hz
Rating max	0.5 A	0.5 A
Output signal	230V AC 50Hz	24V AC 50Hz
Temperature range	5 - 30°C	
Control algorithm	PWM or Hysteresis: $\pm 0.5^\circ\text{C}$	
Communication	Wired	
Dimension (mm)	85 x 85 x 30	



Wired, flush-mounted, digital thermostat - programmable BTRP230(50)

615122911



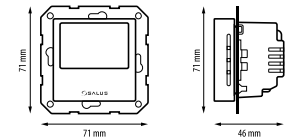
Flush-mounted room thermostat for installation in a 55x55 mm frame dedicated for surface heating / cooling control, characterized by high thermal inertia. It is connected to the wiring centre. It has the function of creating your own schedules. It can control daily thermostats - via wiring centre it sends them an NSB signal and switches them to economic temperature. Then the time schedule is common to all thermostats (according to the weekly thermostat), while temperatures are set individually on each thermostat.

Product advantages:

- absolutely silent operation (TRIAC)
- has a PWM control algorithm
- protection against too high or too low temperature using an additional FS300 floor sensor
- protection of thermostatic valves against stagnation (VP)
- an input for the additional temperature sensor
- has frost protection mode
- mounting in a \varnothing 60 mm wall box

The thermostat works with the KL08NSB or KL06 (230V) wiring centres

Power supply	230V AC 50Hz
Rating max	0.5 A
Output signal	230V AC 50Hz
Temperature range	5 - 35°C
Display temperature accuracy	0.5°C
Control algorithm	PWM or Hysteresis: $\pm 0.25^\circ\text{C}$ or $\pm 0.5^\circ\text{C}$
Communication	Wired
Dimension (mm)	71 x 71 x 46



Wired, flush-mounted, electronic thermostat - non-programmable BTR230(20)

615122910



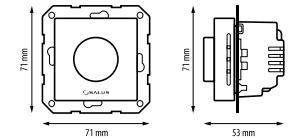
Flush-mounted room thermostat for installation in a 55x55 mm frame dedicated for surface heating / cooling control, characterized by high thermal inertia. It is connected to the wiring centre. The thermostat does not have the function of creating schedules - it lowers the set temperature via wiring centre after receiving the NSB signal from the weekly thermostat.

Product advantages:

- absolutely silent operation (TRIAC)
- has a PWM control algorithm
- changes the temperature according to the weekly thermostat command
- protection of thermostatic valves against stagnation (VP)
- mounting in a \varnothing 60 mm wall box

The thermostat works with the KL08NSB or KL06 (230V) wiring centres

Power supply	230V AC 50Hz
Rating max	0.5 A
Output signal	230V AC 50Hz
Temperature range	5 - 30°C
Control algorithm	PWM or Hysteresis: $\pm 0.5^\circ\text{C}$
Communication	Wired
Dimension (mm)	71 x 71 x 53



CHOOSE
YOUR STYLE



Berker, Ospej and Simon frames were used for the photos.

Wired electronic thermostat - non-programmable

ERT024V

615112972



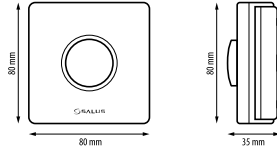
Surface-mounted room thermostat dedicated for surface heating / cooling control, characterized by high thermal inertia. It is connected to a 24V wiring centre. Via wiring centre it is possible to lower the set temperature on it, receiving a signal NSB (night temperature reduction) from the weekly thermostat.

Product advantages:

- has a PWM control algorithm
- valve protection function
- easy to install and easy to use
- has a knob backlight when it is sending a signal to work

The thermostat works with the KL0624V wiring centre

Power supply	24V AC 50 Hz
Rating max	10 (3) A
Output signal	24V AC 50 Hz
Temperature range	5 - 30°C
Control algorithm	Hysteresis: $\pm 0.5^\circ\text{C}$
Communication	Wired
Dimension [mm]	80 x 80 x 35



230V wiring centre (6 zones) with pump module

KL06 + PL06

615111404



The set consists of a 230V wiring centre together with pump or boiler control module.

Product advantages:

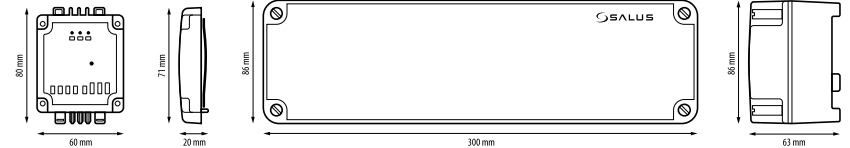
- control of 6 independent heating zones
- 24 outputs for connecting the actuators (4 per zone)
- convenient installation of wires by using the PLUG-IN method
- adaptation for mounting on a 35 mm DIN rail
- has integrated overload protection
- possible selection of which zone starts the module first
- very easy and quick module mounting in the wiring centre

Wiring centre:

Power supply	230V AC 50 Hz
Rating max	2 (1) A
Outputs	Thermoelectric actuators (230V)
Dimension [mm]	300 x 86 x 63

Module:

Power supply	From KL06 wiring centre
Rating max	5 (2) A
Output signal	NO/COM/NC
Dimension [mm]	60 x 80 x 20



Wired electronic thermostat - non-programmable

RT10230V*

615112920



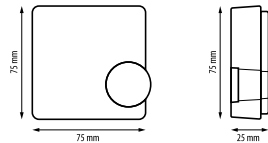
Surface-mounted (or on a flush-box) room thermostat dedicated for surface heating / cooling control, characterized by high thermal inertia. It is connected to the wiring centre. Via wiring centre it is possible to lower the set temperature on it, receiving a signal NSB (night temperature reduction) from the weekly thermostat.

Product advantages:

- has a PWM control algorithm
- protection of thermostatic valves against stagnation (VP)
- easy to install and easy to use

The RT10230V thermostat works with KL08NSB or KL06-M (230V) wiring centres
The RT1024V thermostat works with the KL0624V wiring centre

Model	RT10230V	RT1024V
Power supply	230V AC 50 Hz	24V AC 50 Hz
Rating max	10 (2) A	10 (3) A
Output signal	230V AC 50 Hz	24V AC 50 Hz
Temperature range	5 - 30°C	
Control algorithm	PWM or Hysteresis: $\pm 0.5^\circ\text{C}$	
Communication	Wired	
Dimension [mm]	75 x 75 x 25	



Boiler and pump control module for KL06 wiring centre

PL07

615111806

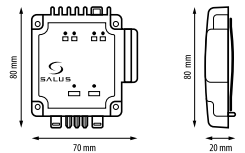


The PL07 module increases the capabilities of the KL06 wiring centre. It is used to control the circulation pump and the boiler by means of voltage-free COM / NO output contacts. The COM / NO contacts close when any of the thermostats connected to the wiring centre indicate heat demand. Otherwise, output COM/NO relay contacts are opened.

Product advantages:

- very easy and quick assembly into the wiring centre
- individual pump and boiler control
- adaptation to work with both voltages - 230V and 24V of KL06

Power supply	From KL06 wiring centre
Rating max	5 (2) A
Output signal	2 x NO/COM
Dimension [mm]	70 x 80 x 20



Wiring centre, for 6 zones

KL06-M*

615111401



Product advantages:

- control of 6 independent heating zones
- 24 outputs for connecting the actuators (4 per zone)
- the ability to control the boiler and pump operation (via PL06/PL07 module sold separately).

KL06-M and KL0624V wiring centres has adaptation for mounting on a 35 mm DIN rail.

KL0624V wiring centre in the set has included a transformer (230 / 24V).

The wiring centre allows easy and quick connection of wired thermostats and actuators by the PLUG-IN method.

The KL06 230V wiring centre is adapted to work with NC (normally closed) type actuators. Up to 6 thermostats can be connected to the wiring centre.



Pump or boiler control module for KL06 wiring centre

PL06

615111805

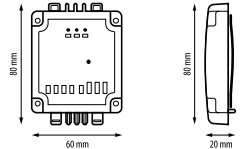


The PL06 module increases the functionality of the KL06 wiring centre. It is used to control the circulation pump (or boiler) with the potential-free NC / COM / NO output contacts. The COM / NO output closes when any of the thermostats connected to the terminal has a demand for heat. Otherwise, output COM/NO relay contacts stay opened.

Product advantages:

- very easy and quick assembly into the wiring centre
- possible selection of which zone starts the module first
- adaptation to work with both voltages - 230V and 24V of KL06

Power supply	From KL06 wiring centre
Rating max	5 (2) A
Output signal	NO/COM/NC
Dimension [mm]	60 x 80 x 20



*Available in 24V version - KL0624V

615111407



Thermoelectric actuator - normally closed NC

T30NC / T28NC*

T30NC 230V - 615211603 / T28NC - 615211500



Actuators can be used e.g. with thermostatic valves in the manifold for underfloor heating or with zone valves. They allow cutting off the heating medium supply to a given element. They can cooperate directly with room thermostats or via wiring centres (wired or wireless). NC actuators are normally closed devices, which means that when there is no current, the actuator closes the loop. The condition of the actuator can be checked quickly thanks to the indicating element.

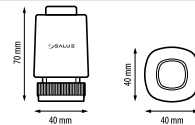
Product advantages:

- faster installation thanks to the 'FIRST OPEN' function
- short opening time - approx. 2 min
- has a stroke of about 4 mm
- small size
- consumes a small amount of power

*Available in 24V version - T30NC 24V
615211606



Model	T30NC230 / T28NC230	T30NC24
Power supply	230V AC 50 Hz /	24V AC/DC
Max. inrush current	200 mA / 200 ms	250 mA / 120 s
Power consumption	2 W	
Type	NC = Normally closed	
Closing force	100 N (±10%)	
Opening time	about 2 min	
Adaptive stroke length [mm]	4	
Thread size	M30x1.5 / M28x1.5	
Dimension [mm]	40 x 70 x 40	
Power cord length [cm]	89	



Thermoelectric actuator - normally open NO

T30NO

T30NO 230V - 615211608



Actuators can be used e.g. with thermostatic valves in the manifold for underfloor heating or with zone valves. They allow cutting off the heating medium supply to a given element. They can cooperate directly with room thermostats or via wiring centres (wired or wireless). NO type actuators are normally-opened devices, which means that when there is no current, the actuator opens the loop. The condition of the actuator can be checked quickly thanks to the indicating element.

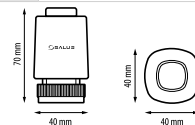
Product advantages:

- short opening time - approx. 2 min
- has a stroke of about 4 mm
- small size
- consumes a small amount of power

*Available in 24V version - T30NO 24V
615211609



Model	T30NO230	T30NO24
Power supply	230V AC 50 Hz /	24V AC/DC
Max. inrush current	200 mA / 200 ms	250 mA / 120 s
Power consumption	2 W	
Type	NO = Normally opened	
Closing force	100 N (±10%)	
Opening time	about 2 min	
Adaptive stroke length [mm]	4	
Thread size	M30x1.5 / M28x1.5	
Dimension [mm]	40 x 70 x 40	
Power cord length [cm]	89	



Self-regulating actuator

THB23030

615210214



Self-regulating actuator dedicated for underfloor heating. It has two temperature sensors that are installed on the supply and return of the appropriate floor heating loop. It measures the temperature on the sensors and adjusts its operation to maintain the correct temperature difference between supply and return (ΔT).

Product advantages:

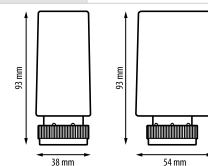
- easy to install on the manifold
- guarantees efficient heating even at different loop lengths
- has 2 contact sensors for measuring the flow and return temperature in the heating loop
- fast opening and closing time (approx. 30 seconds)
- low power consumption (less than 0.5 W)

Fits the most popular M30x1.5 thread size

*Available in 24V version - THB2430
615210215



Model	THB23030	THB2430
Power supply	230V AC 50 Hz	24V AC/DC
Power consumption	0,5 W	
Closing force	30 seconds	
Protection class	IP54	
Thread size	M30 x 1,5	
Dimension [mm]	93 x 38 x 54	
Power cord length [cm]	93	
Sensor cord length [cm]	45	



OpenTherm wired, surface-mounted thermostat - programmable

RT520

615292902



The surface-mounted thermostat is used for wired control of heating devices. It works by maintaining comfortable room conditions in accordance with the work schedule or a constant temperature set by the user. The thermostat is connected directly to the boiler.

The control can be done in two ways:

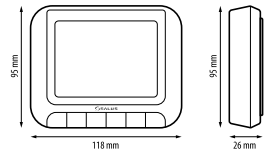
- starting the heat source by closing contacts in a heating device equipped with an input for connecting the ON / OFF thermostat
- boiler power modulation by means of communication via the OpenTherm protocol (OT + 4.0). Two-way communication between the boiler and thermostat as well as boiler power modulation ensures maximum efficiency and comfort.

Product advantages:

- automatically detects OT + 4.0 protocol and regulates hot water temperature
- possibility to choose Hysteresis or built-in TPI algorithm for all types of heating
- works with time schedules
- service mode protected by a PIN code
- maximum / minimum temperature limitation
- can temporarily change the temperature (overwriting until the next program change)



Power supply	2 x AA batteries
Rating max	3 (1) A
Output signal	OpenTherm or voltage free relay NC / COM / NO
Temperature range	5 - 33.5°C
Display temperature accuracy	0.1°C or 0.5°C
Control algorithm	TPI or Hysteresis: ±0.25°C or ±0.5°C
Communication	Wired
Dimension [mm]	118 x 95 x 26



OpenTherm wireless, surface mounted thermostat - programmable

RT520RF

615292601



The surface-mounted thermostat is used for wireless control of heating devices. It works by maintaining comfortable room conditions in accordance with the work schedule or a constant temperature set by the user. The thermostat is factory-paired with the receiver. The receiver is connected to the boiler.

The control can be done in two ways:

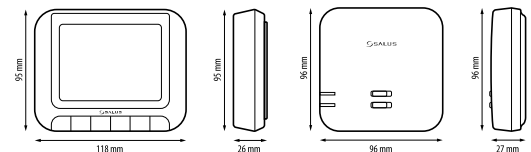
- starting the heat source by closing contacts in a heating device equipped with an input for connecting the ON / OFF thermostat
- boiler power modulation by means of communication via the OpenTherm protocol (OT + 4.0). Two-way communication between the boiler and thermostat as well as boiler power modulation ensures maximum efficiency and comfort. The thermostat automatically detects the OT + 4.0 protocol, displays boiler error codes and allows you to adjust the hot water temperature.

Product advantages:

- set is factory-paired and ready to work
- option to choose Hysteresis or built-in TPI algorithm for all types of heating
- works with time schedules
- service mode protected by a PIN code
- maximum / minimum temperature limitation
- can temporarily change the temperature (overwriting until the next program change)
- has unique transmission codes
- operates at 868 MHz - a stable and noise-resistant signal



Thermostat's power supply	2 x AA batteries
Receiver's power supply	230V AC 50 Hz
Receiver's rating max	16 (5) A
Output signal	OpenTherm or voltage free COM / NO relay
Temperature range	5 - 33.0°C
Display temperature accuracy	0.1°C or 0.5°C
Control algorithm	TPI or Hysteresis: ±0.25°C or ±0.5°C
Communication	Wireless, 868 Mhz
Dimension [mm]	Thermostat: 118 x 95 x 26 Receiver: 96 x 96 x 27



A list of compatible boilers can be found on the website

www.salus-controls.eu

or by scanning the QR code

