

Roth Minishunt Plus control system

Wireless control system for underfloor heating

Control unit

Roth Minishunt Plus control system is used for control and regulation of the room temperature in a single room with underfloor heating where a simple but well-functioning system is needed.

The system consists of a single channel controller connected with a wireless room thermostat in the room.

The box has no control panel as this is not needed when pairing the thermostat. The thermostats are available in 2 variants: Basic and Advanced. Both thermostats have a display and touch buttons.

Electrical heat element

A 500W electrical heating element can be added to provide heating when the main heat source is unavailable e.g. during the summer season, where heat boilers are typically not running or turned off.

Room thermostats

Basic room thermostat

The thermostat comes in white with a smaller LCD display protected by a transparent polycarbonate plate. The power supply is 2 x AAA 1.5V batteries. The temperature is easily set with the two touch buttons (+/-). It is also possible to lock the buttons for accidental operation.

The following menus are available in the thermostats: Battery status, calibrating, key lock, factory reset, continuous temperature.

Advanced room thermostat

The thermostat comes in white with a bigger LCD display. The front is protected by a transparent polycarbonate plate. The power supply is 2 x AAA 1.5V batteries.

The temperature is easily set with the two touch buttons (+/-) and it is possible to override the entered comfort temperature for a selected number of hours after which the temperature returns to the previous setting. It is also possible to lock the buttons for accidental operation.

The following menus are available in the thermostats: Battery status, calibrating, key lock, factory reset, operation mode, alarm state and hysteresis.

Control box

The control box is a single channel controller. The box can be mounted directly on the wall. The control box has an output for actuator, an output for electrical heat element, as well as an output for pump, all with 230V voltage.

Individual LED indicators on the front shows the status of the outputs.



First start-up

When first starting up an underfloor heating system, an actuator should be fully opened to ensure proper operation, it is also important to get all air flushed out of the system.

Pump motion

To extend the durability of the pump and ensure that the pump does not get stuck, the system automatically performs pump exercise every 10 days for 5 minutes.

Valve motion

Long durability and securing of valve and the function of the actuator is ensured by the automatic valve and actuator exercise which is performed every 10 days for 5 minutes.

Sections of functionality

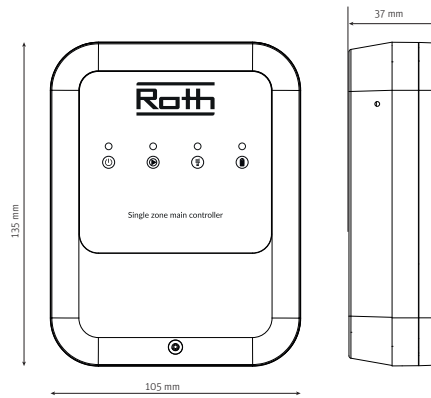
- › Up to 30 m indoor range
- › Locking the thermostat for public use
- › On/Off regulation
- › To be used for underfloor heating
- › Control of pump, actuator and electrical heat

Roth Minishunt Plus control system

Roth Minishunt Plus Controller

HVAC no.	7466397005
Supply voltage	230V AC
Energy consumption	4W
Number of outputs and voltage	1 (NC/NO), 230V AC
Max. sustained load	1 thermal motor (0.3 A)
Protection class I	
Transmission frequency	(EN60730)
Range (up to) 30 m (in ordinary building)	868 MHz
Max. load pump relay	230V and 0.5 A
Power supply cable	100 cm
Ambient temperature	5 - 50°C
Ambient humidity	< 80% RH
Storage/transport temperature	-20 - +50°C
Degree of protection IP20	(EN60529)
Fuse glass fuse WT 6.3A	(5 x 20mm)
Approvals CE	2014/53/EU
External sensor for flow sensor	KTY-210 (1,0 m)

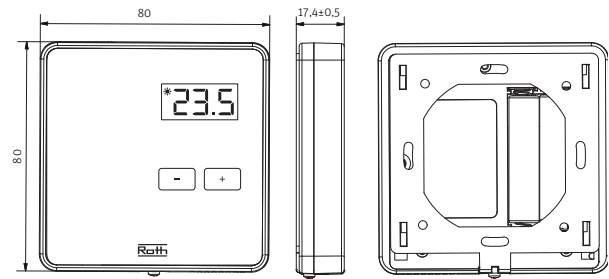
Roth Minishunt Plus controller



Thermostats

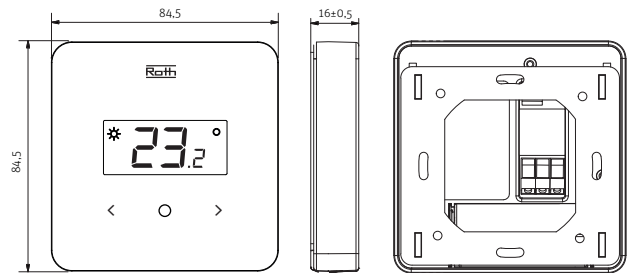
Roth Basic wireless room thermostat	HVAC no. 7466397100
Roth Advanced wireless room thermostat	HVAC no. 7466210838
Supply voltage	2 pcs. AAA 1.5V
Battery life	> 2 years
Power consumption standby	~ 50uA
Room temperature, setting range	+5 - +35°C
Comfort flow temperature, setting range	+5 - +35°C

Roth Basic wireless room thermostat



Accuracy (resolution)	0.5 K.
Time constant (time delay)	Approx. 4 min.
Activation time (wake-up time)	<2 sec.
Max. forced update time for data from control box	10 sec.
Standby display without operation	Max. 5 sec.
Transmission frequency	868 MHz
Range up to	30 m (ordinary building)

Roth Advanced wireless room thermostat



Ambient temperature	0 - 55°C
Ambient humidity	Max. 80% RF
Degree of protection IP20	(EN60529)
Approvals CE	2014/53/EU

Accessories

Roth Project actuator 230V	HVAC no. 7466275430
Roth Electric Heation Element 230V	HVAC no. 7466210650

Electrical heating element

Effect	500W
Working temperature	Approx. 40°C
Supply voltage	230V AC
Thermal protection auto-reset	50°C
Diameter and lenght	Ø 51 x 73 mm

Connections to controller

