

Roth Touchline® SL control system

Wireless control system for heating and cooling

Advanced wireless control system for underfloor heating, cooling and radiators with optional internet connectivity and the use of Roth Touchline® SL app.

The Roth Touchline® SL control system is used for individual control and regulation of the room temperature in buildings with underfloor heating/cooling systems where an advanced system is needed. The control system also offers the possibility to control radiators using the wireless radiator actuators.

The system consists of two controllers: A Roth Touchline® SL Controller, Master and a Roth Touchline® SL Controller, extension, each with 8 channels and wireless connection to room thermostats or sensors in the individual rooms. It is possible to set up a system consisting of one Roth Touchline® SL Controller, master and up to four Roth Touchline® SL Controller, extensions wirelessly connected to each other.

The system offers a wide range of accessories such as a Roth Touchline® SL WIFI Internet module, a Roth Touchline® SL Valve module for control of a mixing unit, a Roth Touchline® SL Wireless Window contact and a Roth Touchline® SL Wireless Radiator actuator.

The Roth Touchline® SL Controllers have a display panel which is used when pairing the thermostats. At the same time, it provides a good overview of installed thermostats/sensors with associated temperatures, and the signal strength can be easily read for each thermostat/sensor, and correct positioning is easily done. The thermostats are available in 2 variants, both with display and touch buttons.

Also available:

- > 2 variants of Roth Touchline® SL temperature sensors. Both are controlled via the controller display or the app.
- > 2 Roth Touchline® SL Smart accessories which make the system even more applicable:
- > Roth Touchline® SL Wireless Radiator valve actuator offers the possibility of controlling radiators. Up to 6 actuators can be connected to each zone.
- > Roth Touchline® SL Wireless window contact ensures that the heat source will be set in ECO mode when the window is opened to reduce waste of energy. Up to 6 contacts can be connected to each zone.

Roth Touchline® SL room thermostats

Roth Touchline® SL Standard room thermostat

The thermostat comes in white with an 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 (< / >) and the menu button (□) gives you access to more advanced settings.

This thermostat can also be connected with a wired sensor for controlling the floor temperature. The thermostat is also equipped with a humidity sensor to monitor the humidity in the room which is important when you run your installation in cooling mode.



Roth Touchline® SL Plus room thermostat

The thermostat comes in white with a large temporary backlit LCD display with, 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 the menu button (□) gives you access to more advanced settings. The “back” button is used for returning from menus.

This thermostat can also be connected with a wired sensor for controlling the floor temperature. The thermostat is also equipped with a humidity sensor to monitor the humidity in the room which is important when you run your installation in cooling mode.

Room sensors

Roth Touchline® SL Room Sensor

The sensor comes in white without any buttons or display. The front is protected by a transparent polycarbonate plate. The power supply is 2 x AAA 1.5V batteries. The sensor measures the actual temperature in the room, and temperature and settings can only be read/changed on the display of the controller or via the app.

Roth Touchline® SL Room Sensor Mini

The sensor comes in white without any buttons or display. The front is glossy white. The power supply is 1 x 2032 button cell. The sensor measures the actual temperature in the room, and temperature and settings can only be read/changed on the display of the controller or via the app. This sensor can also be delivered with a humidity sensor.

Roth Touchline® SL kontrolsystem

Accessories

Roth Touchline® SL Radiator actuator

The wireless radiator actuator comes in glossy white with an outside pairing button and LED indicator. The power supply is 2 x AAA 1.5V batteries.

The actuator ensures accurate and quiet operation of radiator heating control.

Connection to valve-nut with M30x1,5 screw thread. Adaptors for several other type of valves available (Danfoss RAN and RTDN adapters in set).

Roth Touchline® SL Wireless window contact

The wireless window contact comes in glossy white in a contemporary, compact, and discreet design. It has an inside pairing button and LED indicator. The power supply is 1 x 3,6V type ER14250 lithium battery.

The contact signals an open window/door to ensure a minimum of heat loss when connected to a zone.

Roth Touchline® SL Controller, Master

The Roth Touchline® SL Controller, Master is available with 8 channels. The controller can be mounted directly on the wall, or by using a 35 mm DIN rail (not included). The controller has a potential-free relay for e.g. boiler control, an output for pump with 230V voltage, as well as in/outputs for more accessories such as heat sources, Roth Touchline® SL WiFi Internet module, Roth Touchline® SL Valve module and different Roth Touchline® SL wired sensors.

The following information can be read on the controller's display per channel:

- > Weekday and time
- > Current and desired temperature (room and floor)
- > Outdoor temperature (if sensor installed)
- > System mode (on/off, Normal, Holiday, Comfort, ECO, schedule)
- > Signal strength per thermostat/sensor
- > Battery level per thermostat/sensor
- > Connected Smart accessories per zone
- > Pump output status (on/off)
- > Status relay (on/off)
- > Connected accessories
- > Alarm in case of lost connection

The control panel provides access to basic settings for the system, and with a code also for the advanced settings.

First start-up

When first starting up an underfloor heating system, all actuators 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 life 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 life and securing of valves, and the function of the actuators are ensured by the automatic valve and actuator exercises which are performed every 10 days for 5 minutes.

Sections of functionality

- > Up to 30 m indoor range
- > Up to 40 channels in combination with Roth Touchline® SL Controller, extension
- > Optional Roth Touchline® SL valve module to control supply temperature
- > Optional Roth Touchline® SL WIFI Internet module for internet connection
- > Frost protection in case of lost connection to thermostats
- > Locking the thermostat for public use
- > On/Off regulation
- > OPTIMUM Start, adaptive regulation
- > Can be used for underfloor heating/and cooling
- > Can be used for radiator installations
- > Control of pump, boiler or other heat sources
- > Intuitive operation of display thermostats

Roth Touchline® SL Controller, Master

8 ch 230V

Supply voltage	HVAC no.7466397028 230V AC
Energy consumption	6 W
Number of outputs and voltage	18 (NC/NO), 230V AC
Max. sustained load	18 thermal actuators (0.3A) (2 channels of 3 actuators and 6 of 2 actuators)
Wireless channels	8 thermostat/sensors 6 radiator actuators (per zone) 6 window contacts (per zone) (EN60730)
Protection class I	868 MHz
Transmission frequency	30 m (in ordinary building)
Range (up to)	230V and 0,5 A
Max. load pump relay	1A
Max. load potential-free relay	85 cm
Power supply cable	5 - 50°C
Ambient temperature	< 80% RH
Ambient humidity	-20 - +50°C
Storage / transport temperature	IP20 (EN60529)
Degree of protection	WT 6.3A (5 x 20mm)
Fuse glass fuse	CE 2014/53/EU
Approvals	

Roth Touchline® SL Controller, extension

8 ch 230V

Supply voltage	HVAC no. 7466397038 230V AC
Energy consumption	6 W
Number of outputs and voltage	22 (NC/NO), 230V AC
Max. sustained load	22 thermal actuators (0.3A) (3 channels of 4 actuators and 5 channels of 2 actuators)
Wireless channels	8 thermostat/sensors 6 radiator actuators (per zone) 6 window contacts (per zone)

Roth Touchline® SL kontrolsystem

Protection class I	(EN60730)
Transmission frequency	868 MHz
Range (up to)	30 m (in ordinary building)
Max. load pump relay	230V and 0.5 A
Max. load potential-free relay	1A
Power supply cable	85 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 20 mm)
Approvals	CE 2014/53/EU

Roth Touchline® SL Standard room thermostat (white)
Roth Touchline® SL Standard room thermostat (black)
Roth Touchline® SL Plus room thermostat
 Supply voltage
 Battery life

Power consumption standby
 Room temperature, setting range
 Comfort floor temperature, setting range
 Floor temperature, max. setting range
 External floor sensor

Accuracy (resolution)
 Time constant (time delay)
 Activation time (wake-up time)
 Max. forced update time for data from control box

Standby display without operation
 Standby by program. at user level
 Transmission frequency
 Range up to

Ambient temperature
 Ambient humidity
 Degree of protection
 Approvals

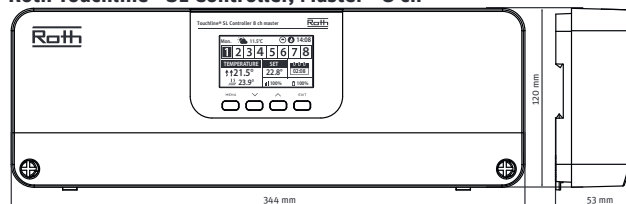
Roth Touchline® SL Radiator actuator HVAC no. 7466397450

Roth Touchline® SL window sensor HVAC no. 7466397600

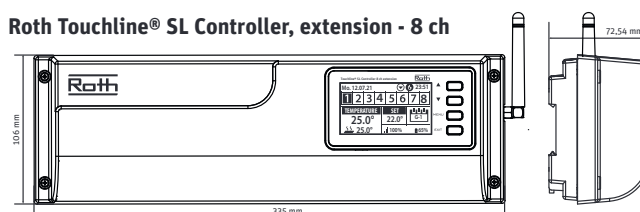
Accessories

Roth Touchline® SL WIFI Internet module HVAC no. 7466397000
 Roth Actuator 230V 1 Watt NC HVAC no. 7466275433
 Roth Touchline® SL Antenna HVAC no. 7466397305
 Roth Touchline® SL Repeater HVAC no. 7466397400
 Roth cable sensor for thermostats HVAC no. 7466397525

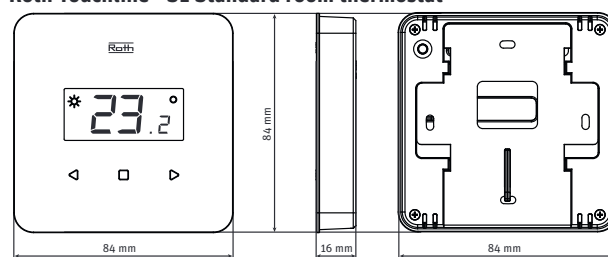
Roth Touchline® SL Controller, Master - 8 ch



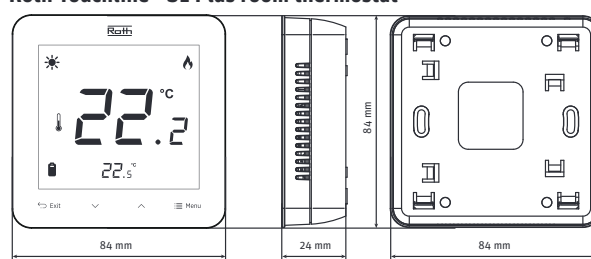
Roth Touchline® SL Controller, extension - 8 ch



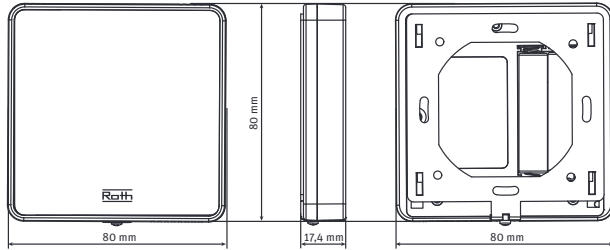
Roth Touchline® SL Standard room thermostat



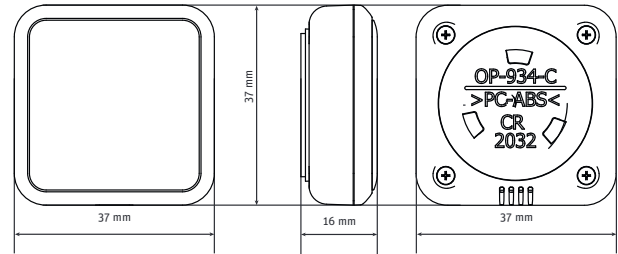
Roth Touchline® SL Plus room thermostat



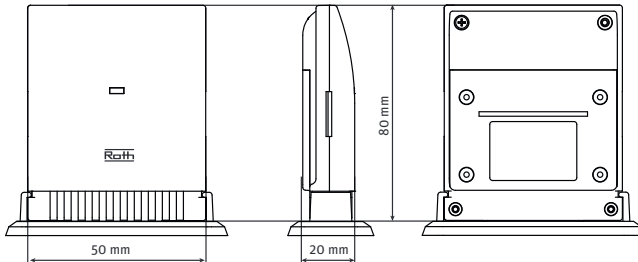
Roth Touchline® SL Room Sensor



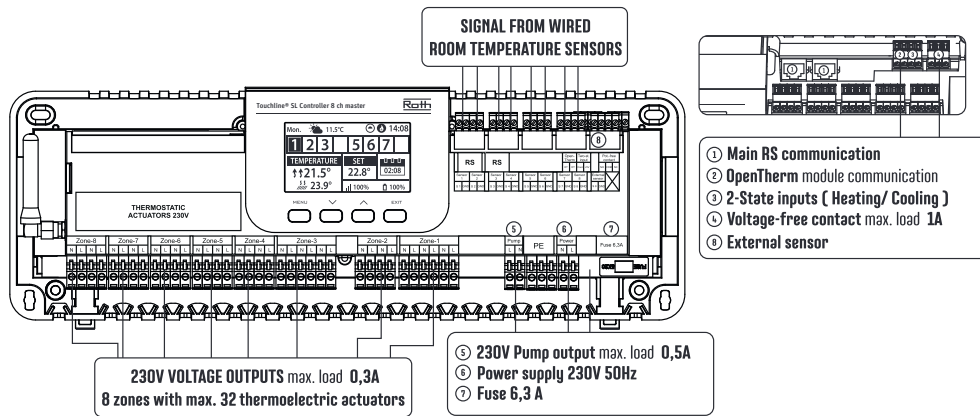
Roth Touchline® SL Room Sensor Mini



Roth Touchline® SL Outdoor Sensor



Connections on Roth Touchline® SL Controller, master



Connections on Roth Touchline® SL Controller, extension

