

Digital room thermostats

ST1B | ST1N | ST1E

Presentation



ST is the new generation of modern room thermostats. They are used for the control of room temperature in smaller houses or for the zone control of room temperature in larger residential facilities. In addition to the room temperature, it also measures the relative air humidity and pressure.

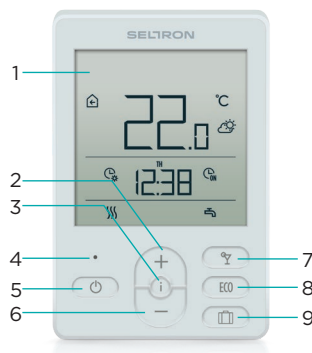
Typical application

- Radiator or convector heating.
- Floor heating (low-temperature control of the supply temperature must be ensured).
- Wall or ceiling heating or cooling.
- Electric floor heating.

Features

- Up to 5 preset applications.
- 2 preset time programmes.
- Simple use and setup.
- Display of the measured and desired temperature.
- PARTY, ECO and HOLIDAY user functions.
- Weekly program timer for time programmes.
- Automatic switchover between winter and summer time.
- No new setup required in the event of power failure.
- Measurement of relative air humidity, air pressure, weather forecast display.
- Simple installation and connection.

Description of settings buttons



- 1 - Illuminated LCD display.
- 2 - Increasing, move forwards.
- 3 - Overview of information displays.
- 4 - Light sensor.
- 5 - Change in operation mode, Escape.
- 6 - Reducing, move backwards.
- 7 - PARTY function switch on/off.
- 8 - ECO function switch on/off.
- 9 - HOLIDAY function switch on.

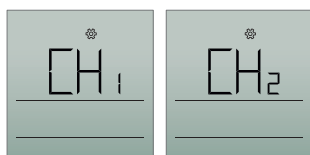
| Typical application | ST1B | ST1N | ST1E |
|--|------|------|------|
| Battery-powered | • | — | — |
| Mains power supply | — | • | • |
| Heating or cooling control of residential rooms | • | • | • |
| Heating or cooling control of business premises | • | • | • |
| Technical characteristics | | | |
| No. of mechanical relays | 1 | 1 | 1 |
| No. of temperature sensor inputs | 1 | 1 | 1 |
| System control | | | |
| Radiator or convector heating | • | • | — |
| * Floor heating or cooling | • | • | — |
| * Wall or ceiling heating or cooling | • | • | — |
| Electric floor heating | — | — | • |
| <i>* Low-temperature control of the supply temperature must be ensured</i> | | | |
| Heating circuits control | | | |
| Direct heating circuit | • | • | — |
| Mixing heating circuit | • | • | — |
| Heat source control | | | |
| Flow boilers | • | • | — |
| Liquid or solid fuel boiler | • | • | — |
| User functions | | | |
| Room heating or cooling | • | • | — |
| PARTY function – activation of the comfort operation mode | • | • | • |
| ECO function – low-energy temperature activation | • | • | • |
| HOLIDAY function – holiday energy-saving mode | • | • | • |
| Heating system protection | | | |
| Room frost protection | • | • | • |
| Limiting the maximum screed temperature or wall heating | • | • | • |
| Setup and installation | | | |
| Possibility of wall installation | • | • | • |
| Possibility of installation into a flush-mounted box | • | • | • |
| Simple installation and connection | • | • | • |

Outlined functions



Large backlit display

The ST room thermostats feature a large display that allows the users to read the information from a distance. The ST model is equipped with a light sensor for an optimum visibility, with the help of which the illumination of the display is adapted to the light in the room.



Preset time programmes

ST room thermostats provide the selection between two preset time programmes. The user is able to create the time programmes according to their wishes, or they may use to preset time programmes and adapt them if necessary.



PARTY, ECO, HOLIDAY user functions

The thermostat is equipped with quick buttons through which we enter user functions directly, such as PARTY (👤), ECO (🌿) and HOLIDAY (🏠).

By choosing the PARTY function, the daytime room heating is prolonged.

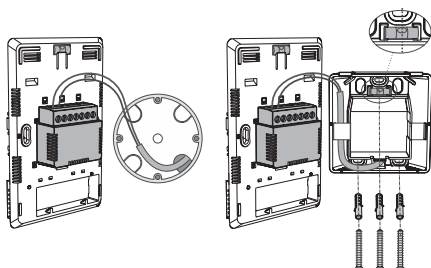
By choosing the ECO function, the heating temperature reduces for a certain period of time.

In the holiday operation mode, we set the heating temperature during our prolonged absence.



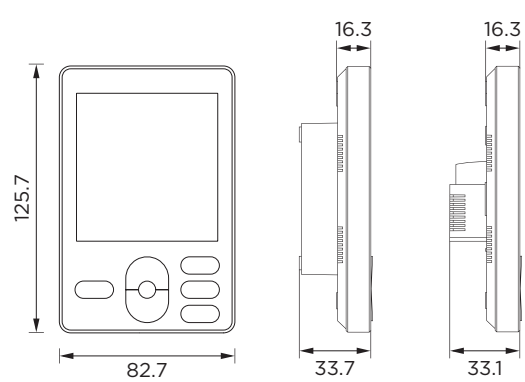
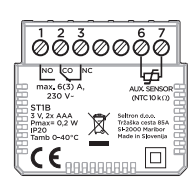
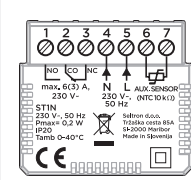
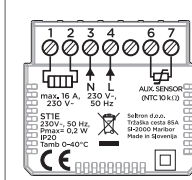
Measurement of relative air humidity, air pressure, weather forecast display

ST measures the air humidity and pressure in the room. Based on the air pressure, also the weather forecast is possible.

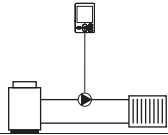
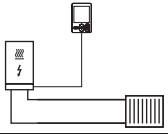
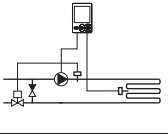


Installation options

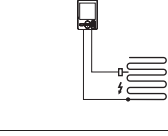
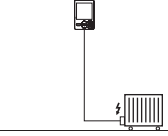
Battery powered room thermostats or thermostats with a standard electrical connection are available. They can be installed into a pre-prepared flush-mounted socket or on the wall.


| Technical specifications | ST1B | ST1N | ST1E |
|---|--|---|---|
| Backlit LCD display | • | • | • |
| Weekly program timer | • | • | • |
| Power supply | 2 × AAA (1.5 V) | 230 V/50 Hz | 230 V/50 Hz |
| Own consumption | 0.1 mW | 0.2 W | 0.2 W |
| Clock power supply | CR1025 battery (Li-Mn) 3 V | | |
| Time display | hours:minutes (24-hour) | | |
| Clock accuracy | +/-1 s (24 h) at 20 °C | | |
| Degree of protection | IP30 according to SIST EN 60529 | | |
| Safety class according to SIST EN 60730-1 | II | | |
| Type of temperature sensors | Murata NTC (10 kohm) | | |
| Housing material | PC + ABS | | |
| Operating temperature | 0÷40 °C | | |
| Storage temperature | -20÷65 °C | | |
| Product weight | 220 g | 140 g | 177 g |
| No. of pieces in the packaging unit | 24 pcs | | |
| Dimensions |  | | |
| Electrical connection |  |  |  |

Applications for ST1B and ST1N


| | | |
|---|--|---|
| <p>101</p>  <p>Radiator heating and ON/OFF circulation pump control.</p> | <p>102</p>  <p>Radiator heating and ON/OFF heat source control.</p> | <p>103</p>  <p>Floor heating and ON/OFF circulation pump control. Protection of the screed temperature.</p> |
|---|--|---|

Applications for ST1E

| | |
|--|---|
| <p>111</p>  <p>ON/OFF electric floor heating control. Protection of the screed temperature.</p> | <p>112</p>  <p>ON/OFF electric heating device control.</p> |
|--|---|

| Item | Order code | Description |
|---|-------------|---|
|  | 1RTD2RB-050 | Room thermostat SELTRON ST1B battery-powered |
| | 1RTD2RN-050 | Room thermostat SELTRON ST1N for the mains power supply |
| | 1RTD2RE-050 | Room thermostat SELTRON ST1E for electric floor or wall heating |

Accessories

| | |
|---|---|
|  | <p>1TFMU-000</p> <p>Immersion temperature sensor SELTRON TF/M</p> |
|---|---|

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