NOVASTAT / NOVAMASTER RF

WIRELESS ROOM THERMOSTATS AND CONNECTOR MODULES

Individual control of room temperature.

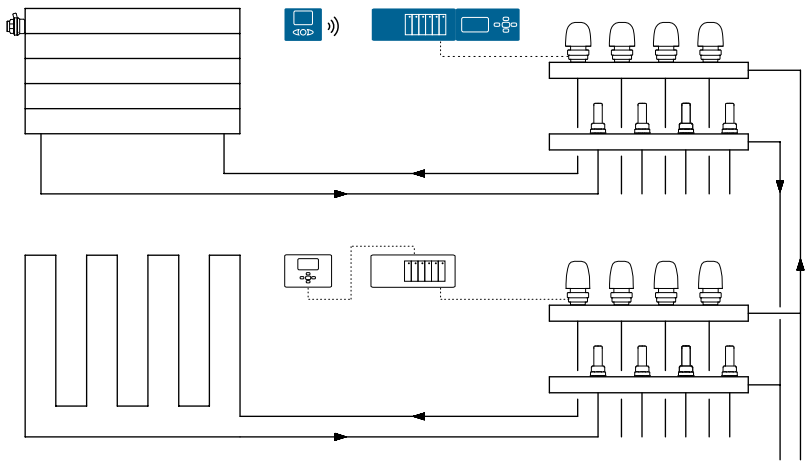
ADVANTAGES

- No wiring effort required
- Optimum positioning within the room
- Own signal encryption for unique assignment of room thermostat
- Simple connection of the actuators to the wiring module
- For actuators normally closed (NC) and normally open (NO)
- Intelligent processor

DESCRIPTION

Room thermostats in combination with Taconova NovaDrive or TopDrive actuators provide a constant room temperature in enclosed and dry rooms.
The room thermostat range, classified according to price/performance, offers the correct solution for individual needs.
The basic version **NovaStat RF Basic** covers the most common range of applications.
The **NovaStat RF Digital** and **NovaStat RF Week** versions display the set and actual values on a digital display.
Individual regulation of temperature in individual rooms as required by the operator is achieved by means of the programmable digital **NovaStat RF Week** clock thermostat or the **NovaMaster RF Logic**. The time duration of the lowering mode can be set in the week program by means of the integral timer.
The individual room thermostats can be assigned to the **NovaMaster RF Logic** receiver module or the **NovaMaster RF Mini** single-channel receiver simply and without complicated wiring.
The connection options for actuators can be expanded with the optional pluggable **NovaMaster RF SlaveBox** module.

SYSTEM/BASIC DIAGRAM



INSTALLATION POSITION

The thermostats are mounted in the respective room while the connector modules are mounted close to the manifold.

OPERATION

By mean of an NTC sensor element, the downstream PI or derivative action controller, the room thermostats provide a constant room temperature in combination with actuators.
The control signal is transmitted to the central receiver by radio (868 MHz).
Control is by means of the actuator acting on the valve according to the OPEN/CLOSED principle.
The PI or derivative action controller integrated into the room thermostat prevents the room temperature exceeding the desired value set on the room thermostat.

BUILDING CATEGORIES

For installations in the heating and cooling area:

- Apartment blocks, housing estates, multiple dwelling units
- Residential care facilities, hospitals
- Administration and service buildings
- Hotels and restaurants, industrial kitchens
- School buildings and sports facilities
- Commercial and industrial buildings

NOVASTAT RF | WIRELESS ROOM THERMOSTATS

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1 NOVASTAT RF BASIC

Electronic wireless room thermostat for indirect controlling of NC/NO actuators in underfloor heating systems

Desired values transmitted by radio signal (868 MHz). Each thermostat has its own signal encryption for unique assignment. Correction of the actual temperature is integrated into the adjustment dial.

TECHNICAL DATA

- Order no.: 206.1656.000
- Operating voltage: 2 batteries LRG AAA 1,5 V
- Operating temperature: 0–50 °C (32–122 °F)
- Adjustment range: 5–30 °C (41–86 °F)
- Radio frequency: 868 MHz, < 10 mW
- Certification: CE.EN 300220-1, EN 301489-1
- Type of protection: Protection class II IP 30
- Control behavior: Proportional band 2 ° K (15 min.)
- Temperature sensor: NTC 100 K
- Dimensions: H80 × W80 × D31 mm
- Color: RAL 9010

2 NOVASTAT RF DIGITAL

Electronic wireless room thermostat with digital display for indirect controlling of NC/NO actuators in underfloor heating systems

Desired values transmitted by radio signal (868 MHz). Each thermostat has its own signal encryption for unique assignment. Mode switch for normal and lowering modes. Further userdefined settings possible in system parameter menu.

TECHNICAL DATA

- Order no.: 206.1657.000
- Operating voltage: 2 batteries LRG AAA 1,5 V
- Operating temperature: 0–50 °C (32–122 °F)
- Adjustment range: 5–30 °C (41–86 °F)
- Radio frequency: 868 MHz, < 10 mW
- Certification: CE.EN 300220-1, EN 301489-1
- Type of protection: Protection class II IP 30
- Control behavior: PI controller or static derivative action controller, adjustable
- Temperature sensor: NTC 100 K
- Dimensions: H80 × W80 × D31 mm
- Color: RAL 9010

3 NOVASTAT RF WEEK

Electronic wireless room thermostat with digital display for indirect controlling of NC/NO actuators in underfloor heating systems.

Desired values transmitted by radio signal (868 MHz). Each thermostat has its own signal encryption for unique assignment. Mode switch for normal and lowering mode or automatic timed programs. Can be programmed for weekly and daily programs and for vacations, frost protection and keyboard lock function. Further user-defined settings possible in system parameter menu.

TECHNICAL DATA

- Order no.: 206.1658.000
- Operating voltage: 3 batteries LR6 AA 1,5 V
- Operating temperature: 0–50 °C (32–122 °F)
- Adjustment range: 5–35 °C (41–95 °F) Frost protection 0,5–10 °C (33–50 °F)
- Radio frequency: 868 MHz, < 10 mW
- Certification: CE.EN 300220-1, EN 301489-1
- Type of protection: Protection class II IP 30
- Type of controller: PI controller, cycle 15 min.
- Adjustment bandwidth: 2 ° K of proportional band
- Adjustment speed: 7,5 Cycles / h (8 min cycle)
- Temperature sensor: NTC 100 K
- Dimensions: H86 × W125 × D32 mm
- Color: RAL 9010

NOVAMASTER RF | RADIO RECEIVER

NOVAMASTER RF MINI

Single-channel radio receiver for controlling NC / NO actuators in underfloor heating systems

Desired values transmitted by radio signal (868 MHz). Combinable with room thermostats NovaStat RF Basic, NovaStat RF Digital and NovaStat RF Week

TECHNICAL DATA

- Order no.: 206.1659.000
- Operating voltages: 230 VAC / NC / NO / 50 Hz ± 10 %
- Operating temperature: 0–50 °C (32–122 °F)
- Switching output: Receiver relay 12 A 250 VAC max.
- Quantity of actuators: Max. 2 actuators (parallel)
- Radio frequency: 868 MHz, < 10 mW
- Certification: CE.EN 300220-1, EN 301489-1
- Type of protection: Protection class II IP 30
- Dimensions: H170 × W28 × D14 mm
- Color: RAL 9010

NOVAMASTER RF | RADIO RECEIVER WIRING MODULE

1 NOVAMASTER RF LOGIC

Wiring module in combination with receiver unit Novamaster RF Logic for the wiring of electrothermal actuators and assignment of the individual wireless room thermostats

Expansion possible with Novamaster RF SlaveBox to provide further connection options. Direct wall mounting or mounting on DIN rail. Control of 230 V NC/NO actuators. Operating status indicated by LEDs. 2 separate, floating switching outputs on Novamaster RF Logic wiring module for actuating pumps. Programmable timer function for zone concerned. Integrated user programs, 9 fixed and 12 freely programmable for each individual zone. Digital display for program, time and function.

TECHNICAL DATA

- Order no.: 258.9317.000
- Operating voltage: 230 VAC 50 Hz ± 10 %
- Operating temperature: 0–50 °C (32–122 °F)
- Radio frequency (Timer): 868 MHz, < 10 mW
- Certification: CE.EN 300220-1, EN 301489-1
- Number of zones: 6 (max. 4 drives / zone)
- Max. quantity of actuators: 24 × 230 VAC
- Quantity of actuators / Zone: max. 4 drives / zone
- Type of controller: PI controller proportional bandwidth 2 ° K/1, 2 ° K
- Type of protection: Protection class II IP 30
- Switching outputs: 2 × separate, floating for pump switching max. 8 A
- Dimensions: H88 × W370 × D58 mm
- Color: RAL 9010

2 NOVAMASTER RF SLAVEBOX

Expansion module for the NovaMaster RF Logic module for the extended wiring of electrothermal actuators

Assignment of the room thermostats takes place via the Novamaster EL Timer. Pluggable expansion and direct wall mounting or mounting on DIN rail. Control of 230 V NC/NO actuators. Operating status indicated by LEDs.

TECHNICAL DATA

- Order no.: 258.9319.000
- Operating voltage: 230 VAC 50 Hz ± 10 %
- Operating temperature: 0–50 °C (32–122 °F)
- Number of zones: 4 (max. 4 drives / zone)
- Max. number of actuators:
  Σ Novamaster RF Logic + Novamaster RF SlaveBox = 24 × 230 VAC
- Type of protection: Protection class II IP 30
- Dimensions: H88 × W160 × D58 mm
- Color: RAL 9010

CONTACT AND FURTHER INFORMATION TACONOVA.COM

Taconova Group AG | Neunbrunnenstrasse 40 | CH-8050 Zurich | T +41 44 735 55 55 | F +41 44 735 55 02 | group@taconova.com