

TOUCHSCREEN THERMOSTAT



DESCRIPTION

nVent RAYCHEM Programmable touchscreen thermostat for electrical underfloor heating. It combines ease of use and aesthetic design for maximum comfort from your underfloor heating.

PRODUCT PROPERTIES

ATTRACTIVE DESIGN

- Full color TFT capacitive touchscreen display
- Flat front with full color capacitive touchscreen
- Unique nVent RAYCHEM look and feel
- Mountable as stand-alone thermostat or in simple or multiple gang switch gear frames

EASE OF USE

- Swipe and touch navigation
- Big icons in the central menu
- Scroll for list selection
- Wheels for temperature selection

7 OPERATING MODES

- 3 economic programs
- 1 Constant mode
- 1 Flexible Boost (flexible and temporary override of economic or constant mode)
- 1 Holiday mode
- 1 OFF mode

FLEXIBLE

- Compatible with switch gear frames
- Compatible with a variety of floor sensors
- 3 Economic modes with flexible number of events per day

ENERGY EFFICIENT

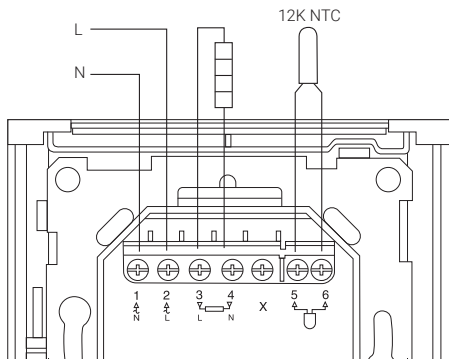
- 3 economic programs to suit everyone's needs
- Smart and precise adaptive function
 - Calculates when to start heating to reach desired temperature when required
 - Adapts to the environment
 - Adapts to the floor construction
- Window open function
- Optimum heat management with 2 sensors (ambient & floor sensor)

TECHNICAL DATA

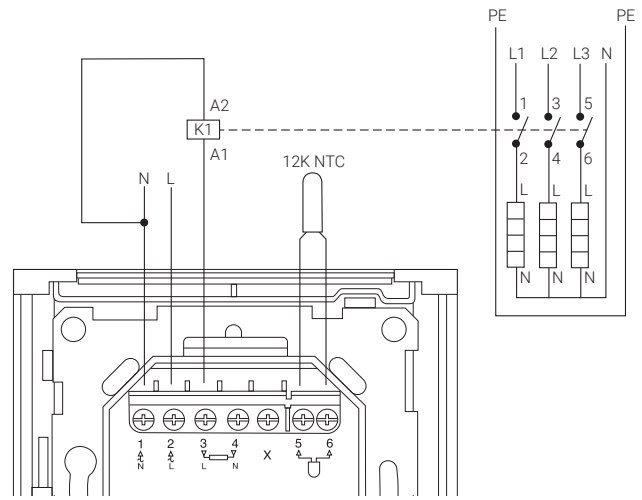
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|----------------------------------|--|
| Supply voltage | 230 VAC (+10%/-15%), 50Hz |
| Relay output | Heating cable 230 V, max 13A (max 10A of T2Red = 100m) |
| Temperature range floor sensor | 5°C to +40°C |
| Temperature range room sensor | 5°C to +40°C |
| Limitation of range | Low +5°C / High +40°C |
| Ambient temperature-operation | 0 to 60°C |
| Ambient temperature-transport | -20°C to +70°C |
| Accuracy floor sensor | 0.2°C in a range 0°C to + 40°C |
| Temperature control method | Pulse width modulation with Proportional integral control loop |
| Accuracy room sensor | 0.2°C in a range 0°C to + 40°C |
| Control modes | Floor sensing Room sensing Room sensing with floor limiter No sensor |
| 7 Operating modes | 3 Fully programmable economic modes: <ul style="list-style-type: none">- 1 to 7 events/day- 7 days/week- 1 temperature per event 1 Constant mode: <ul style="list-style-type: none">- 1 set temperature 1 Flexible boost mode (temporary override of the programmable or constant modes) <ul style="list-style-type: none">- Adjustable temperature- Adjustable duration 1 Holiday mode <ul style="list-style-type: none">- Programmable in advance- Calendar based- Adaptable temperature 1 OFF mode <ul style="list-style-type: none">- Including frost protection option |
| Back-up for set values | Non-volatile memory |
| Back-up for time and date | Minimum 5 years of storage Minimum 10 years if powered 50% of the time |
| Protection class | IP21 Can be upgraded to IP44 using the accessory gasket (1244-017779 R-SENZ-ACC-IP44GASKET) |
| Terminals | 2,5 mm ² Screw cage clamp |
| Floor sensor | 12kΩ @ 25°C +/- 0.75°C (no:38165) |
| Max length of floor sensor | 100m, 2 x 1.5 mm ² (230 VAC cable) |
| Diameter sensor cable | 4.5 mm |
| Diameter sensor tip | 5 mm |
| Compatibility with other sensors | 2, 10, 12, 15, 33 & 100kΩ sensors |
| Dimension with RAYCHEM frame | 85.5 x 84.3 x 41.9 mm |
| Color Extra front | RAL9003 |
| Approvals | CE, VDE |

WIRING DIAGRAM

Direct connection (single heating circuit)
Heater circuit < 13 Amps constant wattage cable or



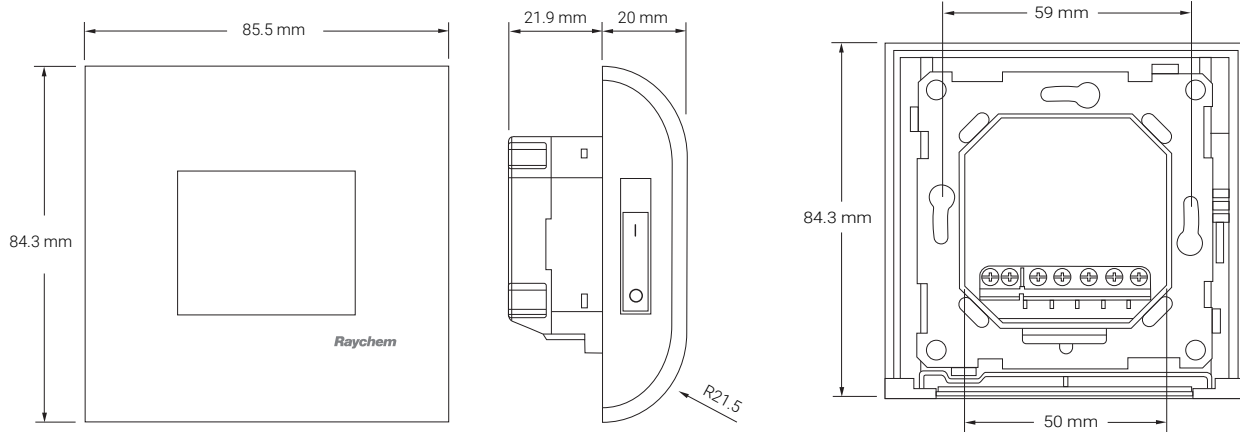
Maximum 100 meter of T2Red Connection via contactor
(multiple heating circuits) Total heating circuits > 13 Amps
constant wattage cable or exceeding 100 meter of T2Red



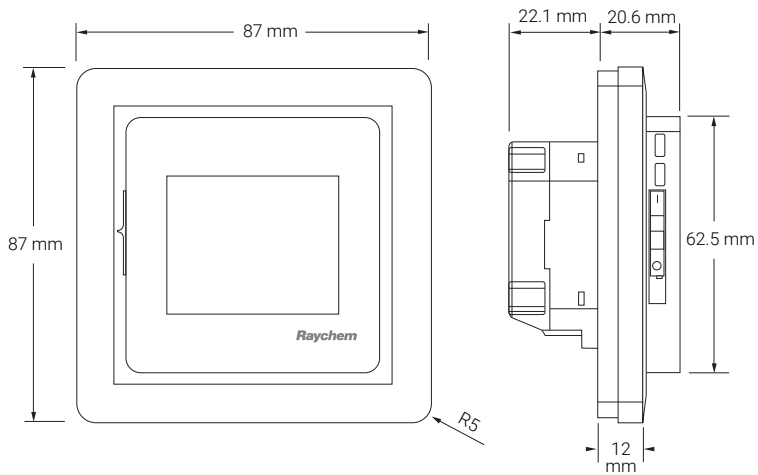
K1: contactor with integral suppression device

DIMENSION DRAWINGS

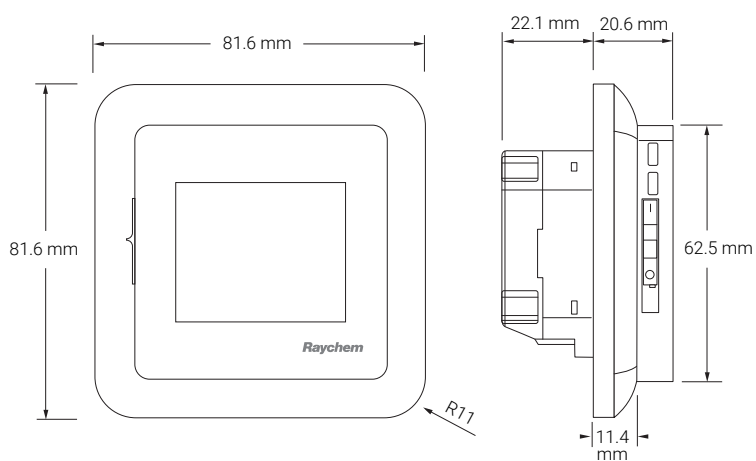
DIMENSION DRAWINGS – RAYCHEM FRAME



DIMENSION DRAWINGS – SQUARE FRAME



DIMENSION DRAWINGS – ROUND FRAME



ORDERING INFORMATION

| | | |
|--------------------------|----------------------------|-------------|
| Thermostat | R-SENZ | 1244-017777 |
| IP44 Gasket | R-SENZ-ACC-IP44GASKET | 1244-017779 |
| Silver colored front | R-SENZ-ACC-METALFRONT | 1244-017780 |
| Anthracite colored front | R-SENZ-ACC-ANTHRACITEFRONT | 1244-017781 |
| Spare sensor | U-ACC-PP-14-SENSOR-N10K* | 1244-002952 |

*If the 1244-002952 spare sensor is used, the configuration needs to be set to the 10kΩ in the sensor settings (Settings Menu / Settings / Advanced / Sensor Type)

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