

### Description



Digital timer thermostat for floor sensing or/and room sensing applications including min. and max. floor temperature limitation function.

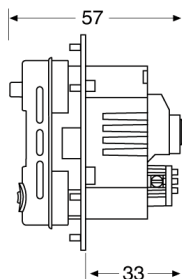
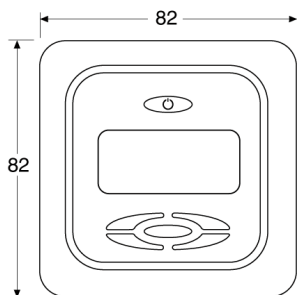
### Product Properties

- Automatic sensing of sensor mode (floor or room)
- Manual ON/OFF by 2-pole main power switch
- Big display with blue backlight
- Built-in timer function
- 4 operation modes
  - Standard mode (Comfort)
  - 2 editable pre-programmes (EcoHome, EcoOffice)
  - Summer mode (off-mode)
- Daily editable in time blocks of 30 minutes
- Adaptive function in order to reach desired temperature at desired time
- Booster function for fast heat-up (+5°C for max 2 hours)
- Read-out of actual floor sensor temperature
- Monitoring of floor or room sensor. In the event of failure of an active sensor, the underfloor heating system is switched off.
- Possibility to lock the settings e.g. public buildings

### Operation Sensor mode

- Room sensing only
- Floor sensing only
- Room sensing with min./max. floor temperature limitation e.g. for wooden floors

### Technical Data



Supply voltage	230 VAC +10%, -15%, 50/60 Hz
Relay output	Heating cable 230 V, max 13 A
Temperature range floor sensor	+5°C to +35°C
Temperature range room sensor	+5°C to +40°
Limitation of range	Low +5°C/ high +35°C
Ambient temperature-operation	0°C to +40°C
Ambient temperature-transport	-20°C to +50°C
Accuracy-floor/room sensor	+/- 0,5°C
Switching hysteresis	0,5°C
Control modes	Floor or room sensing or room sensing with limiter
Clock function	2 pre-programmes : EcoHome, EcoOffice; editable in blocks of 30 min; daily programmable
Back-up for set values	Non-volatile memory
Back-up for time and date	24 hrs
Protection class	IP21
Terminals	Max. 2,5 mm <sup>2</sup>
Floor sensor	With 3 m cable NTC, 10K / 25°C
Max length of floor sensor	100 m, 2 x 1,5 mm <sup>2</sup> (230 VAC cable)
Diameter sensor cable	4 mm
Diameter sensor tip	6 mm, length 32 mm
Dimensions with frame	H 82 x W 82 x D 57 mm
Color	Polar white RAL 9010
Approvals	Semko, VDE, EuBac

## System Information

- Raychem underfloor heating thermostats are used with
- T2QuickNet mats 90 W/m<sup>2</sup> and 160 W/m<sup>2</sup>
  - T2Red – Self-regulating heating cable
  - T2Blue 10 W/m<sup>2</sup> and T2Blue 20 W/m<sup>2</sup> heating cables

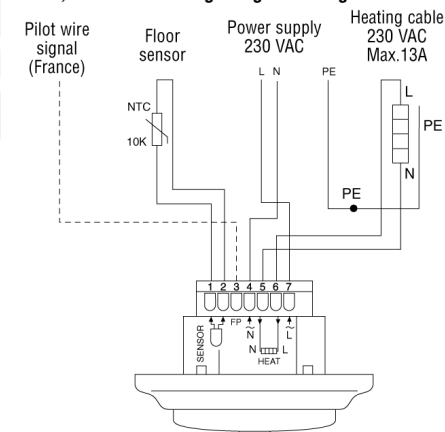
## Compatibility with wall boxes

An extra square front plate for square frames is provided as a standard.

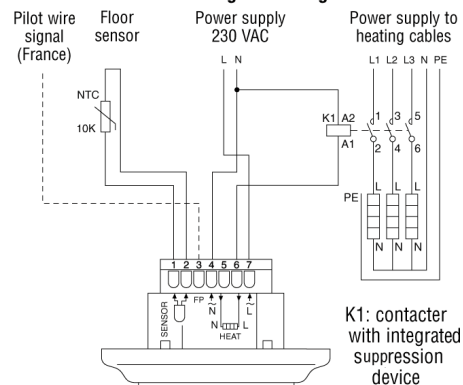
Switch manufacturer	Light switch product range
Busch + Jäger	Reflex SI, Jussi
Eljo	Trend
Elko	RS, L571
Gira	ST55 Standard, E2
Jung	AS
Merten	M-Plan, M-Smart, M-Arc, Atelier, M-Antik, Thermo, M-Star

## Wiring diagram

### Direct, connection – e.g. single heating circuit



### Connection via contactor – e.g. 3 heating circuits



K1: contactor with integrated suppression device

Do not use contactor without interference filter.

## Ordering information

R-TC-NRG 1244-002513

## Accessories

Silver-R-TC silver coloured front parts	1244-010130
Sensor-N10K spare floor sensor	1244-002952
Silver Raychem TC-NRG-Squared	1244-010132
Adapter UK wall box	1244-010134

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