

TS 320, TS 321, TS 322.

Functions

In association 4 output module TS 240, these controllers regulate the heating of either electric heaters or hot water radiators equipped with electro-thermal actuators mounted directly on the radiator or on the hot water boilers.

The TS 240 and the controllers communicate with one another via the bus 29 V **EIB**.

The controllers must be chosen according to the heater types.

The selection of the settings comfort ☼, ECO ☾, or frost protection ❄ can be done either remotely over the bus or locally by push-buttons on the controllers ①

- soft press : switching from Comfort to ECO or vice versa
- hard press (2 sec.) : switching to frost protection (reset by soft press).

Adjustment of Set Point of $\pm 4^\circ\text{C}$ by potentiometer ② on the front face of the controllers.

Display of the actual setting ③ by means of 2 LED's on the controller fascia (see diagram).

The pushbutton ① on the front allows numbering the controller while programming with configurator TS 100.

Technical Specifications

Electrical data

- Supply voltage : system voltage 29 V

Operating data

- PI regulation with integral time action

- Time basis :

- TS 320 : 20 min
- TS 321 : 10 min
- TS 322 : 5 min

- Set values :

- comfort : $21^\circ\text{C} \pm 4^\circ\text{C}$
- ECO : comfort -4°C
- frost protection : 7°C

- Adjusting range of the potentiometer :

- from 0°C to $\pm 4^\circ\text{C}$

- Regulation class : Class B

Environment

- fire classification : V0
- working temperature: 0°C to $+45^\circ\text{C}$
- storage temperature: -20°C to $+70^\circ\text{C}$

Dimensions

- $\varnothing 60$ mm dia flush mounting box, fixation by screws.

User instruction (GB)

Ambient Temperature Controller

TS 320 : underfloor heating

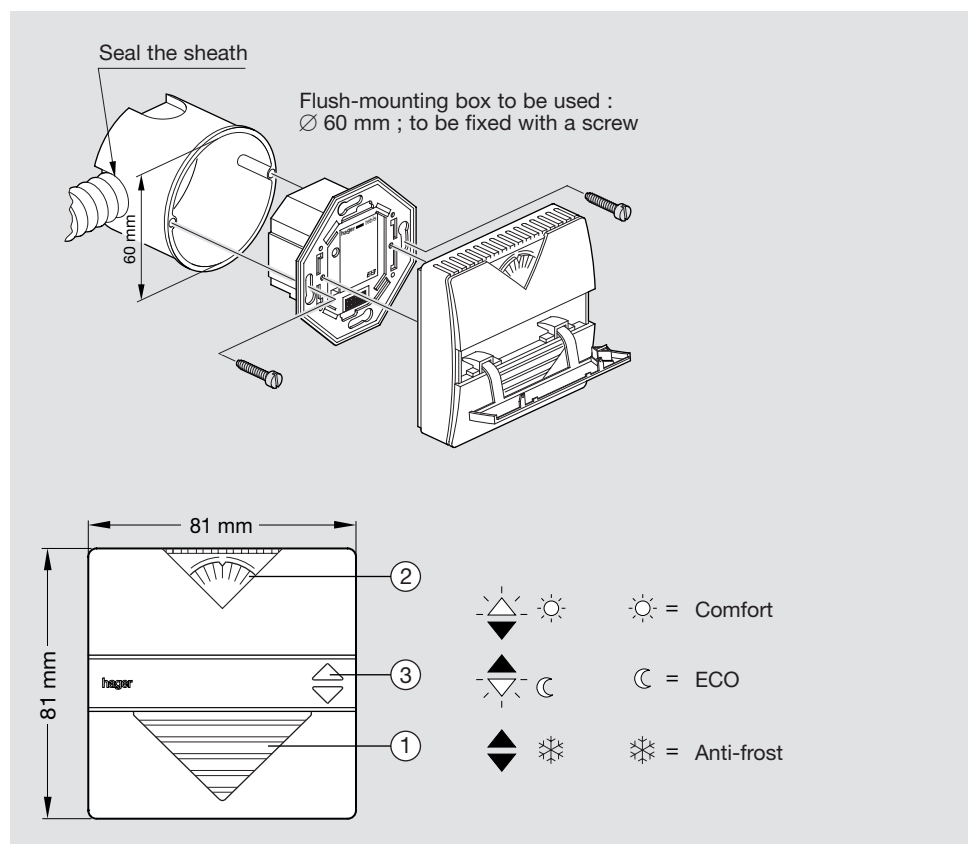
TS 321 : heating with hot water
radiators

TS 322 : electric convection
heaters.

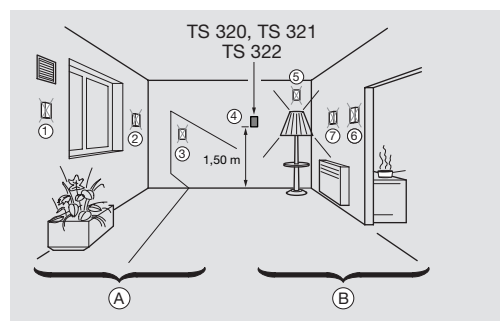
Safety Recommendations:

- Assembly may only be effected by a specialist.
- The device's function is only possible within the system tebis TS.
- Observe the installation regulations of the protection measures SELV.

Electrical connection



Installation advice for putting into operation:



Install the probe at 1,50 m from the floor, ④ on the internal wall, avoiding external influences :

(① extraction fan, ② external wall, ③ sunlight) and internal influences : (⑤ lighting device, ⑥ chimney, electrical ⑦ heater).

- (A) external influences
- (B) internal influences

Warranty

(GB)

A warranty period of 24 months is offered on hager products, from date of manufacture, relating to any material of manufacturing defect. If any product is found to be defective it must be returned via the installer and supplier (wholesaler). The warranty is withdrawn if :

- after inspection by hager quality control dept the device is found to have been installed in a manner which is contrary to IEE wiring regulations and accepted practice within the industry at the time of installation.
- the procedure for the return of goods has not been followed. Explanation of defect must be included when returning goods.