

DELTA i-system	Temperature controller UP 237	5WG1 237-2AB_1
DELTA profil	Temperature controller UP 252	5WG1 252-2AB_3
DELTA style	Temperature controller UP 254	5WG1 254-2AB_3
DELTA ambiente	Temperature controller UP 253	5WG1 253-2AB_3

As at: March 2008

## Operating and installation instructions

	DELTA i-system	DELTA profil	DELTA style	DELTA ambiente
Frames	ordered separately from the DELTA ranges			
		cut-out frames		
Bus coupling unit	bus coupling unit UP 110 or UP 114 ordered separately			

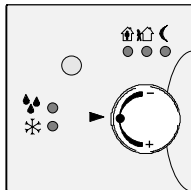


Diagram 1: temperature controller

### Product and functional description

The temperature controller can be used both as a two-step controller (thermostat) or as a continuous controller (P, PI controller) both for pure heating or cooling mode and for combined heating and cooling operation.

The associated application program compares the actual temperature measured by the temperature controller with the required setpoint temperature and calculates the relevant control variable. This control variable is then either transmitted as a switching command (ON/OFF) to switching actuators (such as the binary output UP 562) to control electrothermal valve drives in two-step control or as a positioning command (0... 100 %) for controlling a motor-driven valve drive in continuous control. The clear and self-explanatory operator interface contains 5 LEDs for displaying the current operating state, a presence button for toggling between comfort and standby mode and vice versa as well as a rotary button for adjusting the basic setpoint. The temperature controller is placed on the flush-mounted bus coupler together with the relevant DELTA frame and is only able to function in connection with the bus coupler and the associated application program.

The flush-mounted bus coupler and the appropriate frames are not included with supply and must be ordered separately.

Using the ETS program, the application programs can be selected and the specific parameters and addresses can be assigned.

### Additional Informations

<http://www.siemens.com/gamma>

### Technical data

#### Power supply

- via the flush-mounted bus coupler

#### Operating elements

- 1 rotary button for manual adjustment of the setpoint (control range dependent on the parameter setting)
- 1 presence button for toggling between comfort and standby mode and vice versa

#### Display elements

- 3 green LEDs for the current operating mode (comfort, standby, night reduction)
- 1 red LED for frost/heat protection
- 1 yellow LED for dew point alarm

#### Temperature measurement

- Measuring range: 0 ... + 40 °C
- Resolution: 0.08 K
- Accuracy of the sensor temperature:
  - ± 1.0 K under reference conditions,
  - ± 2.0 K under ambient conditions and in measuring range

#### Connections

- 10-pole plug connector (PEI): for connection to the flush-mounted bus coupler

### Mechanical data

- Dimensions:
  - Temperature controller UP 237: (L x W x D): 55 x 55 x 16 mm (without spring)
  - Temperature controller UP 252, UP 253: (L x W x D): 65 x 65 x 16 mm (without spring)
  - Temperature controller UP 254 (L x W x D): 68 x 68 x 16 mm (without spring)
- Weight: approx. 30 g

### Electrical safety

- Type of protection (according to EN 60529): IP 20

### Ambient conditions

- Ambient operating temperature: - 5 ... + 45 °C
- Storage temperature: - 25 ... + 70 °C
- Relative humidity (not condensing): 5 % up to 93 %

### Markings

- KNX / EIB

### Location and function of the operating and display elements

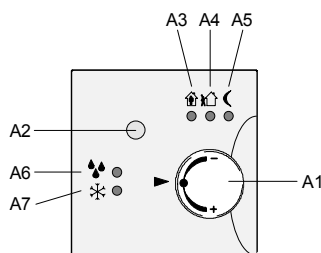


Diagram 2: Location of the operating and display elements

- A1 Rotary button for manual setpoint adjustment (control range dependent on the parameter setting)
- A2 Presence button for toggling between comfort and standby mode and vice versa
- A3 Comfort mode, display is green; lights up if the operating mode is active
- A4 Standby mode, display is green; lights up if the operating mode is active
- A5 Night reduction, display is green; lights up if the operating mode is active
- A6 Dew point alarm, display is yellow; lights up if the operating mode is active
- A7 Frost/heat protection mode, display is red; lights up if the operating mode is active

### Mounting

- The device can be used for permanent interior installations in dry rooms and for insertion in flush-type boxes.

### DANGER

- The device must be mounted and commissioned by an authorised electrician.
- The device may not be inserted in the same box as 230 V devices.
- The device may be used in switch-sockets if VDE approved devices are used.
- The prevailing safety and accident regulations should be observed.
- The device must not be opened.
- For planning and construction of electric installations, the relevant guidelines, regulations and standards of the respective country are to be considered.

### General description

The temperature controller is placed and screwed in position on the flush-mounted bus coupler together with the relevant DELTA frame.

### Notes regarding diagram 3:

- The flush-mounted bus coupler (B5) is connected in the flush-type box and fixed in position (see installation instructions for the flush-mounted bus coupler)
- Remove the rotary button (B1) from the device (B2)
- Place device with frame (B4) onto the flush-mounted bus coupler and fix in place with the screw (B3)
- Clip the rotary button (B1) on again

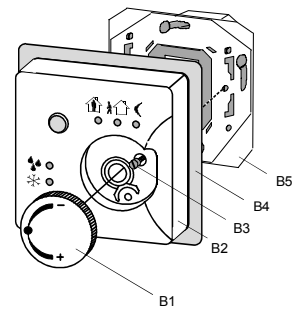


Diagram 3: Installing the temperature controller

- B1 Rotary button
- B2 Device
- B3 Fixing screw
- B4 Frame
- B5 Flush-mounted bus coupler

### Dismantling

- Remove the rotary button (B1)
- Loosen the screw (B3)
- Remove the device together with the frame
- Remove the flush-mounted bus coupler (B5) in accordance with the instructions for dismantling

### General Notes

- The operating instructions must be handed over to the client.
- Any faulty device should be returned to the local Siemens office.
- If you have further questions concerning the product please contact our technical support:

+49 (180) 5050-222  
 +49 (180) 5050-223  
[www.siemens.com/automation/support-request](http://www.siemens.com/automation/support-request)