

Bus temperature controller  
BTR65H/12V DC



**Only skilled electricians may install this electrical equipment otherwise there is the risk of fire or electric shock!**

Temperature at mounting location:  
-20°C up to +50°C.  
Storage temperature: -25°C up to +70°C.  
Relative humidity:  
annual average value <75%.

Bus temperature controller with hand wheel for connection to the RS485 bus gateway BGW14. For single mounting or mounting into the E-design switching system. 84x84 mm, 27 mm high. Installation depth 33 mm. Only 0.1 watt standby loss.

For installation in 55 mm switch boxes. Data transmission and power supply take place over the 4-wire bus with a 12V DC mains adapter. Up to 16 BTR devices can be connected to the RSA/RSB terminals of the RS485 Bus Gateway BGW14. The permitted total line length is 1,000 m. The second 120Ω terminal resistor supplied with the BGW14 must also be connected to the RSA/RSB terminals of the remotest BTR device.

We recommend stainless-steel countersunk 2.9x25 mm, DIN 7982 C, for screw connections. Both with rawl plugs 5x25 mm and with 55 mm switch boxes. Set of 2 stainless-steel countersunk screws 2,9x25 mm and plugs 5x25 mm are enclosed.

The bus temperature controller sends a message on the RS485 bus within 20 seconds when there is a change of min. 0.15°C in the actual or reference temperature.

Measurement accuracy is approx. 1°C. The **reference temperature** that ranges from +12°C to +28°C is changed using the hand wheel.

In the  position, the set temperature is 8°C (frost protection).

#### Set BTR bus address:

Remove the cover panel and the rotary knob to set the bus address. You now have access to the rotary switches. Set a different bus address for each of the maximum 16 BTR devices.

#### Error messages:

If several BTR devices have the same bus address, the LED under the cover panel flashes. If there is an interruption in bus communication, the LED under the cover panel lights up continuously. The bus temperature can be taught in the heating/cooling relays FHK14, F4HK14 and FAE14.

#### Send teach-in telegram:

In order to teach the bus temperature controller in an actuator prepared for teach-in, remove the cover panel and the rotary knob. The LRN pushbutton is then accessible. Press it briefly.

#### Data transmission:

EEP: A5-10-06

Teach-in telegram: 0x40300D87

Data telegram:

Data\_byte0 = 0x0F

Data\_byte1 = Actual temperature

0xFF..0x00 corresponds 0..40°C

Data\_byte2 = reference temperature

0x00..0xFF corresponds 0..40°C

#### Must be kept for later use!

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