Bus temperature sensor
BTF55E/12V DC-

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 sensor for connection to the RS485 bus gateway BGW14. For single mounting or mounting in the E-Design55 switching system. 80x80 mm, 15 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 12 V DC mains adapter. Up to 16 BTF 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 120 Ω terminal resistor supplied with the BGW14 must also be connected to the RSA/RSB terminals of the remotest BTF 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 sensor sends a message on the RS485 bus within 20 seconds when there is a change of min. 0.15°C in the actual temperature.

Measurement accuracy is approx. 1°C.

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

Error messages:
If several BTF 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 sensor can be taught in the heating/cooling relays FHK14, F4HK14 and FAE14.

Send teach-in telegram:
In order to teach the bus temperature sensor in an actuator prepared for teach-in, remove the cover panel. The LRN push-button is then accessible. Press it briefly.

Data transmission:
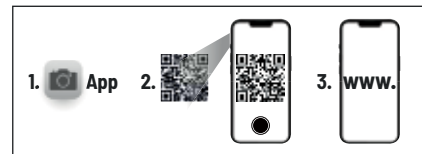EEP: A5-02-05
Teach-in telegram: 0x08280D87
Data telegram:
Data_byte0 = 0x0F
Data_byte1 = Actual temperature 0xFF..0x00
corresponds 0..40°C

Must be kept for later use!