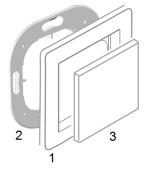
Cever & smart

MERZ clever&smart Room Sensor 3 F810 41

Digital room temperature sensor with communication via 1-Wire bus in connection with the HERZ clever&smart Control Box.

Technical Data	
Power Supply	5 VDC SELV or PELV
Measurement Range	0 °C 60 °C
	Accuracy +/- 1 °C Resolution 0.1 °C
Protection Class	IP 20
Max. Cable Length	up to 100 m powered (three-wire connection recommended), using twisted pair cables
Dimension	55 mm x 55 mm
Housing Design	plastic housing pure white
Installation Methods	Surface / flush-mounted

Wall Installation



Mount the HERZ clever&smart Room Sensor in a suitable place.



Caution! Device and function may be damaged. Select a suitable environmental condition. Direct sunlight, sources of heat and cold, e.g. radiators and windows must be avoided.

Mounting in flush-mounted switch box

wire cross-section e.g. LIYCY 2 x 2 x 0.75mm²

Attach the mounting ring to the switch box with the arrow pointing upwards (2). Make the electrical connection as described below.

Attach insert

Hold the cover frame (1 - not included in the scope of delivery) against the mounting ring (2). Align the HERZ clever&smart Room Sensor (3) to fit the mounting ring and push it on.

For the connection of a HERZ clever&smart Room Sensor, one of the terminal points VDD/ DQ/ GND is required in each case. The

additional three clamping points are for easy connection of further sensors. Use a suitable twisted pair cable and ensure sufficient

Surface mounting

Use the surface-mounted frame set 3 F810 52 for surface mounting.

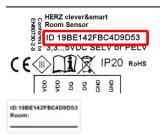
Electrical Connection



Only to be used with SELV or PELV protective extra-low voltage.

If shielded cables are used, contact between the shielding and the PCB can cause damage to the device and lead to malfunctions.

💟 Type Plate and Sticker with 1-Wire ID



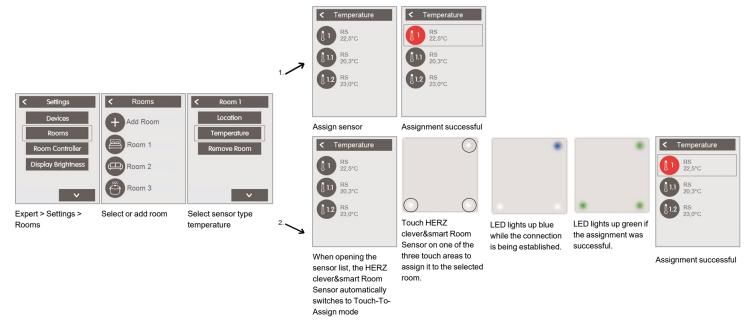
Each HERZ clever&smart Room Sensor has a unique 16-digit 1-Wire ID. This ID is required for sensor-room assignment in HERZ clever&smart Room Controller. The ID can be found inside the sensor on the type plate and on the supplied sticker. We recommend sticking the sticker in the table of the HERZ clever&smart Control Box instruction manual or in the HERZ clever&smart Control Box terminal plan sticker to simplify the later configuration of the system.



MERZ clever&smart Room Sensor room assignment

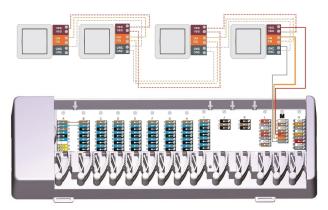
There are two ways to assign a room to the HERZ clever&smart Room Sensor:

- 1. Using the unit ID via the HERZ clever&smart Room Controller menu 'Expert -> Settings -> Room X -> Temperature'.
- 2. As described under 1. via the HERZ clever&smart Room Controller menu in combination with the Touch-To-Assign function (T2A) on the HERZ clever&smart Room Sensor.



☑ Connection examples

Example 1: Series connection. The installation leads from one sensor to the next.



The 1-Wire system must be realised with 3 wires (5 VDC, DQ, GND). The wiring must be done in series, see diagram opposite. Stub lines should be avoided or made as short as possible. The total cable length can be up to 100 m. A suitable twisted pair cable must be used and sufficient conductor cross-section must be ensured, e.g. LIYCY 2 x 2 x 0.75 mm², in order to avoid impermissible voltage drop at the HERZ clever&smart room sensors.

Example 2: Tree structure. Several stub lines lead from one main line to the individual sensors.

