Room Sensor 1-Wire 55 mm flush-mount variant UP
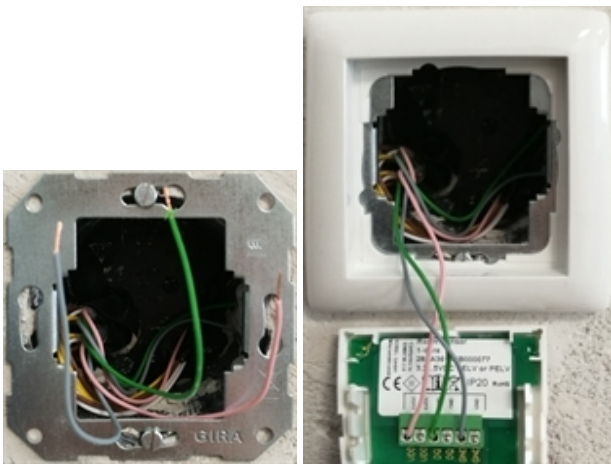
Digital room temperature sensor with communication via 1-wire bus in combination with °CALEONbox.

Technical Data

Power Supply	3,3 VDC ... 5 VDC SELV or PELV
Measurement Range	0 °C ... 60 °C
	Accuracy: +/- 1 °C
	Resolution: 0,1 °C
Protection Class	IP20
Max. Cable Length	up to 100 m powered (three-wire connection recommended), up to 50 m parasitic (two-wire connection), using twisted pair cables
Dimension	80 mm x 80 mm
Housing Design	white plastic housing pure white
Installation Methods	flush-mounted switch box

Wall Installation
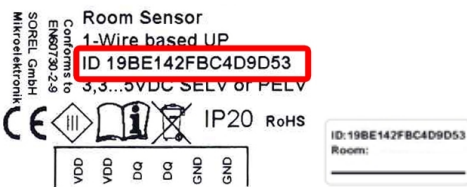
Mount the sensor in a suitable location.

⚠️ Pay attention to suitable environmental conditions. Direct sunlight, sources of heat and cold, e.g. radiators and windows must be avoided.

Mounting on Pastic Wall Socket
Using the enclosed screws (3.0 x 16) fix the mounting frame to the switch box. Open the terminals with a screwdriver and make the electrical connection as described below.

Type Plate and Sticker with 1-Wire ID

Each sensor has a unique 16-digit 1-Wire ID. This ID is required for sensor-room assignment in the °CALEON Room Controller. The ID can be found inside the sensor on the type plate and on the supplied sticker. To simplify the later configuration of the system, we recommend to place the sticker in the table of the °CALEONbox operating instructions or on the °CALEONbox terminal diagram sticker.
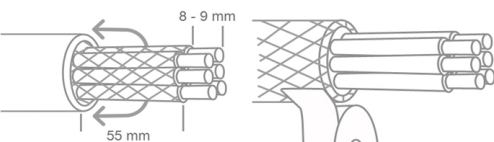
Electrical Connection

VDD	3,3 ... 5 VDC+
VDD	3,3 ... 5 VDC+
DQ	1-Wire Data
DQ	1-Wire Data
GND	GND -
GND	GND -

One of the terminal points VDD/DQ/GND is required for the connection of a sensor. The additional three clamping points are for easy connection of further sensors.
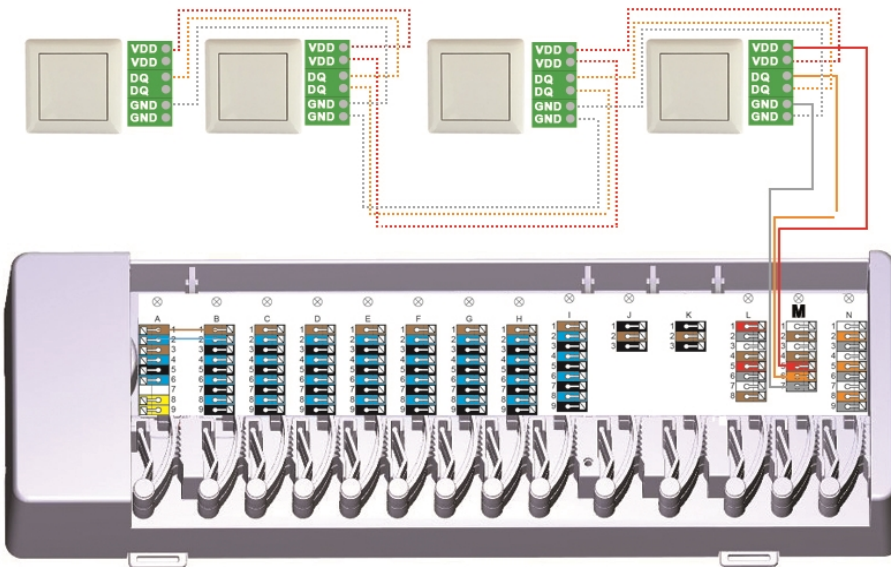
⚠️ Only to be used with SELV or PELV protective extra-low voltage.
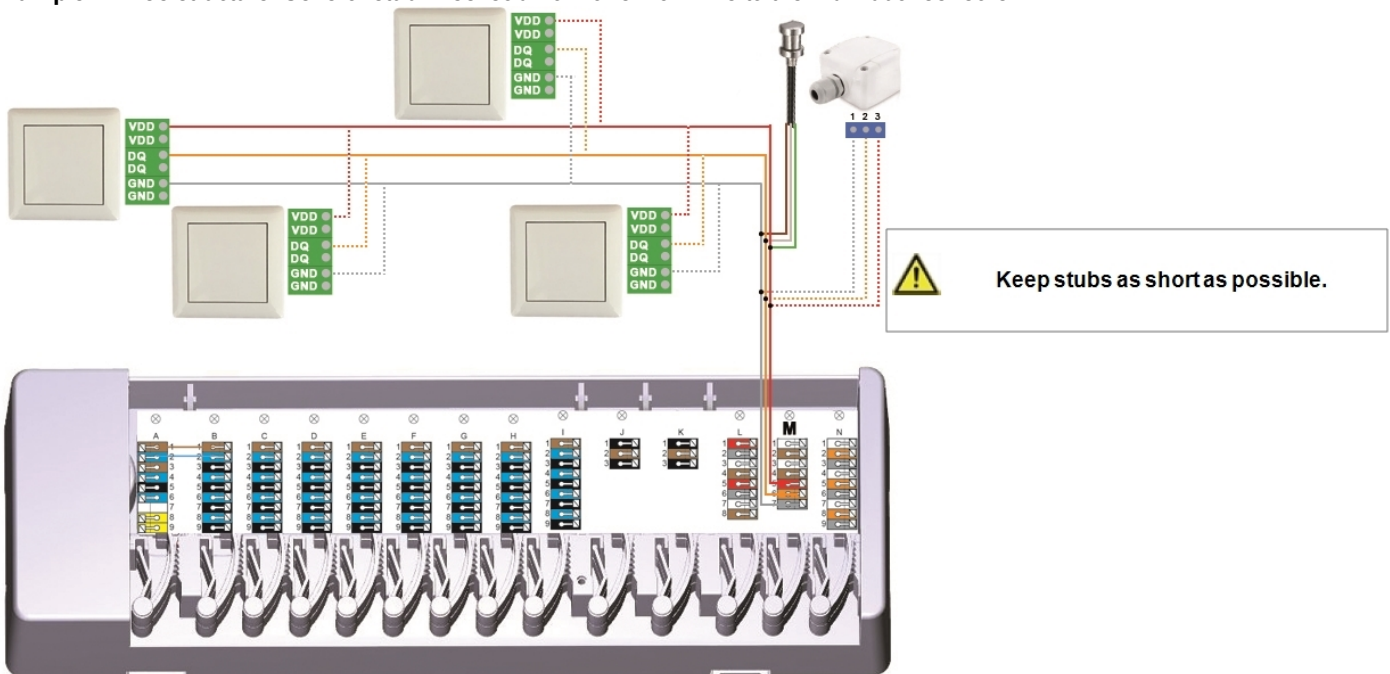
⚠️ If shielded cables are used, contact between the shielding and the PCB can cause damage to the device and lead to malfunctions.

Connection Examples 1-Wire Sensors

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

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

⚠ **Keep stubs as short as possible.**

Insert the Element

1. Hold the cover frame to the mounting frame.
2. Align the 55-mm element with the mounting frame.
3. Push in the 55-mm element until it snaps into the frame.