

Room Sensor T2A

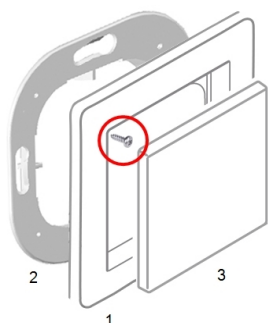
Digital room temperature sensor with communication via 1-Wire bus in connection with the °CALEONbox.



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 Room Sensor T2A 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

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

Attach insert

Screw the cover frame (1 - not included in the scope of delivery, art. no.: 82001) to the mounting ring (2) **diagonally at the top left and bottom right** using the two screws (2.2 x 4.5 mm) supplied. Align the Room Sensor T2A (3) to fit the mounting ring and push it on.

Surface mounting

Use the surface-mounted frame set for surface mounting Art. No.: 82002.

Electrical Connection

VDD	5 VDC +
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DQ	1-Wire Data
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GND	GND -
GND	GND -

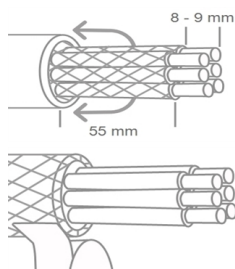
For the connection of a Room Sensor T2A, one of the terminal points VDD/ DQ/ GND is required in each case. The additional three clamping points are for easy connection of further sensors. Use a suitable twisted pair cable and ensure sufficient wire cross-section e.g. LIYCY 2 x 2 x 0.75mm²



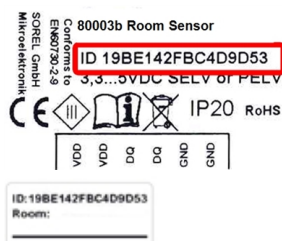
Only to be used with SELV or PELV protective extra-low voltage.



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

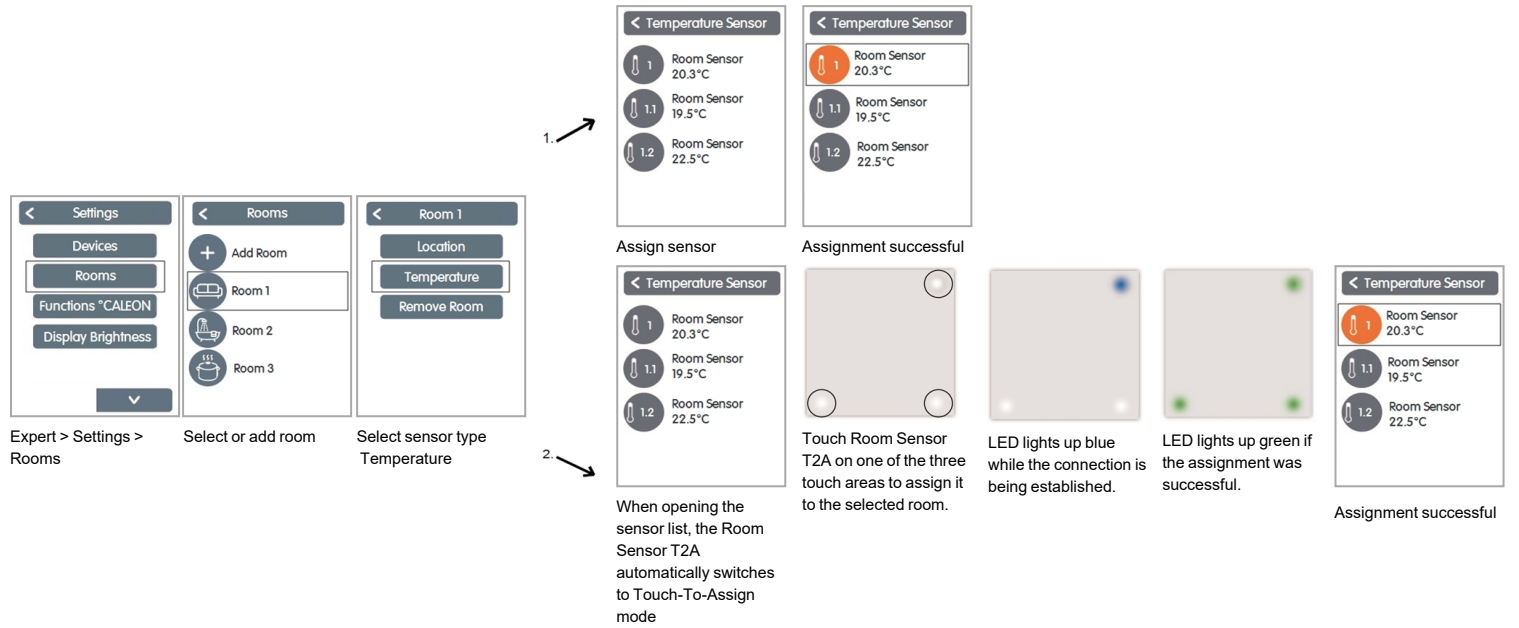


Each Room Sensor T2A has a unique 16-digit 1-Wire ID. This ID is required for sensor-room assignment in °CALEON . The ID can be found inside the sensor on the type plate and on the supplied sticker. We recommend placing the sticker in the table of the °CALEONbox instruction manual or in the °CALEONbox terminal plan sticker to simplify the later configuration of the system.

Room Sensor T2A room assignment

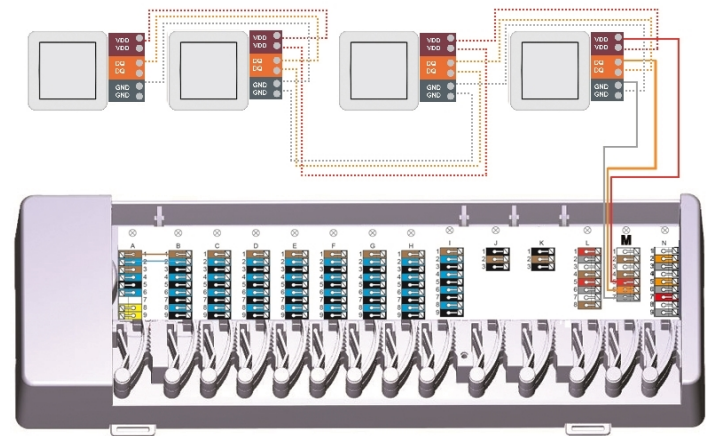
There are two ways to assign a room to the Room Sensor T2A:

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



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 Room Sensor.

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

