TH-UP basic
Temperature and humidity sensor

Technical specifications and installation instructions
Item number 30525

Insert for 55 mm frame

1. Description

The **TH-UP basic indoor sensor** is an indoor climate sensor specially designed for the KNX B8-TH interface. **TH-UP basic** measures temperature and air humidity.

The housing is supplemented with a frame of the switch series used in buildings, and thus fits seamlessly into the interior fittings.

Functions:
- Measuring of **temperature** and **air humidity**

1.1. Deliverables

- Sensor board/baseplate
- 55 mm housing
- Connection line

1.1.1. Accessories required

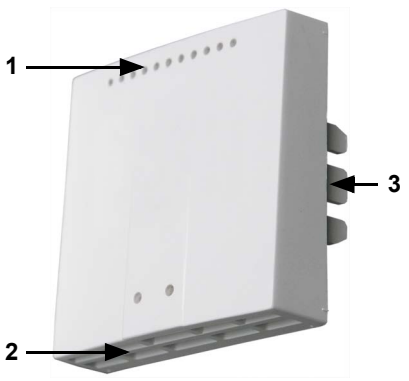
- Device socket according to DIN 49073
- Frame (for insert 55 x 55 mm), compatible to the switch scheme used in the building

1.2. Technical specifications

General:	
Housing	Plastic
Colours	• White, glossy, similar to RAL 9016 traffic white • Special colours on request
Assembly	on device socket according to DIN 49073
Dimensions	Housing approx. 55 x 55 (W x H, mm), Installation via socket approx. 18.5 mm, Total depth approx. 25.5 mm, Baseplate/board approx. 71 x 71 (W x H, mm),
Total weight	approx. 45 g
Output length	approx. 62 cm
Ambient temperature	-5…+45°C
Ambient humidity	0...95% RH, non-condensing
Storage temperature	-10…+60°C
Overvoltage category	III
Degree of contamination	2
Connection	Connection via 4-pole socket and supplied connection line approx. 62 cm, not extendable (SELV)
Sensors:	
Temperature measuring range	0…+50°C
Temperature resolution	0.1°C
Humidity measuring range	0…95% RH
Humidity resolution	0.1% RH
Humidity drift	± 0.5% RH per year in normal atmosphere

The product is compliant with the provisions of EC guidelines.

1.2.1. Construction of the sensor



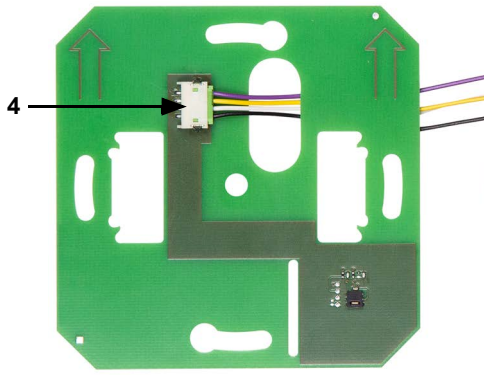


Fig. 1
Housing:
1 Openings for air circulation
2 Openings for air circulation (LOWER)
3 Fixing clamp

Board/baseplate:
4 Connection socket with connection line

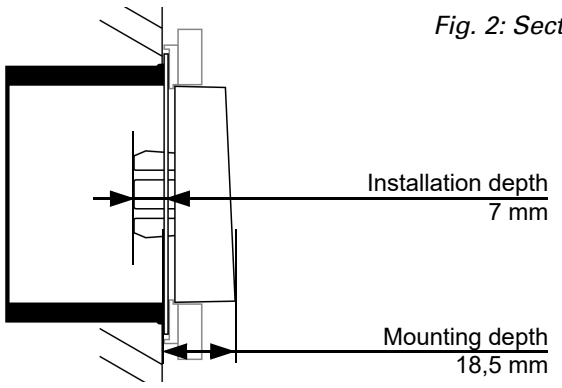


Fig. 2: Sectional view

2. Safety and usage instructions

Installation, testing, operational start-up and troubleshooting should only be performed by an authorised electrician.

CAUTION!
Live voltage!
There are unprotected live components inside the device.
- Inspect the device for damage before installation. Only put undamaged devices into operation.
- Comply with the locally applicable directives, regulations and provisions for electrical installation.
- Immediately take the device or system out of service and secure it against unintentional switch-on if risk-free operation is no longer guaranteed.

Use the device exclusively for building automation and observe the operating instructions. Improper use, modifications to the device or failure to observe the operating instructions will invalidate any warranty or guarantee claims.
Operate the device only as a fixed-site installation, i.e. only in assembled condition and after conclusion of all installation and operational start-up tasks, and only in the surroundings designated for it.
Elsner Elektronik is not liable for any changes in norms and standards which may occur after publication of these operating instructions.

3. Installation

3.1. Installation location and preparation

The sensor is installed on a device socket.

The sensor may only be installed and used in dry interior spaces. Avoid condensation.

First, install the box with the supply connection. Seal the inlet tubes in order to prevent draughts.

When selecting an installation location, please ensure that the measurement results are affected as little as possible by external influences. Possible sources of interference include:
- Direct sunlight
- Draughts from windows and doors
- For flush-mounted fitting: Draughts from ducts which lead to the junction box in which the sensor is mounted from other rooms.
- Warming or cooling of the building structure on which the sensor is mounted, e.g. due to sunlight, heating or cold water pipes
- Connection lines, which lead from warmer or colder areas to the sensor

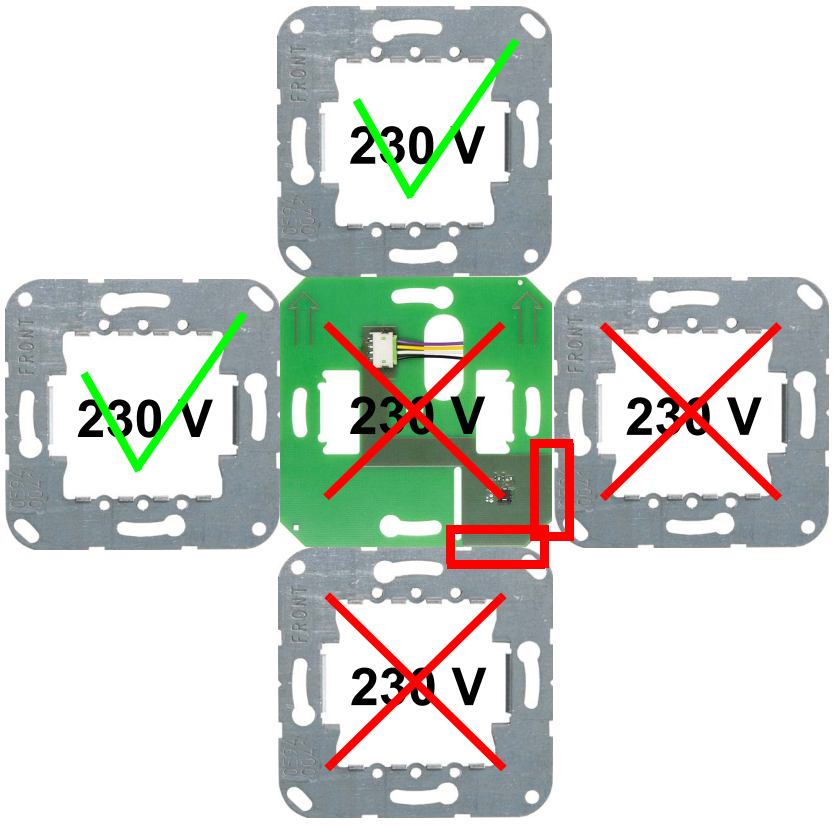
3.2. Connection

Comply with the installation conditions for SELV installation!
Prevent contact between the mains voltage line and SELV wiring!
- Do not route the connection cables together with 230 V wiring in boxes and connections (pipes)!

The lower right corner of the board is conductive for **TH-UP basic**. This area must be insulated from metal parts that are connected to 230 V wiring. Avoid, for exam-

ple, contact with metal support frames, which can provide a conductive connection to boxes with 230 V wiring.

Fig. 3



Connect the sensor to the KNX B8-TH interface using the supplied connection line.

Then screw the board/baseplate to the box. Make sure that the front side of the connection socket points away from the wall and that the arrows are pointing upward.

Move the frame into place. Insert the sensor housing firmly into the metal frame using the fixing clamps, so that the housing and frame are fixed together.

4. Disposal

After use, the device must be disposed of in accordance with the legal regulations. Do not dispose of it with the household waste!