theben KNX

307032 04

Meteodata 140 S 24V KNX 1409201
Meteodata 140 S 24V GPS KNX 1409204

Weather station

1. Designated use

The weather station measures temperature, brightness and wind speed. A rain sensor is also installed on the top of the device. The device is designed for use on buildings.

Time/date and position can be received via an integrated GPS module (with Meteodata 140 S 24V GPS KNX – 1409204).

ETS (Engineering Tool Software) enables application programs to be selected, specific parameters and addresses to be assigned and transferred to the device.

2. Safety instructions

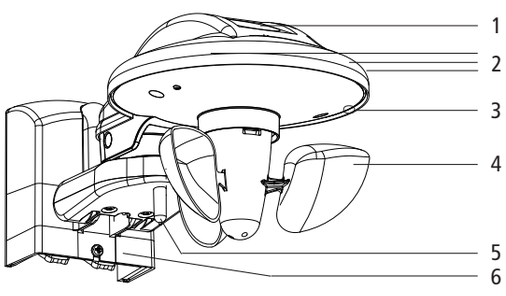
⚠

- Installation should only be carried out by a professional electrician.
- Please note the provisions of EN 50428 for switches or similar installations for use in building system technology regarding the correct installation of bus lines and setting up of devices. Tampering with, or making modifications to, the device will invalidate the guarantee.
- Observe extra-low voltage.

⚠ Rain sensor becomes hot during use
Do not touch the rain sensor.

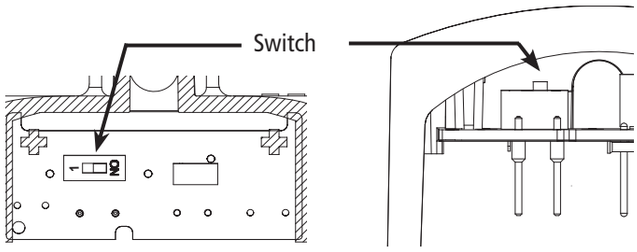
- Rain is only detected when the rain sensor is sufficiently wet. There can be a delay between the first raindrops in a shower to the point where rain is detected.
- When the rain stops, and despite heating, it can take several minutes before the sensor is dry again and the device is able to detect that correctly.
- **Caution**: When it is windy, awnings/blinds take time to retract. Configure the wind thresholds below the value provided by the awning/blinds manufacturer.

3. Description



1 Rain sensor with heating
2 three light sensors (front, right and left)
3 Programming push button and LED for the physical address
4 Rotor
5 Temperature sensor
6 Wall bracket with connection for supply 24 V and bus connection (KNX)

Set supply voltage

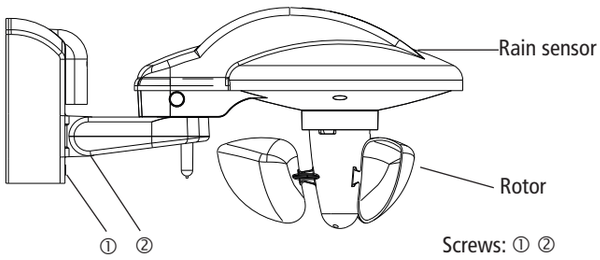


ON Switch the switch to ON (factory setting) if an external power unit is used

1 Switch the switch to 1 if the auxiliary voltage of the KNX power unit is used

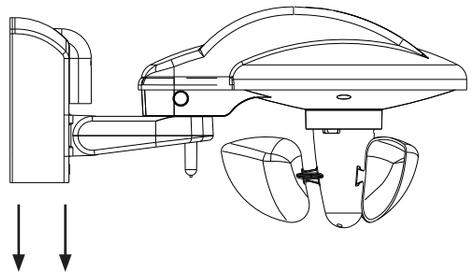
4. Installation

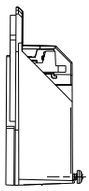
- Do not install the wind sensor in a sheltered position.
- Avoid shadows (e.g. from masts etc.) and reflected light.
- Pay attention to mounting position
  – Rain sensor pointing up
  – Rotor pointing down



Wall-mounting

- Secure the wall bracket to the wall etc. with the screws and washers provided (see chap. 5).
  The washers are important to achieve the IP 44 protection rating.
- Feed the cables through the rubber seals and insert in the terminals.
- Loosen the screws ②.
- Push down the weather station until it clicks into place.
- Tighten screw ①.
- Install the weather station horizontally and tighten screws ②.





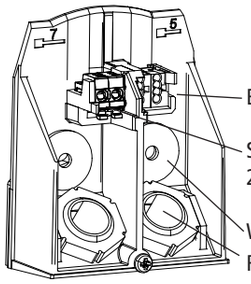
Wall bracket with terminals

Mast or corner bracket fixing

The weather station can also be attached to a mast with mast or corner fixing (accessory 9070380).

This installation method is recommended if wind is to be registered from all directions

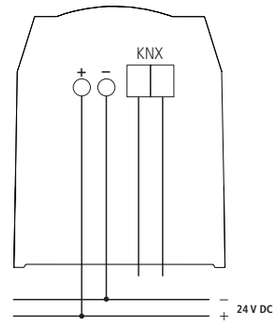
5. Electrical connection



Feed in lines

- ➢ Feed cable for 24 V connection or for bus through the rubber seals provided- and plug the lines into the screwless terminal or the bus terminal.
- ➢ Ensure correct polarity.

The weather station can be operated without 24 V supply. The heating of the rain sensor will not function then (no dew suppression).



6. Enter physical address

- ➢ Press the programming push button **3** on the bottom of the device with a screwdriver.
  The programming LED flashes.

  Meteodata 140 S 24V KNX is in program mode.

7. Technical data

- Operating voltage: 15 – 34 V DC (SELV)
- Max. power input: 350 mA (at 15 V)
- Max. power input when connected
  – to KNX auxiliary voltage: 180 mA
  – to 24 V DC 210 mA
- Bus power draw:
  ≤ 7 mA (Meteodata 140 S 24V KNX)
  ≤ 15 mA* (Meteodata 140 S 24V GPS KNX)
- Permissible ambient temperature: –20 °C ... +55 °C
- Protection class: III subject to correct installation
- Protection rating: IP 44 in accordance with EN 60529
- Bus voltage KNX: 21 – 32 V DC
- Cable: max. cable cross-section 1.5 mm²
  JSTY 2 x 2 x 0.8 mm (bus cable)
- Mast installation: Dm 50–60 mm (accessory 9070380)
- Wind sensor: 2–30 m/s
- Brightness sensor (3): 1–100,000 lux
- Temperature sensor: –30 °C to +60 °C
- Rain sensor display: rain/no rain

* only during satellite search for approx. 1 min after start-up, afterwards < 7.5 mA

The ETS database is available at **www.theben.de**
Please refer to the KNX Handbook for detailed functional descriptions.

Caution
In case of installation or replacement, always use the right application! Meteodata 140 and Meteodata 140 S require different applications!
See: **www.theben.de**

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