Weather sensor with weather control unit
for KNX
5146 00

# GIRA

KNX®

# Weather sensor with weather control unit

## Safety instructions

Electrical devices may only be connected and mounted by a qualified electrician.

Serious injury, fire or damage to property possible. Read and follow these instructions completely.

These instructions are an integral part of the product and must be kept by the customer.

### General information

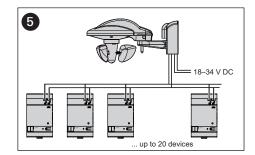– With the modular weather sensor system consisting of a weather sensor and weather control unit, the devices cannot be used individually.
– The weather sensor detects wind, precipitation, brightness (3x) and temperature. This information is evaluated and processed by the weather control unit.

### Intended use

– Operation in the KNX system
– The weather station detects temperature, brightness, wind speed and rain and sends these measured values to the weather control unit to be evaluated.
– For use in private homes and relatively small offices and functional buildings

## Device components

### Sensor system ❶

(1) Precipitation sensor with heating
(2) 3 brightness sensors
(3) Rotor
(4) Temperature sensor
(5) Screws
(6) Screws
(7) Wall mount with terminals (connection for power supply and weather control unit)

### Brightness sensors ❷

(1) Front
(2) Left
(3) Right

### Weather control unit ❸

(1) Weather sensor connection
(2) Weather sensor status LED
 – flashing green = OK
 Weather sensor data is received at intervals. If data packages are missing, this results in an error message.
 – red = error
 No data from the weather sensor.
(3) KNX connection
(4) Programming button
(5) Programming LED

### Wall mount ❹

(1) Weather control unit connection (A/B)
(2) Power supply connection (+/-)

# Mounting

**Weather control unit**: to be installed in a distributor or small housing for quick fastening to the top-hat rail (in accordance with EN 60715).

**Weather sensor**: Mounting on the wall of the building (where appropriate with mast mounting – order no. 5148 00).

⚠ **Warning**
Precipitation sensor becomes hot when in operation! Do not touch the precipitation sensor.

1. Do not mount the wind sensor in a leeward position.
2. Avoid shadows (e.g. from masts etc.) and light reflections.
3. Observe the mounting position.
   – Precipitation sensor at the top
   – Anemometer at the bottom
4. Mount the wall mount to the wall using the screws and washers provided (to comply with IP 44).
5. Guide the cables through the rubber seals and insert them into the terminals.
6. Loosen the screws ❶/(5).
7. Push the weather station into the wall mount from above.
8. Tighten the screws ❶/(6).
9. Align the weather station horizontally and tighten the screws ❶/(5).

# Connection ❺

Only one weather sensor is required per building and up to 20 weather control units can be connected.

1. **Weather control unit:** connect according to the figure (see ❹ and ❺).
2. **Weather sensor:** Guide the cable for the electrical connection and for the connection to the weather control unit through the rubber seals provided.
3. Connect the cable for the electrical connection to the power supply. Pay attention to the polarity (+/-)!
4. Insert the cable for the connection to the weather control unit into the plug terminal. Pay attention to the polarity (A/B).

# Start-up

Start-up is performed with ETS5 version 5.7.7 and higher and ETS6 version 6.0.2 and higher.

– Enter or scan the device certificate and add it to the project. We recommend using a high-resolution camera to scan the QR code.
– It is recommended that you remove the device certificate from the device when mounting the device. This can be found on the right-hand side of the weather control unit.
– Note down all passwords and keep them safe.

# Technical data

**Weather sensor**

| | |
|---|---|
| Ext. operating voltage Supply: | 18–34 V DC |
| Internal energy consumption: | max. 5 W |
| Connection between weather sensor and weather control unit: | 0.6 to 0.8 mm (bus line e.g. J-Y(St)Y 2 x 2 x 0.8) |
| Connection type: | push-lock terminal & connection terminal |
| Mounting type: | wall or mast mounting |
| Protection type: | IP44 |
| Protection class: | III |
| Rated surge voltage: | 0,8 KV |
| Ambient temperature: | -20°C to +55°C |
| Wind measurement range: | 2 to 30 m/s |
| Brightness measurement range: | 1 to 100,000 lux |
| Temperature measurement range: | -30°C to +60°C |
| Dimensions: | 105 x 121 x 227 mm (H x W x D) |

**Weather control unit**

| | |
|---|---|
| KNX medium: | TP256 |
| KNX start-up mode: | S mode |
| KNX bus voltage: | DC 21 – 32 V/< 10 mA |
| Internal energy consumption: | max. 0.5 W |
| KNX connection: | 0.6 to 0.8 mm (bus line e.g. J-Y(St)Y 2 x 2 x 0.8) |
| Maximum cable length between weather sensor and weather control unit: | 1,000 m |
| Protection type: | IP20 |
| Protection class: | III |
| Rated surge voltage: | 0.8 KV |
| Number of weather control units that can be connected to a single weather sensor: | 20 |
| Ambient temperature: | -5°C to +45°C |
| Dimensions: | 3 HP |

# Accessories

| | |
|---|---|
| Mast mounting ø 48 to 60 mm | Order no. 5148 00 |