Wind sensor
Art.-No.: WS 10 W
Rain sensor
Art.-No.: WS 10 R

Operationsmanual

1 Safety instructions

Electrical equipment may only be installed and fitted by electrically skilled persons.

Failure to observe the instructions may cause damage to the device and result in fire and other hazards.

Do not operate in the vicinity of chimneys or other exhaust or ventilation systems. Doing so will compromise function.

Do not operate in the vicinity of radio transmitter systems. Doing so will compromise function.

Select the mounting place so that the device will still be accessible for maintenance purposes.

Do not lay sensor cables parallel to mains- or load-transmitting cables. Doing so will compromise function.

These instructions are an integral part of the product, and must remain with the end customer.

2 Function

Intended use

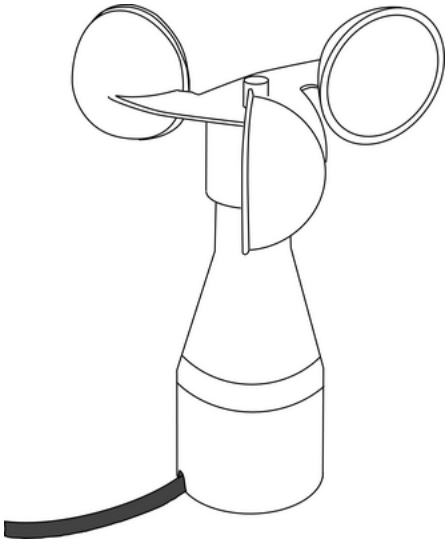
- Sensors for measuring weather data
- Power is supplied to the sensors and the sensor signals are evaluated via additional electronics, e.g. a weather station

Wind sensor (picture 1):

- Detection of the horizontal wind speed
- Vertical installation in outdoor areas, e.g. on walls of buildings, using the supplied mounting bracket

Rain sensor (picture 2):

- Detection of precipitation
- Installation in outdoor areas, e.g. on walls of buildings, using the supplied 110° mounting bracket



picture 1: Wind sensor – View

Product characteristics

Wind sensor

- Measurement of the rotational speed of the anemometer
- Output with analogue output signal 0...10 V
- Maintenance-free
- Operation without additional power supply possible

i Recommendation: To avoid dew and condensation, use a separate 24 V AC/DC power supply for heating (see chapter 4.2. Accessories).

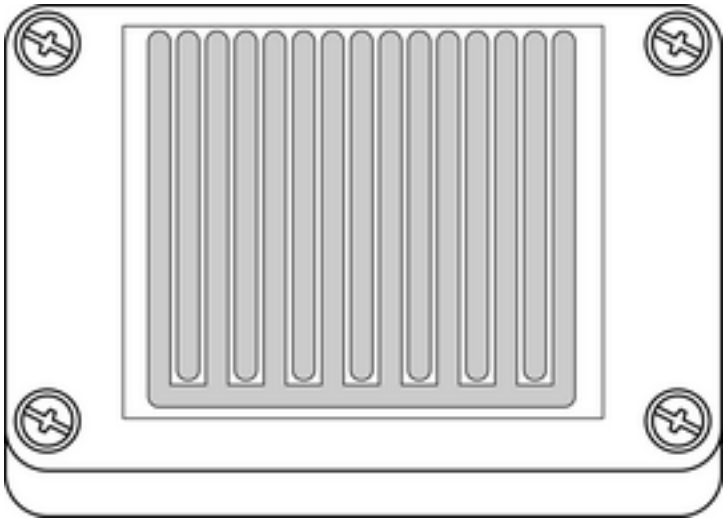
i For proper function, the anemometer must be able to rotate freely. Heavy fouling, icing or frozen precipitation can jam the anemometer.

Rain sensor

- Measurement of the electrical conductivity on the sensor surface
- Output by means of analogue output signal: 0= dry, 10 V = rain
- Heating of the sensor surface with separate 24 V AC/DC power supply (see chapter 4.2. Accessories)

i The sensor signal is reset when the sensor surface has dried out and a run-on time of 4 minutes has elapsed. The heater speeds up the drying and melts snow and ice.

i For proper function, clean the rain sensor regularly with a mild cleaning agent.



picture 2: Rain sensor – view

3 Information for electrically skilled persons

3.1 Fitting and electrical connection

DANGER!

Electrical shock on contact with live parts in the installation environment.

Electrical shocks can be fatal.

Before working on the device, disconnect the power supply and cover up live parts in the working environment.

Mounting and connecting the wind sensor

Selecting a suitable installation location. Do not install in wind shadows or locations with strong turbulence, updrafts, etc.

- Mount wind sensor vertically on the building wall using the enclosed mounting bracket.
- Connect wind sensor to an evaluation device, e.g. a weather station.

brown	Operating voltage 24 V DC
white	Operating voltage earth, GND
green	Sensor signal 0...10 V output
yellow	Sensor signal earth, GND output
grey, pink	Heating connection
green-yellow	Shield, earth connection

Installing and connecting the rain sensor

Select a suitable installation location: rain must be able to reach the sensor in an unobstructed manner. Do not install under projecting roofs.

- Mount rain sensor on wall of building using enclosed 110° mounting bracket.
- Connect rain sensor to an evaluation device, e.g. a weather station.

brown	Operating voltage 24 V DC
green	Sensor signal 0...10 V output
white	Common earth operating voltage/sensor signal, GND
yellow, grey	Heating connection

4 Appendix

4.1 Technical data

Wind sensor, Art.-No.: WS 10 W

Supply	
Rated voltage	DC 18 ... 32 V SELV
Current consumption	6 ... 12 mA
Heating	
Rated voltage	AC/DC 24 V
Switch-on current	max. 1 A
Ambient conditions	
Ambient temperature	-25 ... +60 °C
Safety class	III
Protection rating	IP 65 (in position for use)
Output signal	
Measuring range	0.9 ... 40 m/s
Load	max. 60 m/s (for short periods)
Output voltage	DC 0 ... 10 V
Load	min. 1.5 kΩ
Connection cable	
Cable type	LiYY 6x0.25 mm²
Cable length	approx. 3 m
Can be extended up to	max. 100 m
Dimensions Ø×H	134×160 mm
Weight	approx. 300 g

Rain sensor, Art.-No.: WS 10 R

Supply	
Rated voltage	DC 15 ... 30 V
Current consumption	approx. 10 mA
Heating	
Rated voltage	AC/DC 24 V
Power consumption	max. 4.5 W

Ambient conditions	
Ambient temperature	-30 ... +70 °C
Safety class	III
Protection rating	IP 65
Output signal	
Output voltage	DC 0 / 10 V
Load	min. 1 kΩ
Reaction time	max. 4 min
Connection cable	
Cable type	LiYY 5x0.25 mm²
Cable length	approx. 3 m
Can be extended up to	max. 100 m
Dimensions L×W×H	58×83×17 mm
Weight	approx. 300 g

4.2 Accessories

Power supply AC 24 V ~ Art.-No.: WSSV10

4.3 Warranty

We reserve the right to make technical and formal changes to the product in the interest of technical progress.

We provide a warranty as provided for by law.

Please send the unit postage-free with a description of the defect to our central customer service office:

ALBRECHT JUNG GMBH & CO. KG
Service Center
Kupferstr. 17-19
D-44532 Lünen
Service-Line: +49 (0) 23 55 . 80 65 51
Telefax: +49 (0) 23 55 . 80 61 89
mail.vka@jung.de

General equipment
Service-Line: +49 (0) 23 55 . 80 65 55
Telefax: +49 (0) 23 55 . 80 62 55
mail.vkm@jung.de

KNX equipment
Service-Line: +49 (0) 23 55 . 80 65 56
Telefax: +49 (0) 23 55 . 80 62 55
mail.vkm@jung.de

The CE symbol is a free trade symbol, which is solely intended for the authorities and does not guarantee any properties.

ALBRECHT JUNG GMBH & CO. KG
Volmestraße 1
D-58579 Schalksmühle

Telefon: +49.23 55.8 06-0
Telefax: +49.23 55.8 06-1 89
E-mail: mail.info@jung.de
Internet: www.jung.de
www.jung-katalog.de