GIRA 0 / 10 V Rain Sensor Info

Installation Instructions

0 / 10 V Rain Sensor

0 - 10 V Wind Sensor with Heating 24 V / 500 mA Heating Transformer

Wind Sensor Function

Wind sensor ① serves for detecting and evaluating the wind velocity and is provided for outdoor installation. It can be installed by means of the attached mounting bracket.

Via a reed contact, the rotating speed is detected and converted into an analogue output signal (0 ... 10 V).

An integrated heating (heating transformer option required) facilitates operation during frost periods.

Wind Sensor Connection

Where:

- 1: white reference potential (earth) brown 2: 24 V DC operating voltage 3: green 0 .. 10 V + output 0 .. 10 V - output (earth) 4: yellow
- 5 + 6: grey/pink 24 V AC/DC heating transformer supply

Rain Sensor Function

Rain sensor 2 serves for detecting and evaluating the precipitation and is provided for outdoor installation. It can be installed by means of the attached 110° mounting bracket.

Via a meander and by utilising the conductivity of water, wetting by precipitation is detected, evaluated and converted into an output signal (dry = 0 V, rain = 10 V).

Intermediate values are not detected.

The output signal is reset only after the sensor surface has dried and when an OFF-delay of 4 minutes has elapsed. The integrated heating (additional heating transformer required as an accessory) accelerates the drying process and melts ice and snow.

Order no.: 0579 00 Order no.: 0580 00 Order no.: 0600 00





Rain Sensor Connection

Where:

1:	white	reference potential (earth)
2:	brown	24 V DC operating voltage
3:	green	0 10 V + output
4 + 5:	yellow/grey	24 V AC/DC heating trans-
		former supply

▲ Safety instructions

Attention: Electrical equipment must be installed and fitted by qualified electricians only.

Installation Instructions

- To supply the sensors (24 V DC) and to evaluate the sensor signals an additional electronic device (e. g. the Instabus weather station) is required that can send measured value or command telegrams to the Instabus EIB, depending upon the analogue signals.
- Install the sensors in an accessible place to facilitate possibly necessary cleaning.
- Do not install sensors in the vicinity of transmitting equipment (e. g. mobile radio converters).
- Do not install sensor lines in parallel with lines carrying mains voltage or loads.
- To avoid electromagnetic irradiation keep a distance of a few centimetres from such lines.

Heating Transformer Function

The heating transformer serves for the power supply of the heating devices integrated into the rain sensors and wind sensors. Short-circuit protection is implemented by means of an automatically resetting thermal overload cut-out.

One rain sensor and one wind sensor, in each case, can be connected to a heating transformer.

Heating Transformer Connection (Refer to Fig. ③)

U _{H1} ~:	Sensor 1 connecting terminals.
U _{H2} ~:	Sensor 2 connecting terminals.

Note additionally for the wind sensor:

• Ensure correct positioning of the sensor (e.g. position not sheltered from the wind).

Note additionally for the rain sensor:

- Do not damage the sensing surface and wipe with a mild cleaning agent at a regular intervals.
- When installing the sensor, ensure unobstructed exposure to rain (do not install under eaves).



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Technical Data

Rain Sensor

External supply		Primary supply:	230 V AC
Current consumption:	Approx. 10 mA (without	Output voltage:	24 V AC
Heating:	heating) 24 V DC/AC, 4.5 W max. 3 m, LiYY 5 x 0.25 mm ² , extendable to 100 m max. (please observe installation instructions)	Output current:	500 mA max.
Supply line:		Prim./sec. connection:	0.25 – 2.5 mm ² screw terminals
		Ambient temperature:	-5°C to +40°C
Output Dry: Rain:	ut r: 0 V in: 10 V DC (1 kQ min, load)		T _C = 60 °C
Ambient temperature:	- 30 to + 70 °C	Protective system:	IP 20 as per DIN 40 050 (IEC 529)
Protective system:	IP 65	Mounting position:	Any
Mounting position:	determined by 110° fitting bracket	Minimum spacings:	None
Dimensions (LxWxH):	58 x 83 x 17 mm	Mounting width:	4 PUs (pitch units)
Weight:	Approx. 300 g	Weight:	600 g

Heating Transformer

Wind Sensor

External supply Supply voltage: Current consumption: Heating:	24 V DC (18 . 32 V DC) Approx. 12 mA (without heating) 24 V DC/AC PTC element (80 °C)		
Supply line:	3 m, LiYY 6 x 0.25 mm ² , extendable to 100 m max. (please observe installation instructions)		
Measuring range:	0.7 40 m/s, linear		
Max. wind velocity:	60 m/s momentary		
Output:	0 10 V DC (1.5 kΩ min. load)		
Ambient temperature:	- 25 to + 60 °C		
Protective system:	IP 65		
Mounting position:	Vertically upright (vertical)		
Type of fixing:	Mounting bracket		
Weight:	Approx. 300 g		

Installation Instructions

Acceptance of guarantee

We accept the guarantee in accordance with the corresponding legal provisions.

Please return the unit postage paid to our central service department giving a brief description of the fault:

Gira Giersiepen GmbH & Co. KG **Service Center** Dahlienstrasse 12 D-42477 Radevormwald

CE The CE sign is a new mass of any warranty of any properties. The CE sign is a free trade sign addressed exclusively to the authorities and does not include

Gira Giersiepen GmbH & Co. KG Postfach 1220 D-42461 Radevormwald

Telefon: +49 / 21 95 / 602 - 0 Telefax: +49 / 21 95 / 602 - 339 Internet: www.gira.de