



Suntracer KNX basic Weather Station

Item numbers 3095 (230V AC), 3096 (20...30 V DC)



Installation and Adjustment

1. Description

The **Weather Station Suntracer KNX basic** perceives temperature, wind speed, brightness and precipitation. All data may be used for the control of switching outputs which depend on threshold values. The states may be linked by means of AND and OR logic gates. The compact housing of **Suntracer KNX basic** stores the sensor system, the evaluation electronics and the electronics of the bus connection.

Functions:

- **Brightness measurement:** The current light intensity is measured by means of a sensor
- **Wind measurement:** The measurement of wind speed is accomplished electronically and thus noiseless and reliable even in case of hail, snow and minus temperature. Air swirls and up-draught in the radius of the weather station are collected, too
- **Wind sensor monitoring:** If the wind measurement value changes by less than ± 0.5 m/s within 48 hours, a fault can be output. The wind measured value is output with the maximum measured value of 35 m/s and all wind threshold values below this value become active
- **Precipitation perception:** The surface of the sensor is heated so that only drops and flakes are recognised as precipitation but not fog or dew. If it stops raining or snowing, the sensor dries quickly and the precipitation message ends
- **Temperature measurement**
- **Threshold values** can be adjusted per parameter or via communication objects
- **8 AND and 8 OR logic gates** with each 4 inputs. Every switching incident as well as 8 logic inputs (in the form of communication objects) may be used as inputs for the logic gates. The output of each gate may optionally be configured as 1 bit or 2 x 8 bits

1.1. Scope of delivery

- Weather station with combined wall/pole mounting
- 2x stainless steel installation band for pole installation

1.2. Technical specifications

Housing	Plastic material
Colour	White / translucent
Mounting	On-wall
Degree of protection	IP 44
Dimensions	approx. 96 × 77 × 118 (W × H × D, mm)

Weight	230 V AC version: approx. 240 g 20...30 V DC version: approx. 170g
Ambient temperature	Operation -30...+50°C, Storage -30...+70°C
Operating voltage	Available for 230 V AC or for 20...30 V DC An appropriate power supply unit can be obtained from Elsner Elektronik.
Current	230 V AC version: max. 20 mA 20...30 V DC version: max. 100 mA Residual ripple 10%
Data output	KNX +/- bus terminal plug
Group addresses	max. 254
Allocations	max. 255
Communication objects	109
Heating rain sensor	approx. 1.2 W
Measurement range temperature	-40...+80°C
Resolution (temperature)	0.1°C
Accuracy (temperature)	±1°C at -10...+85°C ±1.5°C at -25...+150°C
Measurement range wind	0...35 m/s
Resolution (wind)	0,1 m/s
Accuracy (wind)	at ambient temperature -20...+50°C: ±22% of the measurement value when incident flow is from 45...315° ±15% of the measurement value when incident flow is from 90...270° (Frontal incident flow corresponds to 180°)
Measurement range brightness	0 ... 150,000 lux
Resolution (brightness)	1 lux up to 300 lux 2 lux up to 1,000 lux 25 lux up to 150,000 lux
Accuracy (brightness)	±15% of the measurement value at 30 lux ... 120,000 lux