

Art.-no.: WS 10 D, WS 10 T, WS 10 H

# Operating Instructions Brightness Sensor, Temperature Sensor Twilight sensor



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#### 1. Function

The climatic data of interest are collected by three different transducers, ie. the brightness sensor, the twilight sensor (Fig. ) and the temperature sensor (Fig. ) and converted into analogue voltage signals  $(0-10\ V)$ . The evaluation of these signals requires additional electronics (e.g. instabus weather station) which offers the capability of transmitting measured value or instruction telegrams to the EIB instabus depending on the analogue signals received. To prevent the formation of moisture inside the housings, the sensors are equipped with pressure-compensating elements (weatherproofing membrane).

# 2. Safety instructions

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

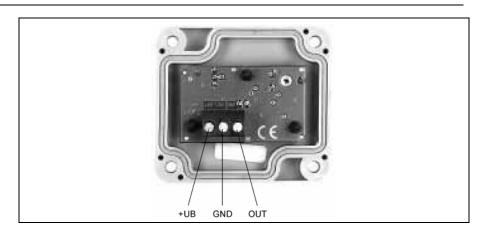
Subject to change without notice.

#### 3. Connection

The connecting cables passes through the screwed conduit entry no. 7 to the connecting terminals.



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#### Terminal designations:

+UB: operating voltage 24 V DC

GND: reference potential (ground) non-earthed

OUT: output 0 - 10 V

## 4. Fitting instructions

• The sensors must be installed in an accessible place to permit necessary cleaning, if needed.

 Do not install the sensors in the vicinity of RF transmitters (e.g. cellular radio transmitters).

 Do not lay sensor cables parallel to mains or other electrically loaded lines. To prevent EMC problems, there should be a distance of a few centimeters between these lines and the sensor cable.

 Make sure the sensors are perfectly adjusted (e.g. pointing in the right direction) as the measured values might otherwise be incorrect.

#### 5. Technical Data

General

Supply voltage: 24 V DC (15 - 30 V DC)

Connecting terminals : screw-type terminals,, max. 2,5 mm<sup>2</sup>
Connecting cable: through screwed conduit entry no. 7

Recommended cable:  $3 \times 0.25 \text{ mm}^2$ Length of cable:  $\max. 100 \text{ m}$ 

(observe installation instructions)

Voltage output : 0...10 V DC

(into a load of at least 1  $k\Omega$ , shortcircuit

protected)

Ambient temperature : - 30 to + 70 °C

Type of protection: IP 65

Mounting position: optional

recommend:

Type of fastening: screw fastening
Dimensions: 58 x 90 x 35 mm



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Weight: ca. 200 g

Twilight sensor

Measuring range: 0 bis 255 Lx, linear

Operating current: ca. 5 mA

**Brightness sensor** 

Measuring range 0 bis 60 klx, linear

Operating current: ca. 5 mA

Temperature sensor

Measuring range: - 30 bis + 70 °C, linear

Operating current ca. 3 mA

Subject to change without notice..

### 6. 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:

ALBRECHT JUNG GMBH & CO. KG

Service-Center Kupferstr. 17-19 D-44532 Lünen

Service-Line: 0 23 55 . 80 65 51 Telefax: 0 23 55 . 80 61 89 E-Mail: mail.vki@jung.de

#### **General equipment)**

Service-Line: 0 23 55 . 80 65 55 Telefax: 0 23 55 . 80 62 55 E-Mail: mail.vkm@jung.de

#### Technik (KNX)

Service-Line: 0 23 55 . 80 65 56 Telefax: 0 23 55 . 80 62 55 E-Mail: mail.vkm@jung.de

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