



The weather sensor WES/A 1.1 is used primarily for domestic purposes. For detection of twilight (1...999 Lux), brightness in three directions (1,000...99,000 Lux), rain (upper sensor and lower surfaces are permanently heated. Temperature (– 30...+ 50 °C), day/night, windspeeds (0...24.0 m/s), date and time (DCF radio receiver). An additional heating transformer is not required. The Weather Sensor WES/A 1.1 works only in conjunction with the WZ/S 1.1 Weather Unit.

**Note** Fascade control is not possible with the WZ/S 1.1. Please use our Weather Unit WS/S for this purpose. The WES/A sensor combined with the WZ/S is suitable for small to mid-sized buildings. The façade structure, wind conditions and special local influences should also be considered with these buildings.

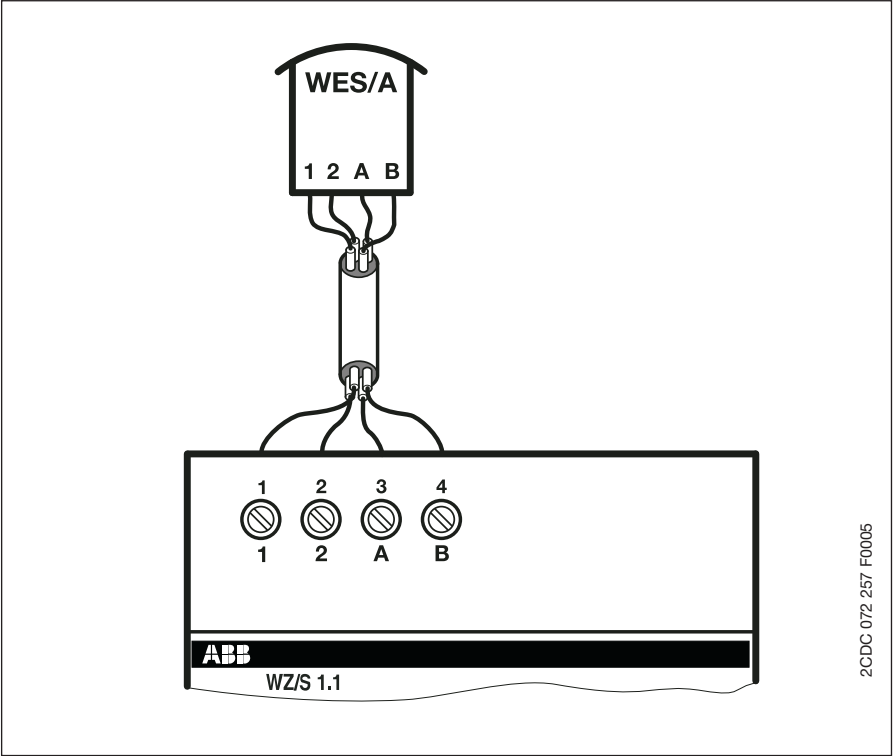
#### Technical Data

|   |  |  |
|---|--|--|
| <b>Power supply</b>                       | – Voltage  | 24 V DC +/- 10 %   |
|   | – Current  | 150 mA   |
| <b>Weather Sensor connections</b>         | – 1 ( 0 V potential)   | Voltage supply   |
|   | – 2 (24 V potential)   | Voltage supply   |
|   | – A (RS 485)   | serial Data communication  |
|   | – B (RS 485)   | serial Data communication  |
| <b>Connection terminals</b>               | – Connection terminal, inscribed, plug-in                        | 0.8 single core  |
| <b>Cable length</b>                       | – Between the Weather Unit and weather                           | Max. 100 m   |
| <b>Cable length / cable cross-section</b> | – P-YCYM or J-Y(ST)Y   | 2 x 2 x 0.8  |
| <b>Temperature range</b>                  | – Operation  | – 30...+ 70 °C   |
| <b>Enclosure</b>                          | – IP 65  | DIN EN 60 529  |
| <b>CE mark</b>                            | – in accordance with the EMC guideline and low voltage guideline |  |
| <b>Installation</b>                       | – surface mount  |  |
| <b>Dimensions</b>                         | – 80 x 67 x 125  | (H x W x D)  |
| <b>Weight</b>                             | – 0.2 kg   |  |
| <b>Enclosure</b>                          | – Plastic  |  |
| <b>Housing colour</b>                     | – White  |  |
| <b>Sensors:</b>                           |  |  |
| <b>Twilight</b>                           | – Total measurement range  | 0...999 Lux  |
|   | – Resolution   | 1 Lux  |
|   | – Measurement range  | 1...100 Lux  |
|   | – Accuracy   | +/- 4 % of final value/+/- 4 Lux   |
|   | – Measurement range  | 101...999 Lux  |
|   | – Accuracy   | +/- 20 % of final value/+/- 200 Lux  |
| <b>3 x brightness</b>                     | – Total measurement range  | 0,1000...99.000 Lux  |
|   | – Resolution   | 1.000 Lux  |
|   | – Measurement range  | 0...10.000 Lux   |
|   | – Accuracy   | +/- 20 % of final value/+/- 2.000 Lux  |
|   | – Measurement range  | 11.000...99.000 Lux  |
|   | – Accuracy   | +/- 15 % of final value/+/- 15.000 Lux   |
| <b>Rain sensor</b>                        | – Power consumption  | 2.4 Watt   |
|   | – Function   | The upper sensor and lower sensor surfaces are permanently heated. After a rain alarm the rain signal is output for about 6 minutes. |

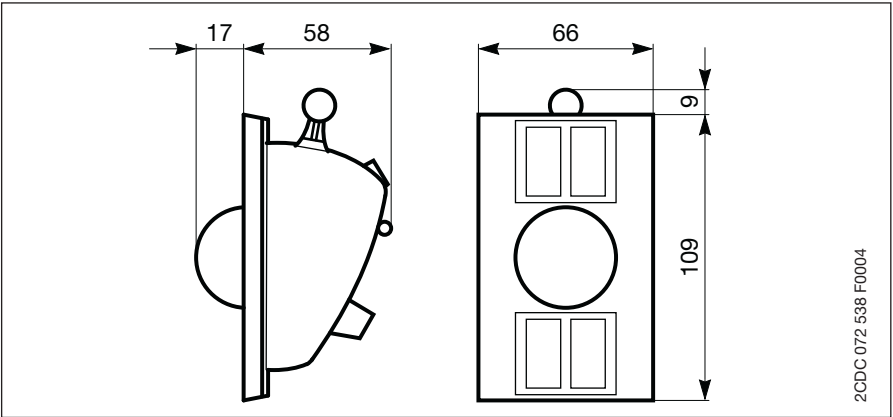
|                |  |   |
|----------------|--|---|
| Temperature    | <div>- Total measurement range</div> <div>- Resolution</div> <div>- Accuracy</div>   | <div>- 30...+ 50 °C</div> <div>0.6 – 0.7 °C</div> <div>+/- 5 % of final value/+/- 2,5 K</div>   |
| Daylight       | <div>- Day =&gt; Night</div> <div>- Night =&gt; Day</div>  | <div>Under 10 Lux is night</div> <div>at more than 10 Lux it is day</div> <div>(one minute and 15 seconds after the brightness value has exceeded 10 Lux)</div>       |
| Wind speed *   | <div>- Total measurement range</div> <div>- Resolution</div> <div>- Measurement range</div> <div>- Accuracy</div> <div>- Measurement range</div> <div>- Accuracy</div> | <div>0...24 m/s</div> <div>0.5 m/s</div> <div>0.5...2.0 m/s</div> <div>+/- 30 % of measured value</div> <div>2.5...24 m/s</div> <div>+/- 20 % of measured value</div> |
| Radio receiver | DCF 77   | Date and time   |

\* The stated tolerances relate to angles of incidence of the air flow in the range of ± 45°, (WES/A as seen from the front, fixing is located at the rear).  
Higher tolerances must be anticipated for other angles of incidence of the air flow.

Wiring diagram  
“Weather Sensor”

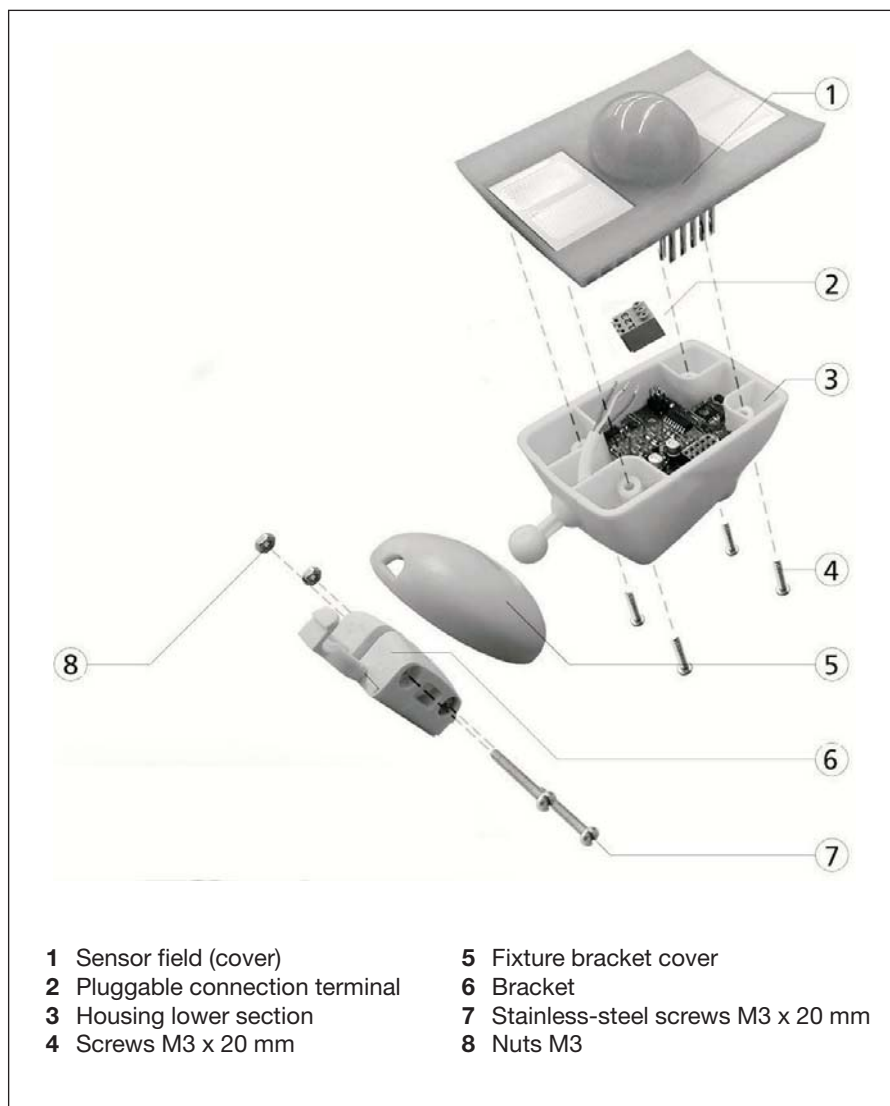


Dimension drawing  
“Weather Sensor”

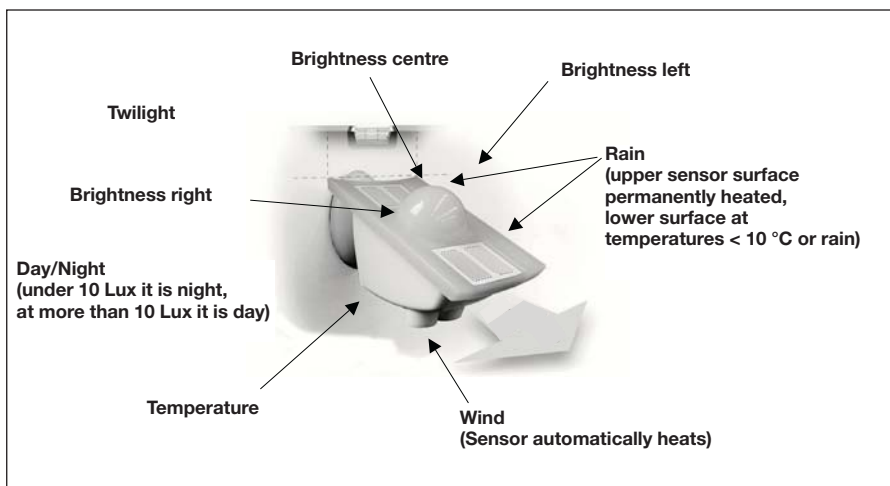


Exploded drawing  
"Weather Sensor"

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Arrangement and  
designation of the sensors

## Notes

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