

# Operating Manual for EASYBUS - Sensor Modules

## EBH - 2R



### Specification:

|                                       |   |
|---------------------------------------|---|
| <b>Measuring range:</b>               | please refer to type plate<br>Standard: 0 - 100 %RH (rec. range of application: 30 - 80 %RH)<br>High humidity: 0 - 100 %RH (rec. range of application: 11 - 90 %RH)   |
| <b>Resolution:</b>                    | 0,1%  |
| <b>Sensor:</b>                        | Capacitive thin film sensor (unsuitable for dusty and aggressive media)   |
| <b>Display: [optional]</b>            | 3½-digit LC-display   |
| <b>Linearity:</b>                     | Standard: ±2 %RH (from 30 to 80 %RH)<br>High humidity: ±2 %RH (from 11 to 90 %RH)   |
| <b>Hysteresis:</b>                    | Standard ±1,5 %RH (from 30 to 80 %RH)<br>High humidity: ±1,0 %RH (from 11 to 90 %RH)  |
| <b>Nominal temperature:</b>           | 25°C  |
| <b>Working temperature:</b>           | 0 to 70°C   |
| <b>Storage temperature:</b>           | -20 to 70°C   |
| <b>Relative atmospheric humidity:</b> | 0 to 98 %RH (non-condensing)  |
| <b>Housing:</b>                       | ABS   |
| <b>Mounting position:</b>             | sensor down   |
| <b>Mounting:</b>                      | Mounting holes (accessible after cover has been removed).<br>max. shaft diameter of mounting screws is 4mm.   |
| <b>Electric connection:</b>           | 2-wire connection, no polarity<br>screw-type terminal, max. terminal range: 1,5mm <sup>2</sup>  |
| <b>Busload:</b>                       | 1.5 <b>EASYBUS</b> -devices   |
| <b>EMC:</b>                           | The device corresponds to the essential protection ratings established in the Regulations of the Council for the Approximation of Legislation for the member countries regarding electromagnetic compatibility (89/336/EWG).<br>Additional fault: <1% |

## **Safety instructions:**

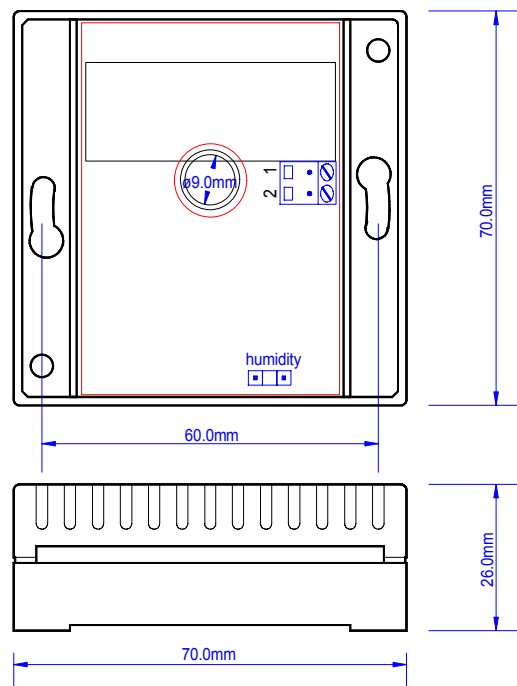
This device has been designed and tested in accordance with the safety regulations for electronic devices.

However, its trouble-free operation and reliability cannot be guaranteed unless the standard safety measures and special safety advises given in this manual will be adhered to when using the device.

1. Trouble-free operation and reliability of the device can only be guaranteed if the device is not subjected to any other climatic conditions than those stated under "Specification".  
If the device is transported from a cold to a warm environment condensation may cause in a failure of the function. In such a case make sure the device temperature has adjusted to the ambient temperature before trying a new start-up.
2. General instructions and safety regulations for electric, light and heavy current plants, including domestic safety regulations (e.g. VDE), have to be observed.
3. If device is to be connected to other devices (e.g. via PC) the circuitry has to be designed most carefully. Internal connection in third party devices (e.g. connection GND and earth) may result in not-permissible voltages impairing or destroying the device or another device connected.
4. If there is a risk whatsoever involved in running it, the device has to be switched off immediately and to be marked accordingly to avoid re-starting.  
Operator safety may be a risk if:
  - there is visible damage to the device
  - the device is not working as specified
  - the device has been stored under unsuitable conditions for a longer time.

In case of doubt, please return device to manufacturer for repair or maintenance.

## **Housing and Assignment:**



## **!!! ATTENTION: !!!**

***The humidity sensor is protected by a rubber tube. After mounting the protection has to be removed.***