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Description

The MELA® FOM 8/1-type humidity voltage converters are OEM subassemblies which convert the humidity signal into a calibrated voltage signal.

They are available as printed circuit board modules or printed circuit boards combined with tubes and thread.

- The advantages of it are: - compact dimensions
 - calibrated output signal
 - temperature measuring element can be retrofitted
 - low operating voltage
 - low power consumption
 - attractive price

Use of capacitive humidity sensor elements is a guarantee

- high long-term stability
- almost linear characteristic curve
- good dynamic performance
- resistance to dew formation
- low temperature coefficients
- small hysteresis.

Product info sheet no. B 1.7 **Humidity sensing elements**

User instructions

Install the MELA®-humidity voltage converter at a place in or on the equipment where characteristic levels of humidity can be measured. Avoid installing it close to heaters in places where it is likely to be splashed. Ensure that the sensing element is in a well ventilated area.

Dew formation and deposits of dust do not cause any harm however, they may affect dynamic performance.

Do not touch the highly sensitive sensor element. Instric capacity (construction parts connected with earth)

can result in additional error. Please consult the "application instructions for the sensing elements" (product info sheet no. A 1) or check with

the manufacturer for further information which you need to

bear in mind when using humidity sensors with capacitive sensing elements.

Technical data

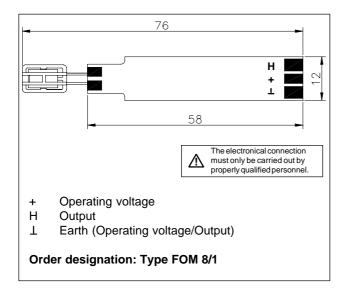
Humidity

Measuring element	FE09.R/4
Measuring range	0100%rh
Accuracy (MR 2085% rh at 23°C, 1m/s)	±3% rh
Response time	
Ambient temperature	20+80°C

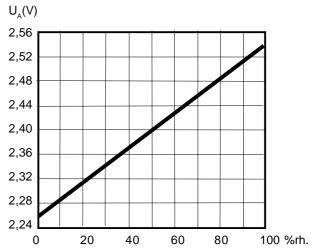
Other data

Operating votage	810V
Power consumption	<1mA
Load resistance	2.5 MOHM
Current-output	acc. diagram
Weight	ca. 3g

Dimensions



Voltage at the output as a function of relative humidity:



This information is based on current knowledge and is intended to provide details of our products and their possible applications. It does not, therefore, act as a guarantee of specific properties of the products described or of their suitability for a particular application. It is our experience that the equipment may be used across a broad spectrum of applications under the most varied conditions and loads. We cannot appraise every individual case. Purchasers and/or users are responsible for checking the equipment for suitability for any particular application. Any existing industrial rights of protection must be observed. The perfect quality of our products is guaranteed under our General Conditions of Sale. Issue: March 2004 B17_E. Subject to modifications.