

BEDIENUNGSANLEITUNG SERIE EE10 MESSUMFORMER FÜR FEUCHTE / TEMPERATUR



ALLGEMEIN:

Messumformer der Serie EE10 sind für die exakte Erfassung von Feuchte und Temperatur bestimmt. Das formschöne funktionelle Gehäuse ist für die direkte Wandmontage geeignet und ermöglicht eine einfache Installation und im Servicefall einen raschen Wechsel der Sensoreinheit.

Anwendung findet die Serie EE10 im Bereich Klimaüberwachung (Wohn- und Bürobauten, Schaltanlagen, Museen und Hotels, etc.).

Extreme mechanische Beanspruchungen und unsachgemäße Handhabung sind unbedingt zu vermeiden!

TECHNISCHE DATEN:

Messwerte

Relative Feuchte			
Sensor	HC103		
Analogausgang 0...100% rF	0-10 V	-1 mA < I _L < 1mA	
	4-20 mA (zwei Draht)	R _L < (U _V -10)/0,02 < 500 Ohm	
Arbeitsbereich ¹⁾	0...95% rF		
Genauigkeit bei 20°C und U _V =24VDC	±2% rF (40...60% rF)	±3% rF (10...90% rF)	
Temperatureinfluss bei 60% rF	typisch 0,06% rF / °C		
Temperatur aktiv			
Analogausgang 0...50°C ²⁾	0-10 V	-1 mA < I _L < 1mA	
	4-20 mA (zwei Draht)	R _L < (U _V -10)/0,02 < 500	
Genauigkeit bei 20°C und U _V =24VDC	Ohm±0,25°C (M1A3)	±0,4°C (M1A6)	
Temperatur passiv			
Typ T-Sensor	siehe Bestellcode		

Allgemein

Versorgungsspannung (U _V)			
	für 0 - 10 V	15 - 40 VDC oder 24 VAC ±20%	
	für 4 - 20 mA	28V DC > U _V > 10 + 0,02 x R _L (R _L < 500 Ohm)	
Stromaufnahme	bei DC Versorgung	typ. 4 mA	
	bei AC Versorgung	typ. 15 mA _{eff}	
Anschluss	Schraubklemmen max. 1,5 mm ²		
Anzeige bei Version EE10-M1	Feuchte / Temperatur alternierend		
	bei Version EE10-M6	Feuchte	
Elektromagnetische Verträglichkeit	EN61326-1 EN61326-2-3		
Temperaturbereiche	Betriebstemperatur:	-5...+55°C	
	Betriebstemperatur mit Display:	-5...+55°C	
	Lagertemperatur:	-25...+60°C	

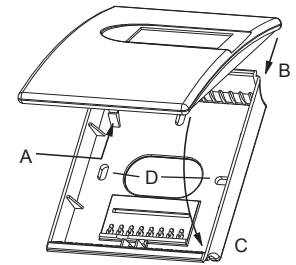
1) Bitte Arbeitsbereich des HC103 beachten!
2) andere Abbildungsbereiche auf Anfrage

Öffnen des Gehäuses:

Zapfen A eindrücken bis sich Deckel öffnen lässt.

Schließen des Gehäuses:

Deckel in Nut B einsetzen und in Richtung C schließen bis Zapfen A einrastet.



Montage:

Gehäuse mittels Schrauben durch die dafür vorgesehen Löcher D an eine Wand montieren.

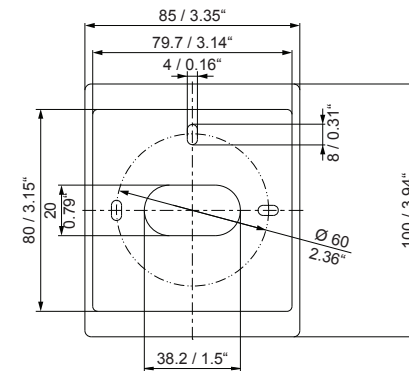
Gehäusematerial: PC
Schutzart: IP30

Abmessungen

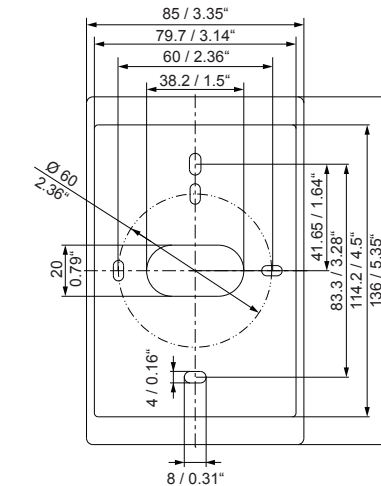
EU: 85 x 100 x 26 mm (BxHxT)
US: 85 x 136 x 26 mm (BxHxT)

MONTAGEBOHRUNGEN / MOUNTING HOLES

EU Version:

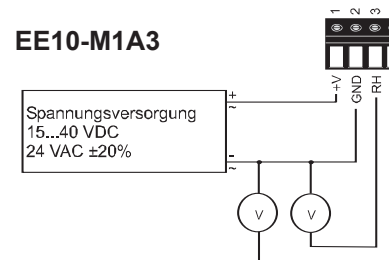


US Version:

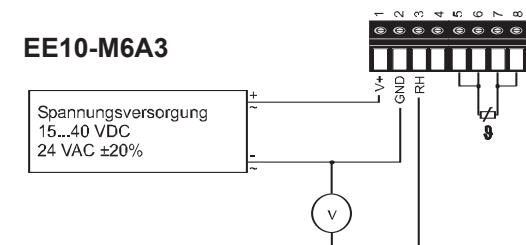


ANSCHLUSSBILDER:

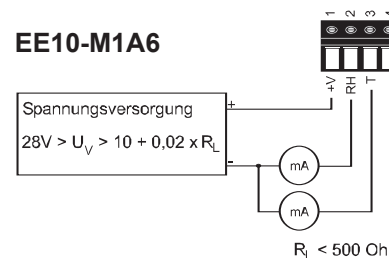
EE10-M1A3



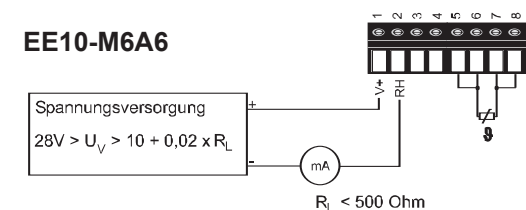
EE10-M6A3



EE10-M1A6



EE10-M6A6



MANUAL EE10 SERIES TRANSMITTER FOR HUMIDITY / TEMPERATURE



GENERAL:

EE10 transmitter series are designed for accurate measurement of humidity and temperature. The stylish, functional housing for wall mounting makes easy installation and fast exchange of the sensing unit for service purposes possible.

Main application for the EE10 is climate control in residential and office areas, switching cabins, hotels and museums, etc.

Absolutely avoid extreme mechanical and unspecified strain!

TECHNICAL DATA:

Measuring Quantities

Relative Humidity		
Humidity sensor	HC103	
Analogue output 0...100 % RH	0-10 V	-1 mA < I _L < 1mA
	4-20 mA (two wires)	R _L < (U _V -10)/0.02 < 500 Ohm
Working range ¹⁾	0...95 % RH	
Accuracy at 20°C (68°F) and U _V =24VDC	±2% RH (40...60% RH)	±3% RH (10...90% RH)
Temperature influence at 60% RH	typical 0.06% RH / °C (0.03% RH / °F)	
Temperature (active output)		
Analogue output 0...50°C (32...122°F) ²⁾	0-10 V	-1 mA < I _L < 1mA
	4-20 mA (two wires)	R _L < (U _V -10)/0.02 < 500 Ohm
Accuracy at 20°C (68°F) and U _V =24VDC	M1A3: ±0.25°C (±0.45°F)	M1A6: ±0.4°C (±0.72°F)
Temperature (passive output)		
Type of T-Sensor	please see ordering guide	

General Data

Voltage supply (U _V)	for 0 - 10 V	
	for 4 - 20 mA	
	15 - 40 VDC or 24 VAC ±20%	
	28V DC > U _V > 10 + 0.02 x R _L (R _L < 500 Ohm)	
Current consumption	for DC supply:	typical 4 mA
	for AC supply:	typical 15 mA _{eff}
Electrical connection	screw terminals max. 1.5 mm ² (AWG 16)	
Display for EE10-M1 version	humidity / temperature alternating	
for EE10-M6	humidity	
CE compatibility according	EN61326-1	
	EN61326-2-3	
Temperature ranges	working temperature range:	-5...55°C (23...131°F)
	working temperature with display:	-5...55°C (23...131°F)
	storage temperature range:	-25...60°C (-13...140°F)

1) Please refer to the working range of the HC103
2) Other T-scaling on request

USA

FCC notice:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the installation manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CANADIAN

ICES-003 Issue 5:

CAN ICES-3 B / NMB-3 B

Opening the housing:

Press pin A until cover can be opened.

Closing the housing:

Set cover into flute B and move it to direction C until pin A snaps in.

Installation:

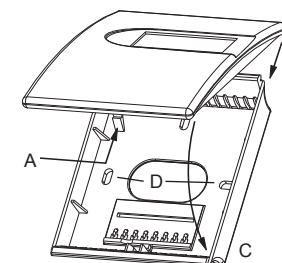
Mount housing on wall with screws through therefore designated holes D.

Material of housing: PC
Protection class: IP30

Dimensions:

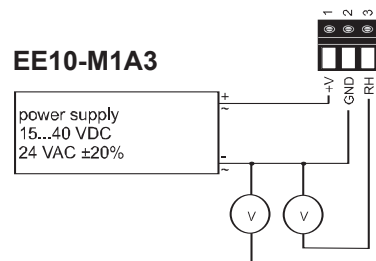
EU: 85 x 100 x 26 mm (WxHxD) (3.35 x 3.94 x 1.02")

US: 85 x 136 x 26 mm (WxHxD) (3.35 x 5.35 x 1.02")

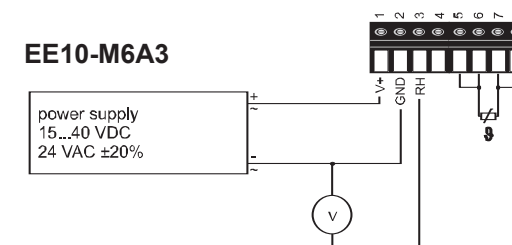


CONNECTION DIAGRAMS:

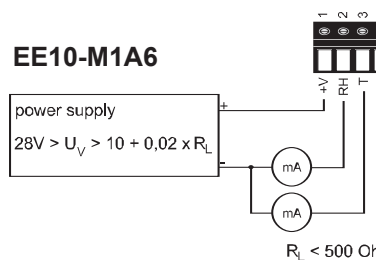
EE10-M1A3



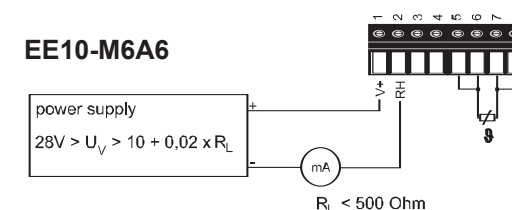
EE10-M6A3



EE10-M1A6



EE10-M6A6



R_L < 500 Ohm