

Room Condition Monitor RCM 890

Humidity, temperature and pressure



Highlights

- Multi sensor system → Simultaneous measuring of humidity, temperature and pressure at one measuring point
- Integrated Transmitter → Simple integration into your system by standard signal
- Graphical trend display of all parameters → Intuitive recognition of process parameters and trends
- Robust construction → Reliable and long-lasting operation also at high mechanical stress
- Insensitive to electromagnetic interference
- Dirt-proof keyboard → Use in dusty or oily environments

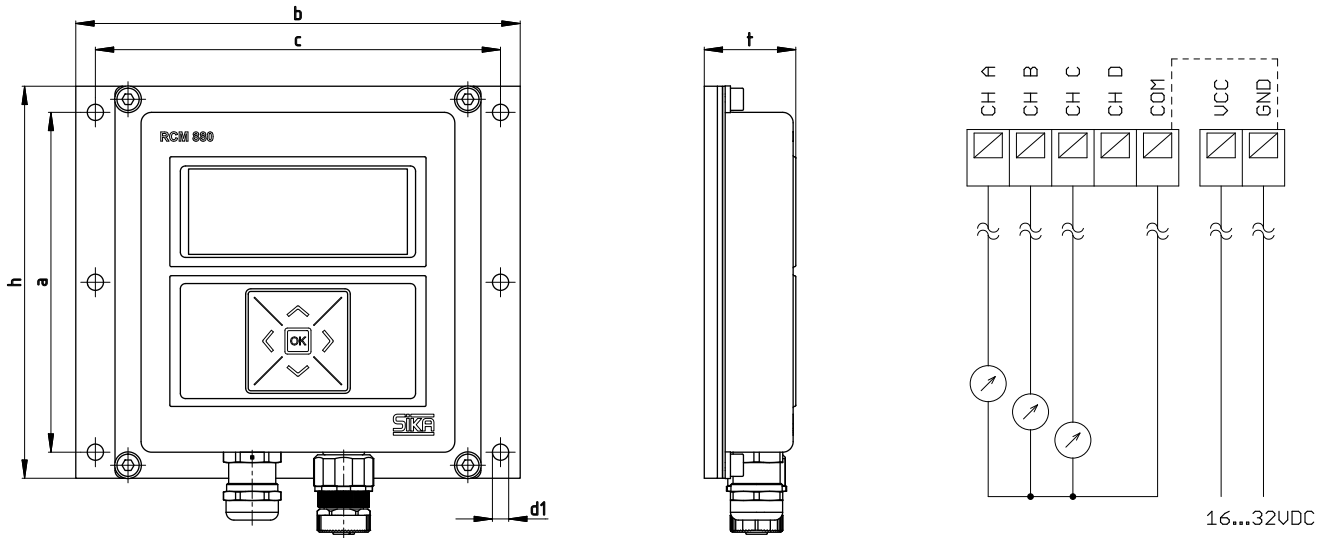
Technical data

Version	Wall mounting	
Dimensions (W x H x D) → Housing with mounting plate	170 mm x 150 mm x 35 mm	6.693" x 5.906" x 1.378"
Display → Type	Dot matrix graphic display	
→ Backlight	Yes (adjustable)	
→ Size (W x H)	83 mm x 33 mm	3.268" x 1.300"
→ Resolution	256 x 100 Pixel	
Indication accuracy	0.01	
Operating elements	5 capacitive keys	
Measuring rate	1 s	
Ambient temperature	-20...70 °C	-4...158 °F
Storage temperature	-20...70 °C	-4...158 °F
Degree of protection EN 60529	IP65, plug & cable connected	

Electrical data				
Power supply	24 VDC (16...32 V)			
Current consumption	<100 mA			
Input				
Measuring element	Digital Multi sensor for humidity, temperature and pressure			
Accuracy	See technical data - Multi sensor			
Electrical connection	4-pin plug connector M12 x 1			
Output				
Number of channels	3			
Signals	0...20 mA or 4...20 mA or 0...10 V or 0...5 V			
Measuring range	<ul style="list-style-type: none"> → Humidity 0...100 % RH → Temperature -40...85 °C -40...185 °F → Pressure 300...1200 mbar abs. 			
Accuracy	16 bit / ±0.1 % of range ±1 digit @ 25 °C		16 bit / ±0.1 % of range ±1 digit @ 77 °F	
Signal error	4...20 mA	0...20 mA	0...10 V	0...5 V
→ Error Analog/Digital Converter	0 mA	0 mA	0 V	0 V
→ General error	<3.5 mA	0 mA	0 V	0 V
→ Underrange	3.8 mA	0 mA	0 V	0 V
→ Overage	20.5 mA	20.5 mA	10 V	5 V
→ Sensor error	>21 mA	>21 mA	0 V	0 V
Electrical connection	Cable gland M16 x 1.5 (cable outer diameter 5...10 mm) Spring clamp terminal: cable cross section 0.2...1.5mm ² (without wire ferrule) cable cross section 0.25...1mm ² (with wire ferrule)			
Load	<ul style="list-style-type: none"> → Current output Max. 500 Ω → Voltage output Min. 1.5 kΩ 			

Dimensions and materials

Room condition monitor RCM 890



Dimensions [mm]						
Type	b	h	a	c	d1	t
RCM 890	170	150	130	155	Ø 6.2	35

Dimensions [inch]						
Type	b	h	a	c	d1	t
RCM 890	6.693	5.906	5.118	6.102	Ø 0.244	1.378

Materials	
Not in contact with medium	
Housing	Powder-coated steel, glass front window
Mounting plate	Aluminium, black anodized

Article numbers

Order code	
Type	
Room condition monitor type 890	890TPHXMU10
Set consisting of RCM type 890 (890TPHXMU10) and multi sensor type E03 (W103E030380X00)	890TPHXMU1SET1
Multi sensor type E03 for room condition monitor type 890	W103E030380X00