

KLU 100 outdoor humidity transmitter



KLU 100 temperature and humidity transmitters are designed for outdoor applications. The transmitter has a capacitive sensor that detects relative air humidity and an NTC10 sensor for temperature measurement. A sintered plastic filter protects the sensor elements.

KLU 100 devices include:

- Humidity measurement (0...100 %rH)
- Temperature measurement (-50...50 °C)
- Humidity and temperature output options: voltage (0...10 Vdc) and current (4...20 mA)

KLU 100 device options:

- LCD display



Applications

KLU 100 devices are commonly used to monitor humidity and temperature in:

- factories
- warehouses
- parking garages
- spas and indoor swimming pools

The product lifetime decreases if the environment is very cold (e.g. freezer rooms) or the air contains chemicals (e.g. chlorine at spas and indoor swimming pools).

Model summary

	Model	Product number	Description
	KLU 100	90021132250	outdoor humidity transmitter
	KLU 100-N	90021132251	outdoor humidity transmitter with display

Technical specifications

Property	Value	
Supply	24 Vac/dc (15...28 V) < 1 VA	
Humidity measurement		
Range	0...100 %rH	
Accuracy (25 °C)	±2 %rH (0...90 %rH)	
Temperature measurement		
Range	-50...50 °C	
Accuracy (0 °C)	±0.5 °C	
Outputs		
Humidity	0...10 Vdc, 2 mA / 4...20 mA < 600 ohm	
Temperature	0...10 Vdc, 2 mA / 4...20 mA < 600 ohm	
Outputs with 15...18Vdc supply	4...20 mA < 375...525 ohm (+Vdc-7.5V)/20 mA	
Sensors		
Humidity	capacitive	
Temperature	NTC10	
Operating conditions		
Temperature	-50...50 °C	
Long term stability	±5 %rH / 2 years	
IP protection class		
Housing	IP54, cable entry downwards	
Sensor	IP5X	
Wire	0.2...1.5 mm ² (16-24 AWG)	
Cable gland	M16	
Dimensions (w x h x d)	106 x 113 x 46 mm	
Weight	145 g	
Materials		
Housing	PC	
Cover	PC	
Conformance	CE	UKCA
EMC	2014/30/EU	S.I. 2016 No. 1091
RoHS	2011/65/EU	S.I. 2012 No. 3032