

KLK 100 - Duct humidity transmitter



KLK 100 duct humidity transmitters are designed to detect relative humidity and temperature inside ventilation ducts. Duct humidity transmitters are also available with Modbus RTU communication (M models).

Technical specifications

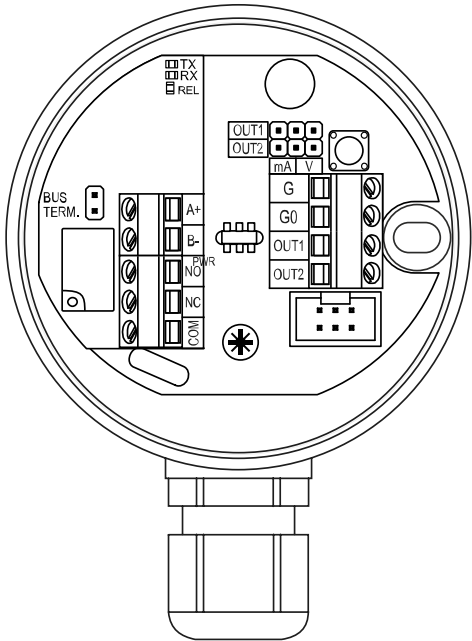
Property	Value
Supply	24 Vac/dc (21...28 V) < 2 VA. Relay output requires 24 Vac/dc supply voltage.
Humidity measurement	
Range	0...100 %rH
Accuracy (25 °C)	±2 %rH (20...80 %rH), max. ±3 %rH
Temperature measurement	
Range	-50...50 °C
Accuracy (25 °C)	±0.5 °C
Outputs	
Humidity	0...10 / 2...10 / 0...5 Vdc, 2 mA / 4...20 mA < 500 Ω
Temperature	0...10 / 2...10 / 0...5 Vdc, 2 mA / 4...20 mA < 500 Ω
Communication (M models)	Modbus RTU
Operating conditions	
Temperature	-50...50 °C
Humidity	0...90 %rH (non-condensing)
Long term stability	±0.5 %rH / 2 years
IP protection class	

Property	Value
Housing	IP54, cable or probe downwards
Sensor	IP20
Wire	0.2...1.5 mm ² (24...16 AWG)
Cable gland	M16
Dimensions (w x h x d)	70 x 95 x 220 mm
Weight	122 g
Materials	
Housing	PBT
Probe	stainless steel

Wiring



CAUTION: Device wiring and commissioning can only be carried out by qualified professionals. Always make the wirings while the power is switched off.

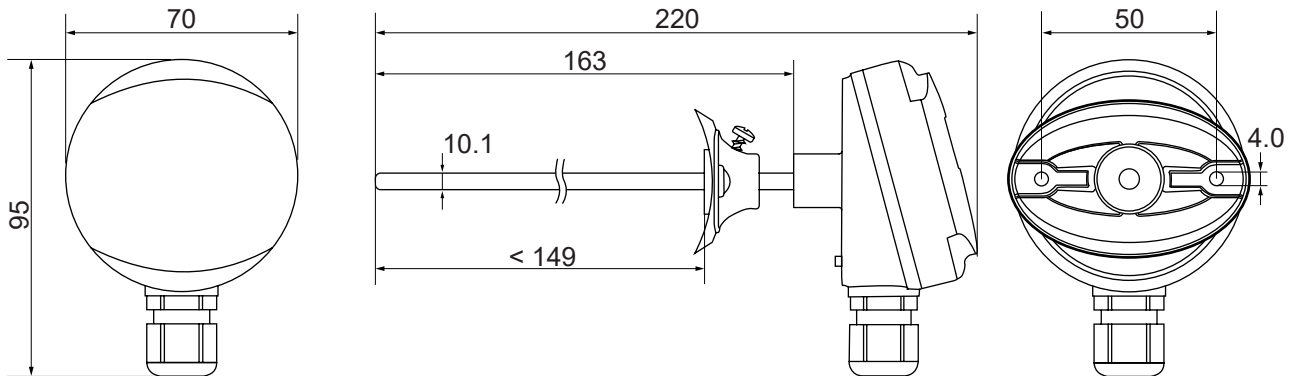


Supply voltage and outputs (all models)	
G	24 Vac/dc
G0	0 Vac
OUT1	Humidity output / controller output
OUT2	Temperature output / controller output

Modbus communication (M models) and relay (option)	
A+	Modbus RTU, RS-485
B-	
NO	
NC	24 Vac 1 A, relay (-R)
COM	

Dimensions

All dimensions are in millimeters (mm).



Supported standards and directives

All KLK models support the following EU directives, UK regulations and standards.

Standard	Description
2014/30/EU	Electromagnetic Compatibility (EMC).
2011/65/EU	Restriction of Hazardous Substances (RoHS2) Directive.
(EU) 2015/863	Commission Delegated Directive, amending Annex II to Directive 2011/65/EU.
S.I. 2016 No. 1091	Electromagnetic compatibility regulations
S.I. 2012 No. 3032	The restriction of the use of certain hazardous substances in electrical and electronic equipment regulations
EN 61000-6-3:2007/A1:2011	Electromagnetic compatibility (EMC) - Part 6-3: Generic standards - Emission standard for residential, commercial and light-industrial environments.
EN 61000-6-2:2006	Electromagnetic compatibility (EMC) - Part 6-2: Generic standards - Immunity for industrial environments.

Ordering information

	Model	Product number	Description
	KLK 100	1132240	Duct humidity transmitter
	KLK 100-N	1132241	Duct humidity transmitter with a dot-matrix display
	KLK-M	1132610	Duct humidity transmitter with Modbus RTU communication
	KLK-M-N	1132611	Duct humidity transmitter with Modbus RTU communication and a dot-matrix display
	KL-R	1132001	Relay 24 Vac, 1 A (optional)
	ML-SER	1139010	Transmitter commissioning tool for M models