

## KLK 100 - DUCT HUMIDITY AND TEMPERATURE TRANSMITTER

KLK 100 humidity and temperature transmitters are designed to detect duct air humidity and temperature.

The M models have RS-485 connection for Modbus RTU communication. ML-SER tool is needed at commissioning for making the Modbus settings.

The output signals can be selected at the commissioning to be either 0...10 V or 4...20 mA signals. More output signal possibilities are available by using the ML-SER tool.

The transmitter settings can be changed by using the ML-SER commissioning tool. The tool can be used to make one point field calibration and to change the OUT1 or OUT2 output to a controller output. Accordingly, the controller settings can be changed by using the ML-SER tool.

The control output can be controlled either according to a one measurement value or according to the maximum selection of all values.

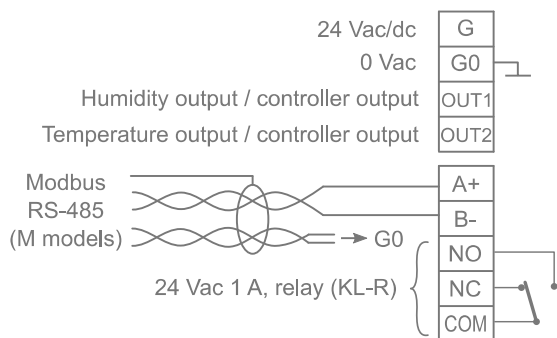
The N models have a backlit display. The measurement values are shown on the N model display simultaneously. One measurement value view can be selected also.

The transmitter can be equipped with a relay option (24 Vac, 1 A) that switches according to the one measurement value or according to the all values. The relay switching point can be adjusted by using ML-SER tool.

### Selecting the output format

	Vdc	mA
OUT1	<input type="checkbox"/>	<input type="checkbox"/>
OUT2	<input type="checkbox"/>	<input type="checkbox"/>

### Wiring



### Technical data:

Supply	24 Vac/dc (*21...28 V), 2 VA
Humidity measurement	
Range	0...100 % rH
Accuracy (at 25 °C)	typ. ±2 % rH (20...80 % rH) max. ±3 %rH
Long term stability	±0,5 % rH / 24 months
Temperature measurement	
Range	-50...+50 °C
Accuracy (at 25 °C)	±0,5 °C
Outputs	0...10/2...10/0...5 Vdc, < 2 mA 4...20 mA, < 500 Ω
Display (N models)	backlit dot matrix display
Communication (M models)	Modbus RTU
Protection class	
Transmitter	IP54 (probe or cable gland downwards)
Sensor	IP20
Operating conditions	
Temperature	-30...+50 °C
Humidity	0...90 % rH (non cond.)
Mounting	with a flange, adjustable probe depth
Dimensions (w x h x d)	70 x 98 x 220 mm
Materials	PBT, PC, PA and stainless steel

\* = Relay output requires 24 Vac/dc supply voltage.

### Ordering guide:

Model	Product number	Description
KLK 100	1132240	duct humidity transmitter
KLK 100-N	1132241	duct humidity transmitter with display
KLK-M	1132610	duct humidity transmitter, Modbus
KLK-M-N	1132611	duct humidity transmitter with display, Modbus
KL-R	1132001	option, relay 24 Vac 1 A
ML-SER	1139010	transmitter commissioning tool

Products fulfil the requirements of directive 2014/30/EU and are in accordance with the standards EN61000-6-3 (Emission) and EN61000-6-2 (Immunity).