



# Duct Mounting Air Quality Sensor, Selectable Output

## 0/10Vdc or 4-20mA

### KLQ

#### Description:

The self-calibrating microprocessor-controlled duct air quality sensor is used to determine the air quality on basis of a mixed gas sensor/VOC sensor.

It is used to measure the air quality for quantitative evaluation of room air pollution with contaminating gases.

The air quality sensor does not trace concentrations of individual gases, but assesses the mixed gas concentration.

Detectable gases: mixed gas, vapours of VOCs, cigarette smoke, automobile exhaust gases, human exhalation, combustion smoke (from wood, paper, plastics).

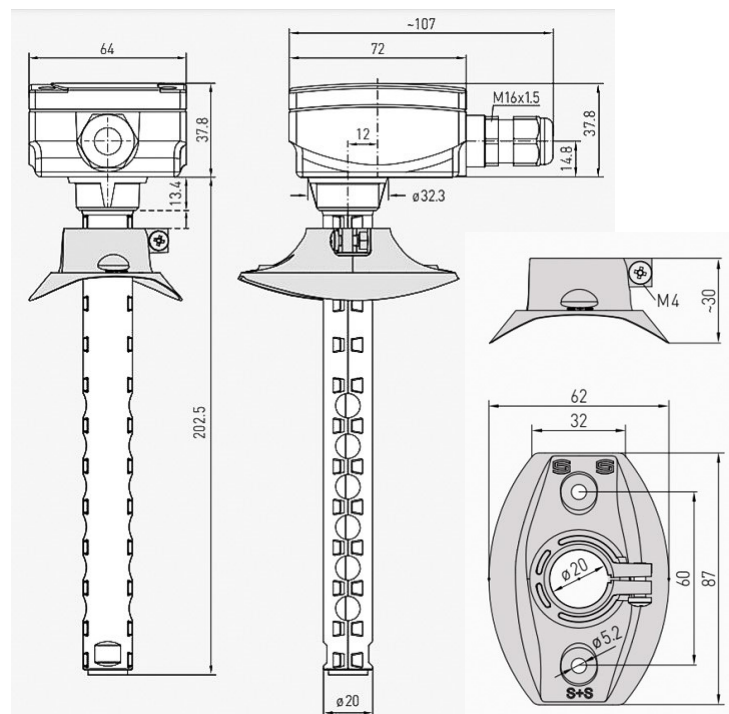
The sensor's lifetime depends on the type of burden and gas concentration.



#### Technical Specification:

<b>Power Supply:</b>	24V AC / DC ( $\pm 10\%$ )
<b>Power Consumption:</b>	< 1.5W / 24V DC typical < 2.9VA / 24V AC typical Peak Current 200mA
<b>Sensor:</b>	VOC sensor (metal oxide), with automatic self-calibration (VOC = volatile organic compounds)
<b>Measuring Range:</b>	0...100% air quality; referred to calibrating gas; multi-range switching (selectable via DIP switches) VOC sensibility low, medium, high
<b>Output:</b>	0 – 10V (OV = clean air, 10V = contaminated air) or 4...20mA (selectable via DIP switches; switch point adjustable from 0...100% of output signal). $\pm 20\%$ of final value (referred to calibrating gas)
<b>Measuring Accuracy:</b>	> 60 months
<b>Service Life:</b>	By diffusion
<b>Gas Exchange:</b>	Approx. 1 hour
<b>Warm-up Time:</b>	-10...+60°C
<b>Ambient Temperature:</b>	Approx. 1 minute, minimum flow rate 0.2—0.5m/s
<b>Response Time:</b>	0.14 – 1.5mm <sup>2</sup> , via terminals
<b>Electrical Connection:</b>	72 x 64 x 37.8mm (Tyr 1 without display)
<b>Enclosure Dimensions:</b>	M 16 x 1.5, including strain relief, exchangeable, max. inner diameter 10.4mm
<b>Cable Gland:</b>	Pleuroform™, material polyamide (PA6), with torsion protection, $\varnothing 20$ mm, NL = 202.5mm vmax = 30m/s (air)
<b>Protective Tube:</b>	By mounting flange, plastic (included in the scope of delivery) III (according to EN 60730) IP65 (according to EN 60529)
<b>Process Connection:</b>	CE conformity, electromagnetic compatibility to EN 61 326, EMC Directive 2014 / 30 / EU
<b>Protection Class:</b>	
<b>Protection Type:</b>	
<b>Standards:</b>	

#### Dimensions:



#### Order Code:

**KLQ** Duct Mounting Air Quality Sensor  
0/10Vdc or 4-20mA Output

#### EC Products Limited

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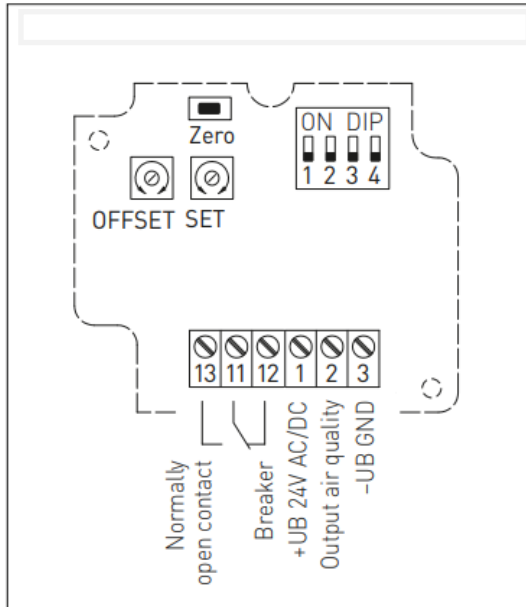


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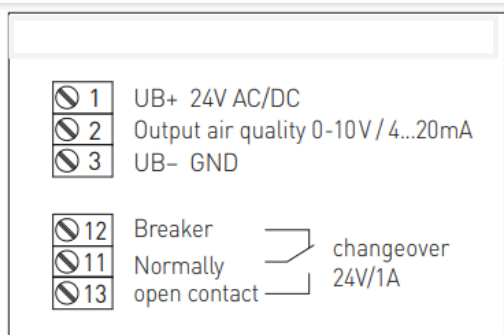
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#### Schematic Diagram:

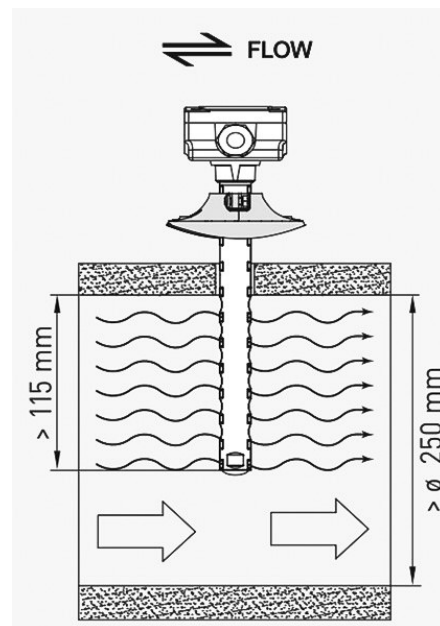


DIP Switches	KLQ	
VOC sensitivity	DIP 1	DIP 2
LOW	OFF	OFF
MEDIUM (default)	ON	OFF
HIGH	OFF	ON
VOC automatic zero point	DIP 3	
Deactivated	OFF	
Activated (default)	ON	
Output	DIP 4	
Voltage 0 - 10V (default)	OFF	
Current 4...20mA	ON	

#### Connecting Diagram:



#### Mounting Diagram:



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