

Room air quality sensor RLS / Duct air quality sensor KLS

Air quality sensor with measuring transducer 0–10 V and 4 – 20 mA
or with switching output and measuring transducer 0–10 V and 4 – 20 mA

RLS



KLS



Technical data

Sensor:	wideband mixed gas sensor
Supply voltage:	24 V \pm \pm 10 %, approx. 80 mA
Ambient temperature:	0 ... +50°C
Storage temperature:	-20 ... +50°C
Output:	measuring transducer 0–10 V and 4–20 mA or potential-free relay contact for safety extra low voltage (SELV) * and measuring transducer 0–10 V and 4–20 mA
Conductor cross section:	0.14 up to 1.5 mm ²
Housing:	plastic
Colour:	RLS: pure white, similar to RAL 9010 KLS: light grey
Mounting / installation:	RLS: flush or on an UP box KLS: inside of a duct
Degree of protection:	RLS: IP 30 KLS: IP 65
Protection class:	III
Dimensions:	RLS: 83 x 78 x 25 mm KLS: 65 x 58 x 35 mm
Running-in time:	approx. 1 hour

Application

The room air quality sensor serves for the requirement-dependant ventilation of living spaces, office premises, meeting rooms, hotels or restaurants. It serves for the quantitative evaluation of the pollution of the air in rooms with gases, such as used up breathing air, tobacco smoke, solvent vapours, cleaning agents and car fumes. The room air sensed by the sensor is being transduced to an output signal of 0–10 V or 4–20 mA. A minimal value at the output is interpreted as clean air, while a maximum value is valuated as strongly polluted air. The version with additional switching output has been preset ex factory to a value that corresponds to 70 % of the maximum output value. This value can be adapted internally to the individually prevailing room occupancy and/or utilisation conditions.

This air quality sensor is not suited for the execution of a selective CO₂ measurement.

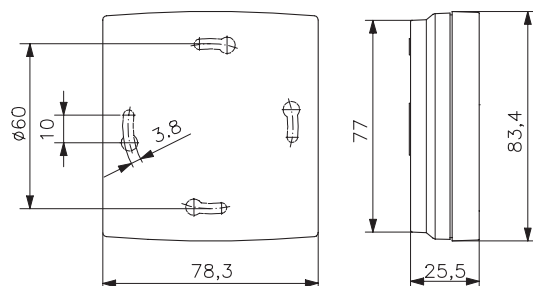
Important:

The air quality sensor must not be used for any safety-relevant applications, no matter of what kind.

Type	Item No.	Output	PG
RLS	G9220010	0–10 V, 4–20 mA	S
RLS/R	G9220020	0–10 V, 4–20 mA, relay*	S
KLS	G9230040	0–10 V, 4–20 mA	S
KLS/R	G9230050	0–10 V, 4–20 mA, relay*	S

* Relay contact suited only for the switching of safety extra low voltage (SELV), max. 30 V AC, 120 V DC 1 (0.2) A.

RLS dimensioned drawing



KLS dimensioned drawing

