

VOCs - Indoor Air Quality Transmitters



EGQ 1..

DESCRIPTION

Indoor Air Quality (IAQ)/Volatile Organic Compound (VOC) gas transmitters.

APPLICATION

The EGQ 1... air quality sensors measure the concentration of multiple gases and odorous substances in the air with constant output. These substances, for example, may be tobacco smoke, kitchen vapors, human odors and unpleasant smells. In conjunction with a control device, it controls the fresh air supply according to the quality of the air in the room; as a result, energy savings can be made. In combination with a measurement device, it provides an indication of air quality in the room.



FEATURES

- IAQ multi-gas detection
- Continuous monitoring
- Long-life solid state sensor
- Easy sensitivity adjustment
- Room, 0-10 VDC signal
- Duct, 0/2-10 VDC, 0(1)-5 VDC, or 0/4-20 mA signal

certified
ISO 9001 **CE**

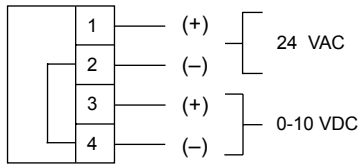
SPECIFICATIONS

Indoor Air Quality Transmitters	EGQ120 (Room)	EGQ110 (Duct)
Electrical		
Power supply	24 VAC, ± 24%, 50 to 60 Hz	
Power consumption	3.0 VA	
Sensor Performance		
Gas detected	Measure contaminants (multiple, different gases; ie., hydrocarbons, hydrogen, alcohols, benzene, carbon monoxide, formaldehyde, cigarette smoke and many other gases)	
Sensor element	Solid state, semiconductor	
Range	0 to 100% of contaminants	
Sensitivity	Adjustable, potentiometer (to room conditions after approx. 2 days)	
Response time	< 60 sec at 98 ft/min (0.5 m/s)	< 100 sec at 98 ft/min (0.5 m/s)
Load max	> 5K Ohms	
Type of Control		
Analog output signal	0 to 10 VDC	0(2) to 10 VDC or 0(1) to 5 VDC 0(4) to 20 mA w/less than 500 Ohms
Operability	Attained after a warm-up period of 130 min.	
Environmental		
Permissible air velocity	2,953 ft/min (15 m/s)	
Permissible ambient temperature - working	32°F to 104°F (0°C to 40°C)	4°F to 158°F (-20°C to 70°C)
- storage	-13°F to 158°F (-20°C to 70°C)	
Permissible ambient humidity	5 to 95% RH	
Physical		
Enclosure, standard - material	Thermoplastic, fire retardant	
- color	White	Yellow, black
- protection	NEMA 1 (IP 30, EN 60529)	NEMA 1 (IP 40, EN 60529 w/conduit connection IP 54, EN 60536)
- installation	Surface mounted	Duct mounted, bracket incl.
Dimensions W x H x D	3.0 x 3.0 x 1.34 in (76 x 76 x 34 mm)	Probe insertion 1.57 to 6.54 (40 to 166 mm) 2.9 x 5.5 x 2.5 in (73 x 140 x 64 mm) & Probe Ø 1.18 x 7.24 in (Ø 30 x 183 mm)

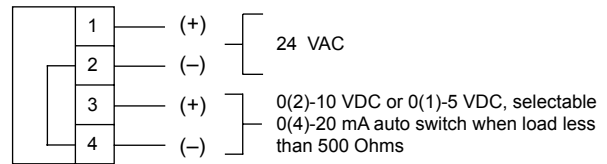
Cable entry	Backside, center of base	2 holes for PG 11, 0.75 in (19 mm) 1/2" conduit adapter order #370300002
Wire connection	Terminal block, screw type for wire leads	
Wire size	Max 14 AWG (2.5 mm ²)	
Weight	0.3 lb (0.1 kg)	0.62 lb (0.28 kg)
Warranty	24 months material and workmanship	
Part Numbers	EGQ120 F001	EGQ110 F001

WIRING CONFIGURATION

EGQ 120 (Room)

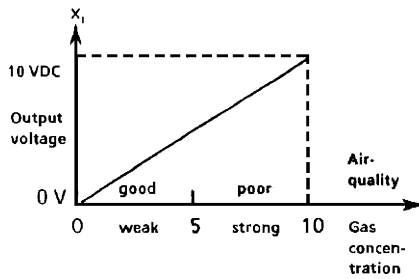


EGQ 110 (Duct)

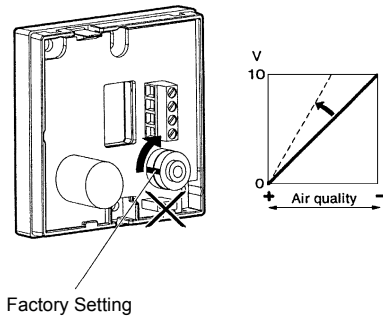


FIELD ADJUSTMENTS

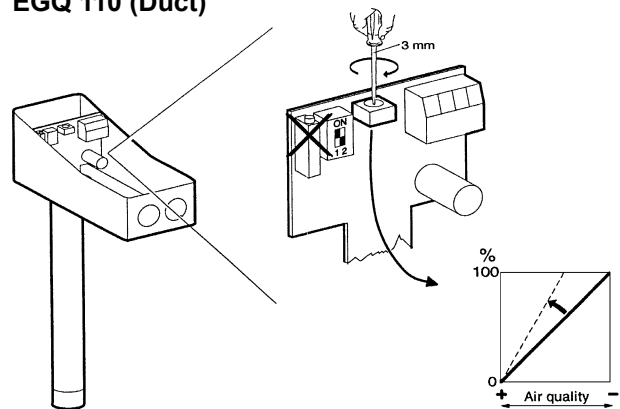
Sensitivity adjustment and output signal selection



EGQ 120 (Room)



EGQ 110 (Duct)



Factory Setting →

S1	R _L >500 Ω	R _L <500 Ω
ON	0 ... 10 V	0 ... 20 mA
1 2	2 ... 10 V	4 ... 20 mA
S1	R _L >250 Ω	R _L <250 Ω
	0 ... 5 V	0 ... 20 mA
	1 ... 5 V	4 ... 20 mA