Honeywell

Series 3000 MkII SPECIFICATIONS

2-wire loop powered toxic and oxygen gas detector for use in potentially explosive atmospheres

Series 3000 MkII detector

Use	Rugged and reliable gas detector for the protection of personnel from toxic and oxygen gas hazards. Suitable for use in Zone 1 or 2 hazardous areas and North American Class I and II Division 1 or 2 areas.

Detectable gases

Gas	Formula	Selectable full scale range	Default range	Operating Temperature* Min	Max	Lower Detection Limit
Oxygen	O_2	25.0%/Vol only	25.0% Vol	-40°F/-40°C	131°F/55°C	3.5% Vol
Carbon Monoxide	CO	100 to 1,000 ppm	300 ppm	-40°F/-40°C	131°F/55°C	15 ppm
Hydrogen Sulfide	H_2S	10 to 50 ppm	15 ppm	-40°F/-40°C	131°F/55°C	1.5 ppm
Hydrogen Sulfide	H_2S	50 to 500 ppm	100 ppm	-4°F/-20°C	131°F/55°C	3 ppm
Chlorine	Cl_2	5 to 20 ppm	5 ppm	14°F/-10°C	131°F/55°C	0.6 ppm
Ozone (pending)	O_3	0 to 0.4 ppm only	0.4 ppm	-4°F/-20°C	131°F/55°C	
Sulfur Dioxide	SO_2	5.0 to 20.0 ppm	15 ppm	-40°F/-40°C	131°F/55°C	0.6 ppm
Chlorine Dioxide	ClO_2	0 to 1 ppm only	1 ppm	-4°F/-20°C	131°F/55°C	0.03 ppm
Nitrogen Monoxide	NO	0 to 100 ppm	100 ppm	-4°F/-20°C	131°F/55°C	3 ppm
Nitrogen Dioxide	NO_2	5 to 50 ppm	10 ppm	-4°F/-20°C	131°F/55°C	1.5 ppm
Hydrogen	H_2	0 to 1000 ppm only	1000 ppm	-4°F/-20°C	131°F/55°C	30 ppm
Hydrogen	H_2	0 to 10,000 only	10,000 ppm	-4°F/-20°C	131°F/55°C	300 ppm
Hydrogen Chloride	HCl	10 to 20 ppm	10 ppm	-4°F/-20°C	131°F/55°C	0.3 ppm
Hydrogen Cyanide (pending)	HCN	0 to 20 ppm only	20 ppm	-4°F/-20°C	131°F/55°C	
Hydrogen Fluoride	HF	0 to 12 ppm only	12 ppm	-4°F/-20°C	131°F/55°C	0.4 ppm
Ammonia**	NH_3	50 to 200 ppm	200 ppm	-4°F/-20°C	122°F/50°C***	6 ppm
Ammonia**	NH_3	200 to 1,000 ppm	1,000 ppm	-4°F/-20°C	104°F/40°C	30 ppm
Phosphine	PH	0 to 1.2 ppm only	1.2 ppm	-4°F/-20°C	131°F/55°C	0.04 ppm

*Performance may vary depending on sensor type.

**Suitable for applications without NH_3 ambient background concentrations only.

***+131°F/+55°C intermittent.

Electrical

Connections and power	2-wire loop powered; 17Vdc (+/-10%) to 24Vdc (max) operation; 22mA max. over range
Recommended cable	2-wire with shield (90% coverage) or conduit; 0.5mm² (20AWG) to 2.0mm² (14AWG)
Signal	0-100%FSD 4-20mA; Fault = 3mA; Calibration due selectable off or 3mA Max. over range 22mA; Inhibit (toxic sensors) = Selectable 3mA or 4mA Inhibit; (Oxygen sensors) = Selectable 3mA or 17.4mA

Construction

Material	Transmitter: Epoxy painted aluminum allow LM25 or 316 stainless steel Sensor: 316 stainless steel with PTFE filter
Maximum Dimensions	6.4 x 7.9 x 3.9 inches; 164 x 201 x 99mm
Weight	Aluminum alloy: 3.75 lbs./1.79 kg; stainless steel: 8.16 lbs./3.7 kg

Environmental

IP rating	IP66 (EN60529), NEMA 4X
Operating humidity	Continuous 20-90% RH (non-condensing); Intermittent 0-99% RH (non-condensing)
Operating pressure	90-110kPa
Storage conditions	59°F to 86°F (15°C to 30°C) 30-70%RH (non-condensing)
Certification	UL/c-UL Class I, Div 1 & 2, Groups B, C & D; Class II, Div 1, Groups E, F, G; Class II, Div 2, Groups F & G, Class I Zone 1, Group 2B + H2 Hazardous Locations ATEX: ⟨Ex⟩ II 2 (1) G Ex d [ia] IIB+H2 T4 (T_{amb} -4°F to +131°F/-20°C to +55°C) IECEx Ex d [ia] IIB + H2 T4

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