



G003858

Gas Detector

Salwico GD

Part no. see below

System: Salwico GS3000, SW2020, GS4

General Description

The Salwico GD range of gas detectors is used to monitor areas where flammable, oxygen deficiency and toxic gases may pose a hazard environment.

The Salwico GD uses a number of sensor technologies including catalytic bead, electrochemical cell and Non-dispersed (NDIR).

Salwico GD has a long list of user friendly features:

- One hand operation for sensor replacement
- Clear multi-function backlit display
- Tri-colour backlight display for status indication
- 4-20 mA signal output
- 3 Switch relays
- Modbus

Data

Detection method	Catalytic bead, Electrochemical cell, Non-dispersed
Gases detected	See list below
Nominal voltage	24 VDC
Working voltage	16-32 VDC
Power consumption	< 5 W max
Ingress protection	IP66
Expected lifetime	5 years
Ex proof housing	Ex II 2 GD Ex d IIC Gb T6
Response time (T90)	Depending on sensor; between 25s to 65s
Max flow rate when fitted in duct	7 M/sec
Accuracy	< +/- 5% of FSD
Temperature range	-40°C to +65°C (IR -20°C to +50°C)
Material	Epoxy painted Aluminium
Colour	Yellow with silver lit
Weight	1.7 kg



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Figure 1. Example of status indications for Normal (1), Fault/Warning (2) and Alarm (3).

Detectable Gases

Gas Name	Gas	Selectable Gas Range(s)	Default Range	Acceptable Calibration Range
Oxygen	O ₂	25% VOL	25% VOL	20.9% VOL Fixed
Hydrogen Sulphide	H ₂ S	10 to 100ppm	30ppm	50% as standard (30 to 70% as acceptable)
Carbon Monoxide	CO	100 to 1000ppm	500ppm	50% as standard (30 to 70% as acceptable)
Hydrogen	H ₂	1000ppm	1000ppm	50% as standard (30 to 70% as acceptable)
Hydrocarbons (CAT)	HC	20 to 100&LEL	100%LEL (CH ₄)	50% as standard (30 to 70% as acceptable)
Propane (IR)	C ₃ H ₈	20 to 100&LEL	100%LEL	50% as standard (30 to 70% as acceptable)
Methane (IR)	CH ₄	20 to 100&LEL	100%LEL	50% as standard (30 to 70% as acceptable)
Carbon Dioxide (IR)	CO ₂	2%Vol	2%Vol	0.8 to 1.2% VOL

Part Numbers

Table 1. Complete Detectors

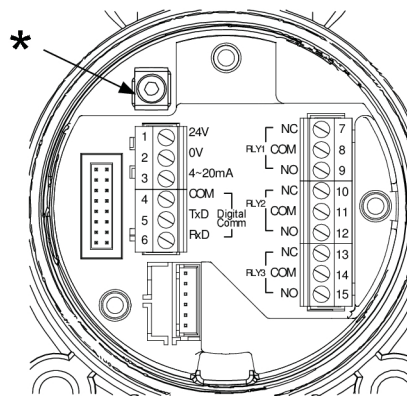
Part Number	Name	Description
5200260-01A	Salwico GD CAT HC	0-100%LEL HYDROCARBON, CATALYTIC, ALUMINIUM ALLOY, M20 ENTRY
5200260-02A	Salwico GD NDIR CH ₄	0-100%LEL METHANE, NDIR, ALUMINIUM ALLOY, M20 ENTRY
5200260-03A	Salwico GD NDIR C ₃ H ₈	0-100%LEL PROPANE, NDIR, ALUMINIUM ALLOY, M20 ENTRY
5200260-04A	Salwico GD NDIR CO ₂	0-2%VOL CARBON DIOXIDE, NDIR, ALUMINIUM ALLOY, M20 ENTRY
5200261-01A	Salwico GD EC O ₂	0-25%VOL OXYGEN, ELECTRO CHEMICAL, ALUMINIUM ALLOY, M20 ENTRY
5200262-01A	Salwico GD EC H ₂ S	0-50 PPM HYDROGEN SULPHIDE, ELECTRO CHEMICAL, ALUMINIUM ALLOY
5200262-02A	Salwico GD EC CO	0-250 PPM CARBON MONOXIDE, ELECTRO CHEMICAL, ALUMINIUM ALLOY
5200262-03A	Salwico GD EC H ₂	0-1000 PPM HYDROGEN, ELECTRO CHEMICAL, ALUMINIUM ALLOY

Table 2. Spare Sensors

Part Number	Name	Description
5200260-11A	Salwico GD CAT HC Sensor	0-100%LEL HYDROCARBONS, CATALYTIC, CARTRIDGE SENSOR
5200260-12A	Salwico GD NDIR CH ₄ Sensor	0-100%LEL METHANE, NDIR, CARTRIDGE SENSOR
5200260-13A	Salwico GD NDIR C ₃ H ₈ Sensor	0-100%LEL PROPANE, NDIR, CARTRIDGE SENSOR
5200260-14A	Salwico GD NDIR CO ₂ Sensor	0-2%VOL CARBON DIOXIDE, NDIR, CARTRIDGE SENSOR
5200261-11A	Salwico GD EC O ₂ Sensor	0-25%VOL OXYGEN, ELECTRO CHEMICAL, CARTRIDGE SENSOR
5200262-12A	Salwico GD EC H ₂ S Sensor	0-50 PPM HYDROGEN SULPHIDE, ELECTRO CHEMICAL, CARTRIDGE SENSOR
5200262-13A	Salwico GD EC CO Sensor	0-250 PPM CARBON MONOXIDE, ELECTRO CHEMICAL, CARTRIDGE SENSOR
5200262-14A	Salwico GD EC H ₂ Sensor	0-1000 PPM HYDROGEN, ELECTRO CHEMICAL, CARTRIDGE SENSOR

Installation

Electrical Installation



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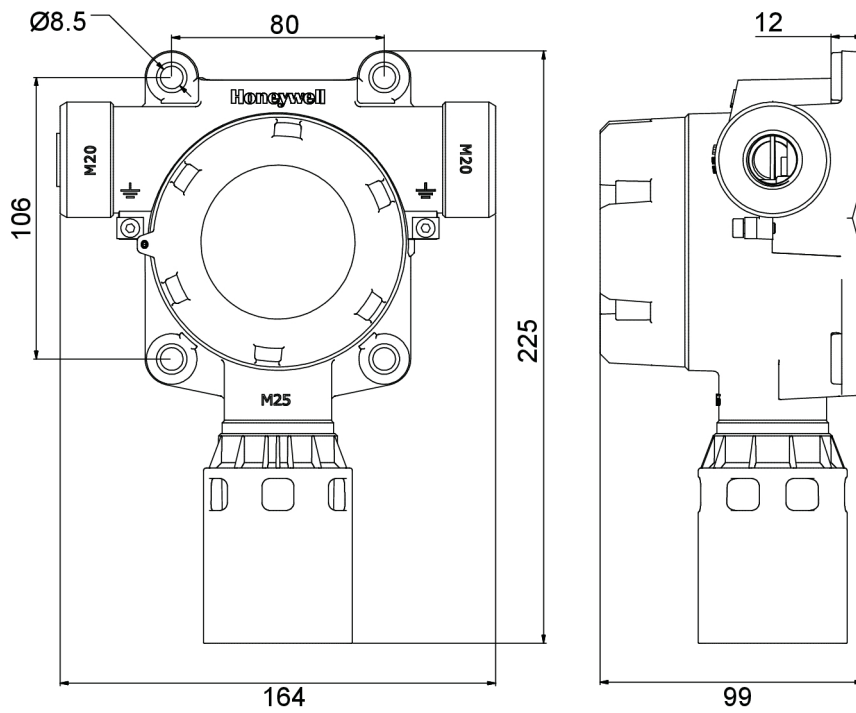
Figure 2. Terminal Blocks

* Internal earth / Ground point

Table 3. Terminal Module Connections

Terminal no.	Marking	Connection	Description
1	24V	+VE Supply (16 - 32VDC)	Controller Connections
2	0V	-VE Supply (0VDC)	
3	4~20mA	Current Output Signal	
4	COM	Drain	MODBUS RTU. RS485 (Optional)
5	TxD	MODBUS B (+)	
6	RxD	MODBUS A (-)	
7	RLY1/NC	Normally Closed	Programmable Relay 1 (Default A1)
8	RLY1/COM	Common	
9	RLY1/NO	Normally Open	
10	RLY2/NC	Normally Closed	Programmable Relay 2 (Default A2)
11	RLY2/COM	Common	
12	RLY2/NO	Normally Open	
13	RLY3/NC	Normally Closed	Programmable Relay 3 (Default Fault)
14	RLY3/COM	Common	
15	RLY3/NO	Normally Open	

Dimensions (mm)



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