



COMBUSTIBLE GAS DETECTOR

INSTRUMENT DATA SHEET

0	INSTALLATION	
0.01	Location	
0.02	Tag no.	
0.03		
0.04		
1	GENERAL	
1.01	Type	Gas detector – High sensitivity
1.02	Product	Simtronics GD10PE
1.03	Product code	GD10-PE0-17DE-0X*-00
1.04	Manufacturer	Simtronics
2	GAS DETECTOR	
2.01	Type	Extended Point Infrared Gas Detector
2.02	Design principle	IR-absorption, Dual wavelength and dual path
2.03	IR Source	Solid state (SimSource), 50Hz sampling rate, long life – 15 years warranty
2.04	Detected gases	Common Hydrocarbons
2.05	Calibrated range	0 – 20%LEL Methane (CH4)
2.06	Weather protector	Two skin baffle arrangement . Sinters, gauzes or hydrophobic filters shall not be used.
3	PERFORMANCE	
3.01	Lifetime stability	±1.4% LEL / 7% FS
3.02	Accuracy	±1.0%LEL, 0-10%LEL reading / ±1.4 %LEL, 10-20%LEL reading
3.03	Response time (20%LEL)	T20 = 1.0 sec / T50 = 2.5 sec / T90: 6 sec
3.04	Over range response	100%LEL gas: Trip/5.6 mA (20%) after 0.6 sec, going to 20mA stable output
3.05	Calibration interval	Fixed factory calibrated. No field calibration required.
4	ELECTRICAL	
4.01	Power supply	24V DC, range (18 - 32V DC)
4.02	Power consumption	140 mA typical
4.03	Cable entry	2x M20, one entry with Exe plug
4.04	Junction box	Integrated Exe junction box.
4.05	Connection	0.3 mm2 (22 AWG) - 1.5 mm2 (16 AWG), 3 wires
4.06	Analogue output signal	0-20mA, max. load impedance 500Ω.
4.07	Fault signalling	Diagnosis signalling in the 0.4 - 3.0mA range. Dirty optics / Early-dirty optics - selectable
4.08	Maintenance interface	HART v6.0 Universal Commands (HART version)
5	ENVIRONMENT	
5.01	Storage	-40°C to +70°C (-40°F to 158°F)
5.02	Operation	-20°C to +65°C (-4°F to 149°F), Probe up to 85°C (185°C)
5.03	Humidity	100% RH (non-condensing)
5.04	Ingress	IP66 / IP67 DIN 40050
5.05	RFI/EMI	Complies with EN50081-1 and EN50082-2.
6	HOUSING	
6.01	Ex Classification	EEx de IIC T6
6.02	Material	316 L stainless steel
6.03	Weight	6.5 kg (14.3 lbs)
6.04	Dimensions	795L x 104W x 106H (mm)*31.3 x 4.1 x 4.2 (inches)
7	APPROVALS	
7.01	ATEX	Certificate Nemko 07ATEX1438
7.02	IECEX	Certificate IECEX NEM 07.0006
7.03	CSA	C22.2 No. 152, Certificate 1773527
7.04	SIL	Suitable for use in SIL3 systems
8	ACCESSORIES	
8.01	499-815430	Weather protection
8.02	499-815271	Duct mount flange kit
8.03	499-815733	Sample flow housing
8.04	499-815712	Sun shade

 	Client		Reference	
	Project		Prepared	
	Location		Checked	
	Client ref		Approved	
			Date	
			Sheet No	1 of 1