GC804 NOVA-Sensor *ELITE*

Catalytic Combustible Gas Detector

Self-Contained and Explosion-Proof

The SST Model GC804 Combustible Gas Detector is a highly versatile and reliable industrial gas detector designed for the toughest job and able to be used in the harshest environments. This detector uses a catalytic poison resistant sensing element which provides accurate measurements in atmospheres where traces of silicone or other poisoning agents may be present and provides excellent long-term zero and sensitivity stability. Readings are unaffected by humidity or carbon dioxide.

The bright LCD screen on the detector continuously displays the operating status and the actual concentration of gas in percentage of the Lower Explosive Limit (%LEL). This reading is converted to a standard 4-20 mA signal, which may be connected to any remote device for remote display or logging. Relay contacts are provided which are activated when the gas concentration exceeds the LOW ALARM and HIGH ALARM set points. Typical set points are adjusted by the installer upon installation and may be reset later by authorized personnel. The relays are suitable for controlling local HVAC equipment, alarm signal devices or for equipment shutdown. Fault relay contacts are also available which operate upon loss of power or internal failure of the unit.

FEATURES & BENEFITS

- Catalytic sensor with excellent long term zero and sensitivity stability and high poison resistance
- 4-20 mA output for connection to external equipment
- User programmable LOW alarm and HIGH alarm settings
- Voltage-free dry contact relays for local control
- Explosion-proof approved electronics housing Class I, Group A, B, C, D
- Explosion-proof approved sensor housing - ATEX listed or ATEX and CSA listed
- Available up to IP66 rating
- Bright LCD screen displays target gas concentration in % LEL
- Magnetic switch initiates test or calibration sequence
- Built-in automatic sensor replacement/maintenance and calibration reminder
- Step-by-step on-screen calibration instructions for ease of use and maintenance
- Shipped fully assembled and pre-calibrated
- Available with wireless transmitter as an accessory with text, e-mail notifications feature
- 5 Year Warranty
- Made in USA

TYPICAL GASES

- For ALL combustible gases
- Methane
- Butane
- Propane
- Ethane
- Pentane
- Hexane
- Heptane
- Octane
- Gasoline (Petrol)

- Hydrogen
- Methanol
- Ethanol
- Acetone
- Toluene
- Isopropyl Alcohol
- Cyclohexane
- Methyl Ethyl Ketone
- Ammonia (LEL)

SST SAFETY SYSTEMS TECHNOLOGY

23282 MILL CREEK DRIVE | STE. 215 | LAGUNA HILLS | CA 92653 | USA
TEL: 1-949-583-1857 | FAX: 1-949-340-6643
EMAIL: SALES@SAFETYSYS.COM | WWW.SAFETYSYS.COM

Model GC804 Combustible Gas Detector

SYSTEM SPECIFICATIONS

Sensor Type:	Catalytic bead with excellent long term zero and sensitivity stability
Poison Resistance:	Highly Resistant
Gases Detected:	Most combustible gases and vapors
Sensor Life:	Typical 5+ years
Measuring Ranges:	0-100% LEL
Accuracy:	+/- 1% LEL(CH_4)
Zero Drift:	< +/- 1/2 mV/Month
Linearity:	Effectively Linear to 100% LEL (to within 5%)
Response Time:	T_{90} <30 seconds
Modes:	Normal operation, set-points, calibration, set-up
Warranty:	5 years
Approvals:	Explosion-proof approved housing
	Class I, Division I, Groups A B C D; Class I, Zone I, AEx d IIC; Type 4X
	ATEX: II 2G Ex d IIC Gb

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature:	Electronics -40°F to 185°F (-40°C to 85°C)
	Sensor -40°F to 266°F (-40°C to 130°C)
Operating Humidity:	0-100% RH, non-condensing
Ingress Protection:	IP40 to IP66

MECHANICAL SPECIFICATIONS

Dimensions:	6.4 x 5.7 x 4.3 inches (163 x 145 x 109 mm)
Weight:	4.0 lbs. (1.8 kg) Aluminum; 10.0 lbs (4.5 kg) Stainless Steel
Controller Housing:	Aluminum or Stainless Steel
Sensor Housing:	Stainless Steel

Specifications subject to change without notice.

ELECTRICAL SPECIFICATIONS

Input Power:	24 VDC nominal, 16 to 32 VDC 92 mA standby, 120 mA alarm
Relay Contact Ratings:	6 amps @ 28 VDC or 300 VAC resistive 1/8 HP @ 120/240VAC

Analog Signal: 0-20 mA (600 Ohms or less)

Malfunction	0 mA
Setup Mode/Calibrate	4 mA
Zero Reading	4 mA
0-100% LEL	4-20 mA
Over-range	> 20 mA

Display:	Graphic Liquid Crystal Display
	Displays target gas concentration in % LEL; Flashing screen in alarm mode; Low brightness setting in power save mode
Field Connections:	4-20 mA output - three-wire shielded cable
	All other connections: 22 AWG (.35 mm^2) to 12 AWG (4.0 mm^2)
Wireless Communication:	Available with optional wireless transmitter with text, e-mail notification features

ORDERING INFORMATION

Part No.	Description
804-4-(Gas)	Model GC804 Combustible Gas Detector *Electronics in aluminum housing*
804-4-(Gas)-SS	Model GC804 Combustible Gas Detector *Electronics in stainless steel housing*

Accessories

851-1-4	Rain shield, stainless steel (IP65)
851-5-4	Water spray shield
852-1-4	Dust cover, stainless steel
854-1-4	Duct mount, stainless steel
859-1-4	Gas sensor collection cone, stainless steel
858-1-4	Remote calibration adapter
857-01	Calibration kit (test gas sold separately)
10121	Spare calibration/test key
20231-2	Stainless steel tag
800-4	Standard replacement sensor
804-2-AL-(Gas)	Electronics in aluminum housing Sensor in stainless steel, CSA & ATEX listed
804-2-SS-(Gas)	Electronics in stainless steel housing Sensor in stainless steel, CSA & ATEX listed

SST Safety Systems Technology

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