Model **580A**

Dual-Channel Combustible Gas Monitor

Applications

- Compressor Stations
- Drilling Platforms and Rigs
- Fuel Loading Facilities
- Gas and Oil Production Platforms
- Gas Turbines
- LNG Processing and Storage
- Oil Well Logging
- Sewage Plants
- Solvent Vapors

Features

- Continuous diffusion, electro-catalytic sensor
- High visibility LED status indicators
- Adjustment-free calibration
- Low power consumption
- Wide variety of relay options
- Two year warranty

Benefits

- Stable operation over wide ambient temperature and humidity ranges
- Provides visual indication of fault and alarm status at the detector location
- Lower calibration costs
- Lower operating costs
- Provides choice to meet specific customer requirements
- User protection

Description

The Model 580A Controller is a two-channel system designed to continuously monitor for potential explosive concentrations of most combustible gases/vapors. The 580A consists of a controller plus two sensor assemblies. The sensors are monitored independently. The controller can be wall, panel or rack mounted in a non-hazardous area.

The system operates in the range of 0-100% LEL (Lower Explosive Limit) and is calibrated to a particular gas or vapor. User interfaces are provided so that the operator may interpret and direct the Model 580A in the performance of its various functions. User interfaces consist of a digital display, status indicators, a channel/select button, a mode button, and a reset button.

The system operates on 117 VAC, 50-60 Hz (optional 220 VAC, 50-60 Hz), or 24 VDC primary input power with the capability of 24 VDC battery backup. Nominal power consumption is 18 watts.

MSA

The Safety Company

*Because every life has a **purpose...***

System Specifications

DIGITAL READOUT	0-99% LEL
ACCURACY	±3% LEL ≤ 50% LEL gas 5% LEL > 50% LEL gas
CLASSIFICATION	General purpose for mounting in non-hazardous areas, indoors.
WARRANTY	Two years
APPROVALS	CSA

Environmental Specifications

TEMPERATURE RANGE	32°F to 140°F (0°C to 60°C)
STORAGE TEMPERATURE	-4°F to 149°F (-20°C to 65°C)
HUMIDITY	10-95%, non-condensing

Mechanical Specifications

MOUNTING	Panel or wall
DIMENSIONS	2.1" W x 6.9" H x 11.5" D (53mmW x 175mmH x 292mmD)
WEIGHT	3.8 lbs. (1.8 kg)

Electrical Specifications

POWER	105-130 VAC (205-255 VAC optional), 50-60 Hz, 22-30 VDC, 9 watts nominal per channel (117 VAC)
ALARM CIRCUITS	4A/117 VAC, resistive
LED STATUS INDICATORS	SE - Sensor malfunction HI - High line voltage LO - Low line voltage
STANDARD CONFIGURATION	580A-1-1-01-2 (110 VAC / 24 VDC, latch alarm, non-latch warn, de-energized, standard

Sensor Elements

General Monitors' sensors are designed for reliable performance and long life. Each sensor must undergo extensive burn-in and rigid quality control procedures before shipment.

The sensors consist of two catalytic bead elements in a balanced Wheatstone bridge circuit. These low temperature catalytic bead-sensing elements require minimal sensor excitation current, greatly increasing sensor life.

Sensor Specifications

TYPE	Continuous diffusion, low temperature catalytic bead. Standard Industrial Hydrocarbon Sensor. High Temperature Standard Industrial Hydrocarbon Sensor.
TEMPERATURE RANGE	-40°F to +167°F (-40°C to +75°C) High Temperature Sensor to 392°F (200°C)
RESPONSE TIME	T_{50}: typically 6 seconds
ZERO DRIFT	Less than 5% per year
LIFE	3 to 4 years, normal service
CLASSIFICATION	Class I, Division 1 and 2, Groups B, C and D
CABLE LENGTH	Three conductor cable. Maximum length of cable between controller and sensor assembly with loop resistance of 20 ohms NOTE: Shielded cable is recommended

Wire Size AWG	*Length* (Meters)	(Feet)
14	2,320	7,600
16	1,460	4,800
18	910	3,000
20	580	1,900

WARRANTY	Two years
APPROVALS	CSA and/or FM

Specifications subject to change without notice.