



Gas Detection Technology

Model PT395-LEL Combustible Gas Sensor

Features

- Microprocessor based modular design
- Industry standard 4-20mA output
- Low and High Field adjustable Alarm levels
- Single point Non-Intrusive calibration
- Bright 3 digit LED display
- Displays gas concentration in %LEL, calibration prompts and sensor fault codes
- Class I, Div 1, Suitable for use in Hazardous Location



Description

Model PT395-LEL is a microprocessor-based sensor designed to detect combustible hydrocarbons in air over the range of 0-100% LEL (lower explosive limit). The unit features easy one-man calibration initiated by simply activating a magnetic switch and applying the gas.

The complete sensor consists of a stainless steel sensor head assembly, a user connection board and a transmitter board assembly. All of the sensor electronics are enclosed in an explosion proof instrument box. The unit's modular design allows easy maintenance, troubleshooting and high reliability.

The unit provides a 4-20mA signal proportional to 0 to 100% of the detection range of the sensor and three (3) fully programmable alarm relays. The sensor transmitter board includes a three (3) digit LED display for continuous indication of the gas concentration. The calibration mode, alarm and fault status of the sensor are also indicated on the digital display. In the normal operating mode the digital display and 4-20mA reading is proportional to the gas concentration detected by the sensor. In the calibration mode the digital display indicates the calibration status, alarm relay outputs are inhibited and analog signal output is set to 2 mA to avoid any false alarm by the control



Model PT395 Stand Alone Combustible Sensor

Specifications

Sensor Type

Continuous diffusion Catalytic Bead

Measuring Range

0 to 100 % LEL

Repeatability

± 2 % Full scale

Zero Drift

< 5% per year

Response Time

T50 < 10 seconds

T90 < 30 seconds

with 100% LEL methane gas applied

Classification

Class I, division 1, Groups B,C & D

Operating Temperature

-40°F to +158°F (-40°C to +70°C)

Operating Humidity

10% to 90% RH, non-condensing

Mechanical Specifications

Length: 7 inches (178 mm)

Width: 5 inches (127 mm)

Height: 4.5 inches (114 mm)

Display

Bright 3 digit LED display

Status Indicators

Amber and Red alarm LED indicators
for Low, High and Fault Alarms.

Approvals

ATEX / CSA for use in Hazardous
area.

CSA Performance test: ISA-S12.13-
Part I-1995

Input Power

14-28 VDC. 24 VDC nominal

Power Consumption

165mA @ 24 VDC typical

Alarm Relays

3 Alarm Relays, Low, High and Fault

Fully programmable. 0 to Full scale
range of the sensor. Latching or Non-
Latching.

Relay Ratings

SPDT Form "C" type Relay contacts

0.5 Amp @ 125 VAC or

2 Amps @ 30 VDC

Analog Output

Linear 4-20mA (300 Ohms max. load)

2.0 mA - Calibration mode

< 1.0 mA - Sensor malfunction

Calibration

Non-Intrusive activated by internal
magnetic switch

Cable Entry Hub

3/4" NPT Female

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