

STATUS SCIENTIFIC CONTROLS

PROGRAMMABLE

FIXED SYSTEM FOR GAS AND SAFETY MONITORING AND CONTROL 

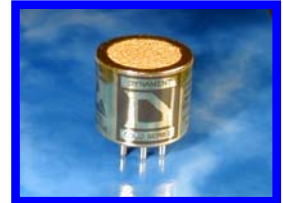


FGD3 INTRINSICALLY SAFE INFRARED FLAMMABLE GAS DETECTOR HEAD



Features

- Totally poison resistant alternative to pellistors
- Inbuilt sensor diagnostics
- 12-month calibration interval
- Minimum 5-year sensor life
- LCD readout
- 4 to 20 milliamp output
- External pushbuttons enabling non-intrusive calibration to take place in hazardous environments
- Unique green flashing 'confidence' LED
- Plug-in sensor
- Certified intrinsically safe to ATEX standards
- Water and dust proof to IP65
- Optional intrinsically safe power supply allows operation directly from 24v supply



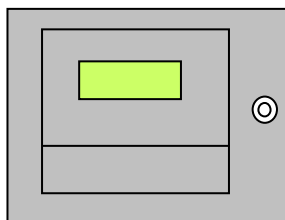
Miniature plug-in sensor with inbuilt temperature monitor

TYPICAL GASES DETECTED

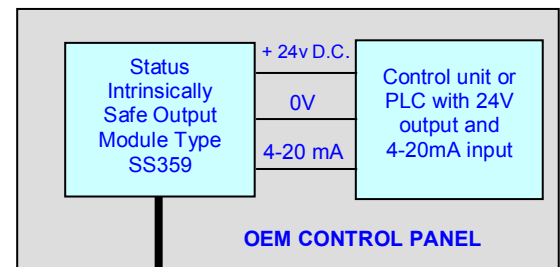
**METHANE
PROPANE
BUTANE
ETHANE
PENTANE
HEXANE
OCTANE
ETHANOL
IPA
SOLVENTS**

TYPICAL INSTALLATION USING STATUS SCIENTIFIC CONTROLS MCU CONTROL UNIT

TYPICAL INSTALLATION USING AN OEM CONTROL PANEL



MCU Control unit fitted with i.s. Output Module Type FGDIO



OEM CONTROL PANEL

Safe area

Safe area

Hazardous area

Hazardous area



FGD3 Infrared Gas Detector



FGD3 Infrared Gas Detector

Specification

Size	:122 x 142 x 75mm nominal		
Weight	:0.9Kg		
Gas Types	:Hydrocarbons including Methane (Note: Infrared sensors have no response to Hydrogen)		
Operating Voltage	:8 to 28V dc (for 4 to 20 mA signal) 5.8 to 7.5V dc (for sensor supply)		
Cable	:3 core (plus screen)		
Output Signal	:0mA - open circuit	2mA - fault	4mA - zero gas
	20mA - full scale gas	22mA - over-range	
Max. Cable Loop Resistance	:Signal - 640 ohms at 24vdc Sensor - 15 ohms at 7.5vdc		
Sensor Type	: NDIR Infrared		
Measurement range	:0-100% LEL (5% vol CH ₄) or 0-100% vol. CH ₄		
Response Time	:T ₉₀ < 30 sec (Methane)		
Measurement Resolution	:1% LEL or 1% vol		
Operating Temperature	: - 20 to +50 deg.C		
Humidity Range	:0 to 95% RH non-condensing		
Operating Pressure	:Ambient + or - 10%		

N.B. Please discuss with your technical sales advisor target gas and measurement range

United Kingdom Hazardous Area Certification

Standards	: EN50014: 1997 + Amds 1 & 2, EN50018:2000, EN50020:1994
BASEEFA Code	: II 2 G EEx iad IIC T4 (-20°C<Ta<+60°C)
BASEEFA Certificate number	: BAS01ATEX2300
Zones	1 & 2

Intrinsically Safe Output Module Type SS359 Specification

Inputs	14-28vDC 12-24V	Current Loop Sensor Supply		
Temperature	-20 - +40°C			
Humidity range	0-95% RH non-condensing			
Operating pressure	Ambient + or - 10%			
Internal Resistance	Current Loop	: 270R ±5%		
Source Resistance	Sensor Supply	: 12.0R ±5%		
Intrinsically Safe Outputs	Terminals	Uo	Io	Po
	1 & 2	28V	.112A	.8W
	3 & 4	7.5V	.66A	1.24W
Certificate No.	Baseefa 03ATEX0590X			
Code	II (1) G [EEx ia] IIC			
Zones	1 or 2			



DIN rail mounting

The Intrinsically Safe Output Module shown above provides the necessary interface between a non-intrinsically safe, mains powered system and an FGD3 Infrared Gas Detector. Note that an intrinsically safe earth must be connected to the module to ensure safety.

Designed and Manufactured in the UK

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