

## MULTI-PURPOSE INTRINSICALLY SAFE GAS DETECTION SYSTEM

*The ED811 Gas Detector has found extensive use in boiler rooms, refrigeration plants, car parks and many other applications. Hazardous area certification, 4 sensor capability and convenient alarm extensions allows an economic solution to a long standing problem. Impressive approvals and an established track record since first certified in 1986 ensures long term reliability second to none.*



### Features

- Intrinsically Safe 4 sensor gas detection system with control capability
- Non poisoning, well proven, semiconductor sensors.
- Double level alarm for each Sensor.
- Continuous fault monitoring of sensor wiring.
- Auto Reset as standard, manual reset optional.
- Separate Alarm and Fault Accept capability.
- Voltage Free Changeover Contacts for each alarm level and fault.
- Relay for shutdown control – 'non acceptable.'
- Fused 12V DC supply available for external functions.
- Calibration only required annually
- Very large range of detected gases, flammable and toxic without changing sensors. Selected by Department of Education and Science for fume cupboard monitoring.
- Non Specific Ammonia sensors available for refrigeration plant monitoring.

Typical applications include boiler rooms, garage pits, tanks, refrigeration plants, LPG heating installations, etc. etc. Gases detected include natural gas, propane, butane, freon, ammonia,

### HAZARDOUS AREAS

BASEEFA Certified Intrinsically Safe to EN50-014 and 020.  
II(1)G [EEx ia] IIC

### Approved By:



Baseefa2001  
Certified  
II(1)G [EEx ia] IIC



Quality Assurance to  
Baseefa2001  
Regulations Certificate  
Number: O344

## PERFORMANCE

RANGE	SENSOR TEMP	ACCURACY
5-30%	LEL-5°+30°C	2% LEL
5-30%	LEL-25°+55°C	3% LEL
30-100%	LEL-5°+30°C	3% LEL
30-100%	LEL-25°+55°C	6% LEL

NB. The above assumes correct calibration at prevailing RH. Reduction in alarm point level (ie fail safe) is not greater than 3% LEL from 40% to 100% RH at 20°C. The reduction is greater at higher temperature. For highest accuracy

WORKING TEMPERATURE RANGE:  
-20°C to +40°C

WARM UP TIME:  
1 minute

RESPONSE TIME:

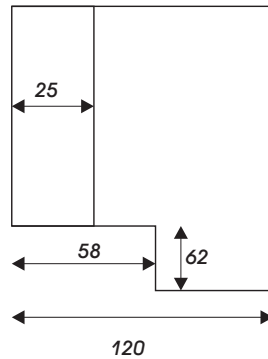
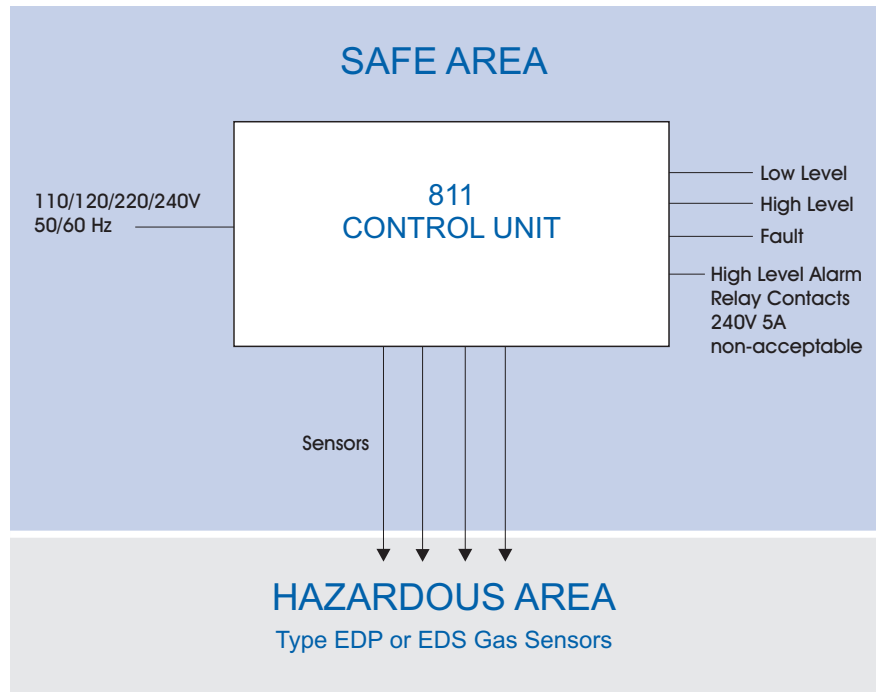
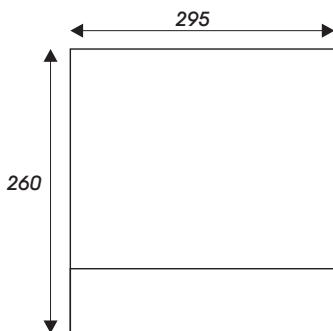
Type EDF 1B or EDF 2B sensors 10 seconds max. 20% LEL for step function from clean air to 50% LEL concentration. See separate data sheet for details on our I.S. Transmitter range. Designed to accept either Pellistor or Electrochemical cell sensors.

HIGH GAS CONCENTRATION:  
After exposure to 100% gas (propane). Reset within 10 minutes. Step function of 50% LEL alarms at 20% LEL within 10 seconds.

POWER SUPPLY:  
Mains (permanent) 110/240V \_10%, 50/60Hz \_ 5% Mains (transient) 110/240V \_ 20%, 50/60Hz \_ 10%

## DIMENSIONS

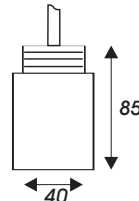
(All dimensions in mm)



## SENSORS



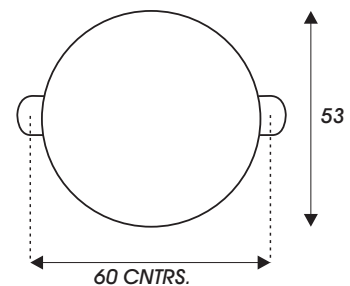
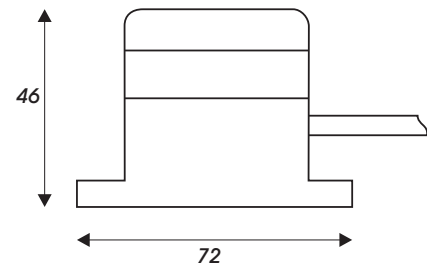
Type EDF 1B, 2B or 3B  
(Stainless Steel)  
II 2 G EExd IIC T6  
Weight: 0.5 Kg  
M32 male thread



The EDF can be Bulkhead mounted in quick release clips or Junction box to facilitate testing calibration etc. The EDF type is suitable for direct internal tank mounting using the M32 male thread or via suitable adaptors to

## AUDIO ALARMS

Type ED4 or Type ED6 LRS and MCA Approved



Also available in this range of Gas Detectors are the following models:  
ED 210, Ed810 and ED 910



## ELECTRONIC DEVICES LIMITED

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