

FIRE DETECTOR - TYPE ED 820



The ED820 was first approved in 1986, and since then many thousands have been fitted worldwide. The equipment has now become an industry standard because of its simplicity and reliability. Ease of use and installation coupled with economy and a superb approvals pedigree make the ED820 first choice for all small commercial vessels. The well proven and easily understood conventional system allows simultaneous indication of all zones and utilises a wide range of detector heads.



APPROVED BY



Type approved by
the American
Bureau of Shipping



SGS Baseefa
Certified
II(1)G [Ex ia Ga] IIC



Quality Assurance
SGS Baseefa
Certificate
Number: 0344

FEATURES

- 4 zone capability – mixed heat, smoke, call points etc.
- Two wire detector circuits, continuous fault monitoring.
- Immediate fire alarm and fault relay outputs.
- Two fault monitored sounder circuits.
- Key switch resound alarms
- Alarm-voltage free contacts 5A @ 30VDC.
- Main DC, Emerg. DC and all fuses are fault monitored.
- EN54-2:1997+A1:2006
- Integral automatic emergency power changeover.
- Internal fire audio alarm.
- Internal fault audio alarm.
- The ED820 accepts dual 24VDC inputs. Where two DC supplies are not available ED recommend that the Type 3 Power Supply Unit and integrated battery charger are used.
- Zener barriers for hazardous area operation are available in separate enclosures.

COMPATIBLE PERIPHERAL DEVICES.

DETECTION HEADS

Most conventional approved heads requiring not greater than 18.5V supply in the standby condition is compatible with the ED820.

i.e Apollo Orbis Heads
Hochiki CDX

Additionally Flame detectors and Hazardous Area products can also be supplied.

CALL POINTS

Most conventional manual call points are compatible.

AUDIABLE / VISUAL ALARMS

We can supply a range of audible and visual alarms to suit specific requirements

HAZARDOUS AREAS

Zener barriers can be supplied for appropriate equipment in hazardous areas.

MARINE APPROVED TESTING INCLUDES.

INSULATION RESISTANCE

Greater than 100 Mohm at 500V and greater than 10 Mohm after humidity, low temperature and salt mist tests (see below).

INCLINATION STATIC

22.5°C on either side of the vertical in all planes.

INCLINATION DYNAMIC

22.5°C on either side of the vertical with a roll period of 10 seconds.

VIBRATION

2.0-13.2 Hz amplitude +/- 1.0mm
13-100 Hz acceleration +/- 0.7g

DAMP HEAT

20° to 55°C +/- 3°C at 95% RH

SALT MIST

Exposure to standard salt solution at 35°C, 95% RH for 28 days.

DRY HEAT

Temperature: + 70°C.

LOW TEMPERATURE

Temperature: - 25°C.

HIGH VOLTAGE

2KV AC.

ELECTRO STATIC DISCHARGE

8KV direct to enclosure.

POWER SUPPLY PERMANENT

+6% / -10% voltage variation, combined with +/- 5% frequency variation.

ELECTRO-MAGNETIC INTERFERENCE

Frequency range 80MHz to 6GHz modulation 80% AM at 1000hz

CONDUCTED LF

10% of input voltage to the fifteenth harmonic, decreasing to 1% at the hundredth harmonic. Input supply frequency 50Hz to 10kHz.

CONDUCTED HF

150kHz to 80MHz modulated 80% at 1kHz, with a carrier level of 3V.

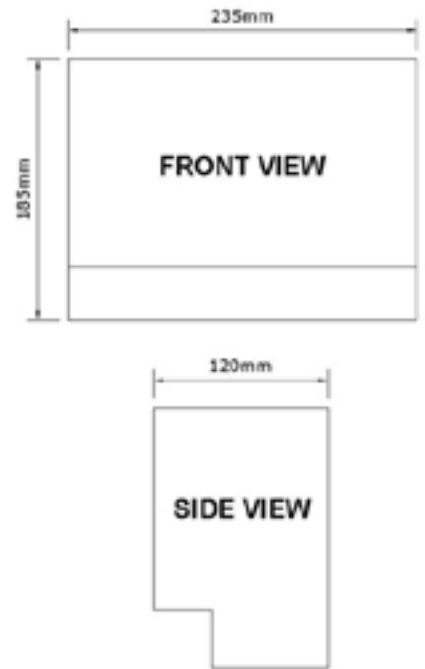
SPATIAL RFI

30 kHz to 500 MHz amplitude modulated 30% at 1 kHz, with an electric field strength of 10 V/m.

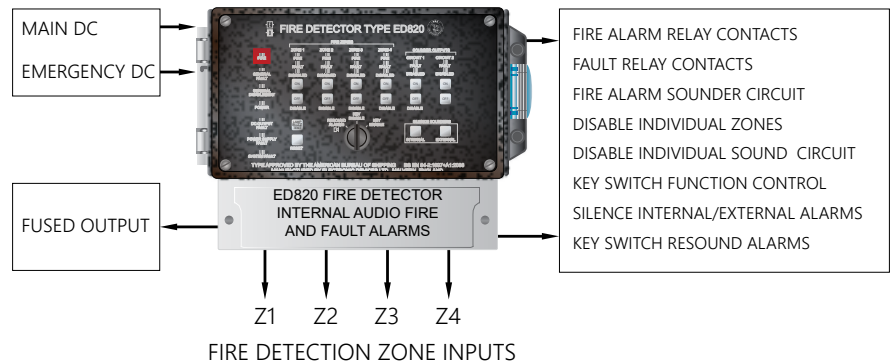
POWER LINE TRANSIENTS

1 kV amplitude 50 ns width pulses with a rise time of 5ns at a PRF OF 5000 P/S
1 kV amplitude 50 microsec width pulses with a rise time of 1.2 microsec at a PRF of 1 p/s

DIMENSIONS



FUNCTION DIAGRAM



Also available in this range of fire detectors are the following models:
ED 320, ED816, ED832