FLAME DETECTORS – INTELLIGENT
XP95 FLAME DETECTOR RANGE

DESCRIPTION

Flame detectors are effective in protecting areas where flaming fires may be expected.

- UV flame detectors are used when detection must be unaffected by convection currents, draughts or wind. These include engine rooms in ships, factories affected by draughts or wind and warehouses.
  They are fast reacting and respond to a flame more than 25 metres away. The UV flame detector is affected by arc welding, electrical sparks, lightning, nuclear radiation and UV light sources. For applications where these phenomena are present a UV flame detector should not be used.
- UV/DUAL IR detectors are not affected by any of the sources mentioned above. They are used in aircraft hangers, generator rooms (diesel and gas turbines) and paint works.
- The IR3 flame detectors are also fast reacting but are also tolerant of fumes, vapours, steam, dust and mist, while being unaffected by the phenomena listed above. It may, however, be affected by modulated IR radiation. Triple IR flame detectors are used in waste handling, colour printing and paper manufacturing.

The Intelligent Base Mounted **UV Flame Detector** is designed to protect enclosed indoor areas where open fires may be expected. The detector has a fast acting response to flames up to 25 metres away and is equipped with a single UV sensor with a narrow spectral response in order to discriminate between flames and most spurious sources of radiation.

The Intelligent Base Mounted **UV Dual IR Flame Detector** is designed to protect open indoor areas such as aircraft hangers, generator rooms and paint works where open flaming fires may be expected. The detector has UV and dual IR sensors responding to different wavelengths in order to discriminate between flames and spurious sources of radiation.

The Intelligent Base Mounted **IR3 Flame Detector** is designed to protect all indoor areas, even in dirty or smoky conditions, where open flaming fires may be expected. The detector has three IR sensors that respond to different IR wavelengths in order to discriminate between flames and spurious sources of radiation.

The Base Mounted **Flame Detector Bracket** option combines a Bracket and Deckhead Mounting Box.

FEATURES

- EN54-10 Compliant
- 10 Year Warranty
- Compact flame detector
- Loop-powered
- Three detection techniques available: ultraviolet (UV), infra-red (IR), and a combination of both:
  - **IR2**: High immunity to false sources (indoor areas)
  - **IR3**: Excellent immunity to false sources (indoor or outdoor areas)
  - **UV/IR2**: Highest immunity to false sources (indoor or outdoor areas)

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SPECIFICATIONS

	UV Flame Detector AP-FDXP-UV	UV/IR2 Flame Detector AP-FDXP-UVIR2	IR3 Flame Detector AP-FDXP-IR3
Supply Voltage	17–28 V DC	17–28 V DC	17–28 V DC
Protocol Peak to Peak	5 –9 V	5 –9 V	5 –9 V
Quiescent Current	2.3 mA	2.8 mA	2. 5 mA
Alarm Current	4.2 mA	4.2 mA	4.2 mA
Surge Current	9 mA (peak) for 110 ms	9 mA (peak) for 85 ms	9 mA (peak) for 85 ms
Maximum Power Up Time	4 seconds	4 seconds	4 seconds
Remote Output Characteristics	Connects to positive line through 4. 5 kΩ (5 mA max)	Connects to positive line through 4. 5 kΩ (5 mA max)	Connects to positive line through 4. 5 kΩ (5 mA max)
Operating Range	0.1 m^2 N-Heptane at 25 m	0.1 m^2 N-Heptane at 25 m	0.1 m^2 N-Heptane at 25 m
Sensitivity	Class 1 or 3, EN54 -10	Class 1 or 3, EN54 -10	Class 1 or 3 EN54 -10
Field of View	90° Cone	90° Cone	90° Cone
Spectral Response	UV 185 to 260 nm	UV 185 to 260 nm, IR 0.75 to 2.7 μm	0.75 to 2.7 μm
Operating Temperature (no condensation or icing)	-40 °C to +70 °C	-40 °C to +70 °C	-40 °C to +70 °C
Storage Temperature	-40 °C to +85 °C	-40 °C to +70 °C	-40 °C to +70 °C
Relative Humidity	95%, non–condensing	95%, non–condensing	95%, non–condensing
IP Rating	IP42	IP42	IP42
Materials			
Housing	White Polycarbonate, V- 0 rated to UL94	White Polycarbonate, V- 0 rated to UL94	White Polycarbonate, V- 0 rated to UL94
Sensing window	2 mm Quartz	2 mm Quartz	2 mm Float Glass
Terminals	Nickel-plated stainless steel	Nickel-plated stainless steel	Nickel-plated stainless steel
Isolator Count			
20D	7	7	7
20i	20	20	20
Dimensions	100 mm diameter; 40 mm height; 48 mm in base		
Weight	150 g detector; 210 g in base		

ORDERING INFORMATION

Product Code	Product Description
AP-FDXP-UV	XP95 Base Mounted UV Flame Detector
AP-FDXP-UVIR2	XP95 Base Mounted UV/IR2 Flame Detector
AP-FDXP-IR2T	Intelligent IR2 Flame Detector (add mounting bracket AP-FDXP-BRK)
AP-FDXP-IR3	XP95 Base Mounted IR3 Flame Detector
AP-FDXPM-UV	Marine Intelligent Base Mounted UV Flame Detector
AP-FDXPM-UVIR2	Marine Intelligent Base Mounted UV/IR2 Flame Detector
AP-FDXPM-IR3	Marine Intelligent Base Mounted IR3 Flame Detector

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