MINERVA® MX Marine

811F & 811FEx MXTechnology® Addressable Solar Blind InfraRed Flame Detectors

Features:

- Unlike UV and UV/IR detection, not blinded by oil mist in machinery spaces
- Reduces cabling, no interface required
  No additional power source required
- Easy installation, uses a common plug in
- base for smoke and heat detectors
- Can be used on all vessels as fully marine approved
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Standard or Intrinsically Safe ATEX approved

The 811F and 811FEx point type flame detectors are part of the MXTechnology® range of digital addressable fire detectors. MXTechnology® incorporates heat, optical and carbon monoxide detection. The 811F and 811FEx flame detectors present a cost effective solution to providing false alarm free flame detection for enclosed applications.

Both the 811F and the 811FEx are full featured solar blind flame detectors for enclosed use and boast a high degree of false alarm immunity. The standard unit is the 811F and it is designed for direct connection to the MX digital loop, employing the same detector base or functional base as other 800 series fire detectors.

The 811FEx is an intrinsically safe version intended for use in hazardous atmospheres and must be connected via an EXI800 interface and galvanic isolator. The detectors are designed to comply with EN 50 014 and EN50 020 for intrinsically safe apparatus. They are certified: ATEX code: II 1 G Cenelec code: EEx ia IIC T4.

Ordering Information:

Stockcode	Description
516.800.007	811F MX IR Flame Detector
516.800.067	811FEx MX IR Flame Detector Intrinsically Safe
517.050.017	5B 5" Universal Base
516.800.903	801IB Isolator Base
517.050.610	MUBEx Base for 600/800Ex
514.001.063	EXI800 MX I.S. Loop Interface
517.001.259	Pepperl & Fuchs KFD0-CS-Ex1.54 Galvanic Isolator
517.001.247	DX170 MTL5/7000 Enclosure
592.001.012	T110 IR Test Source
592.001.018	T110 Test Source Adapter

Mechanical

Detector Material:	FR110 'BAYBLEND'
Dimensions (mm):	108 x 21.2
Weight: - 811F	74g
- 811FEx	108g

Electrical

Loop Voltage:	20 – 40 V
Quiescent current:	300 micro Amp
Alarm current:	3 mA typical

Intrinsic Safety Rating

Maximum Voltage for Safety (Ui)	28V
Maximum Current for Safety (Ii)	93mA
Maximum Power Input (Pi)	650mW
Equivalent Inductance (Li)	0
Equivalent Capacitance (Ci)	0

Hazardous Area

ATEX code:	ATEX 0422X II 1 G EEx ia IIC T4

Environmental

Operating temperature:	-20°C to +70°C

Operation below 0°C is not recommended unless steps are taken to eliminate condensation and hence ice formation on the detector.

Storage Temperature:	-40°C to +80°C
Relative Humidity:	90% RH continuous (non-condensing) and up to 99% RH intermittent (non-condensing)

Performance

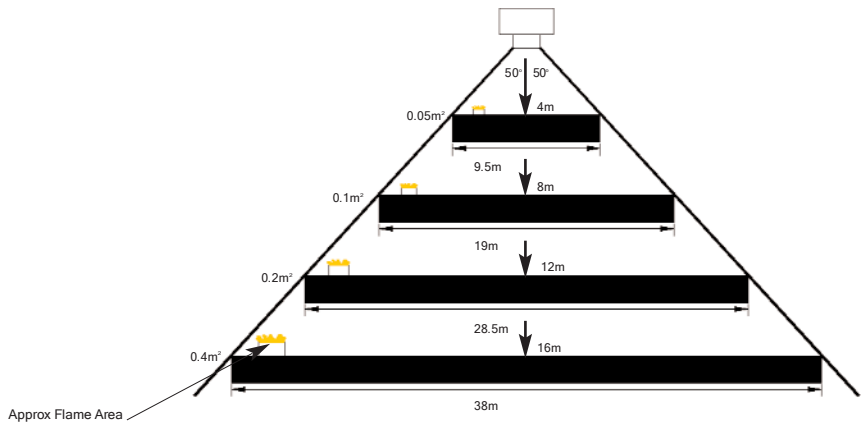
Range:	0.1m² n-heptane at 20m
	0.4m² n-heptane at 50m
Field of View:	100°

Mounting Bases

5B:	5" Universal Base
MUBEx:	I.S. Universal base

Functional bases that provide relays, sounders and isolation can be used with the 811F but cannot form part of an intrinsically safe circuit.

Connections:	L -VE IN/OUT
	L1 +VE IN/OUT
	801F Only R Remore LED -VE



Note 1: When the risk is a hot vibrating body the detector should be mounted securely using a suitably fabricated bracket at an angle or on a vertical surface to view the risk.

Note 2: Diagram not to scale