601F & 601FEx

Conventional InfraRed Flame Detectors

ZETTLER

Standard or Intrinsically safe ATEX approved The 601F and 601FEx point type flame detectors form part of the 600 series of conventional detectors. The range includes heat, optical, ionisation and carbon monoxide detection technologies and with the addition of the 601F and 601FEx now encompasses infrared flame detection.

Both the 601F and the 601FEx are full featured solar blind flame detectors for indoor use and boast a high degree of false alarm immunity. The standard unit is the 601F and it is designed for connection to a conventional zone of point type fire detectors that may include any mix of detection technologies. The 601FEx is an intrinsically safe version intended for use in hazardous atmospheres and must be connected via a suitable isolator or shunt diode safety barrier in a certified Intrinsically Safe system.

Features

// Solar Blind for false alarm free operation

// Intrinsically safe or standard versions

// Fast response to flame

// Detect a $0.1m^2$ fire at a range of 20m

// Discrete ultra low profile design

// Fits a standard detector base or functional base

// Integral alarm LED with 360 degree angle of view

// Use T110 infrared test source (With separate adaptor)

// Complies to EN54-10 for Flame Detectors

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Technical Specifications

Mechanical
Detector Material	FR110 'BAYBLEND'
Dimensions	108mm x 21.2mm
Weight	- 601F 74g
	- 601FEX 110g

Electrical
Supply Voltage:	601F 18 – 28Vdc
	601FEx 14 – 28 Vdc
Quiescent current:	Typical 300 micro Amp
Alarm current:	36mA @ 18Vdc

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 Certificate No:	Baseefa 03ATEX0422X
IECEX Certificate No:	IECEX BAS 07.0075X

Environmental
Operating temperature	-20°C to $+70^{o}$C

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

Storage Temperature	-40°C to $+80^{o}$C
Relative Humidity	90% RH continuous (noncondensin and up to 99% RH intermittent (non condensing)

Performance
Range	$0.1m^2$ n-heptane at 20m (on axis)
	$0.4m^2$ n-heptane at 50m (on axis)
Field of View	100°

Electromagnetic Compatibility
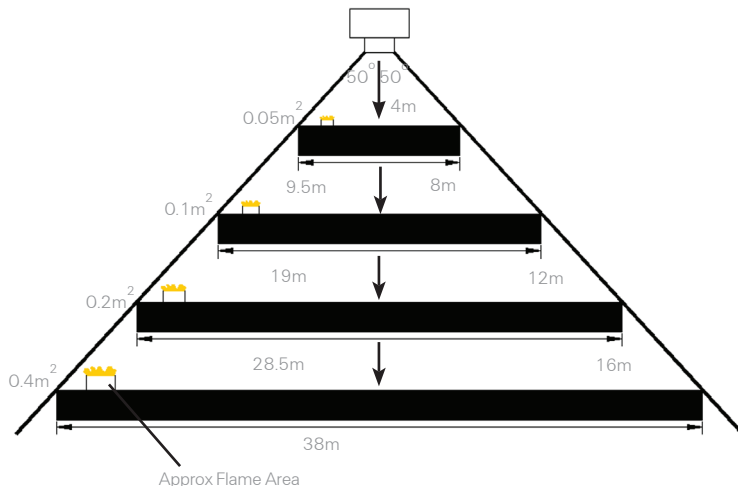|	
ESD:	to EN50130-4
Radiated Immunity:	to EN50130-4
Fast Transient:	to EN50130-4
Slow High Energy:	to EN50130-4
Conducted Immunity:	to EN50130-4
Emissions:	to EN61000-6-3

Mounting Base
5B	5" Universal Base
5BD	5" Universal Diode Base (601F only)
5BEX	5" IS Universal Base
Connections:	L -VE IN/OUT
	L1 +VE IN
	L2 +VE OUT
	R Remote LED Drive -VE

Ordering Information

516.600.006	601F Conventional Flame Detector
516.600.066	601FEX Conventional Flame Detector Intrinsically Safe
517.050.017	5B 5" Universal Base
517.050.600	5BD 5" Conventional Diode Continuity Base
517.050.023	5BEX 5" Universal Ex Base
517.001.244	MTL5061 2 Channel Galvanic Isolator
517.001.247	DX170 MTL5/7000 Enclosure
592.001.012	T110 IR Test Source
592.001.018	T110 Test Source Adapter

Approx Flame Area

PSF132ZT - April 2013

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