

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.

The detectors are designed to comply with IEC 60079-0:2011, EN 60079-11:2012 and IEC 60079-11:2011 for intrinsically safe apparatus. They are certified: ATEX code: Ex II 1GD EX ia II CT4 Ga
Cenelec code: Ex ia IIC T4 Ga EX ia IIIB T135°C Da
(-20°C ≤ Ta ≤ + 70°C)



Features

- Solar Blind for false alarm free operation
- Intrinsically safe or standard versions
- Fast response to flame
- Detect a 0.1m² fire at a range of 20 m
- 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	108 mm x 21.2 mm
Weight	- 601F 74 g - 601FEX 110 g

Electrical

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

Intrinsic Safety Rating

Maximum Voltage for Safety (Ui):	28 V
Maximum Current for Safety (Ii):	93 mA
Maximum Power Input (Pi):	650 mW
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°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°C
Relative Humidity	90% RH continuous (noncondensing) and up to 99% 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

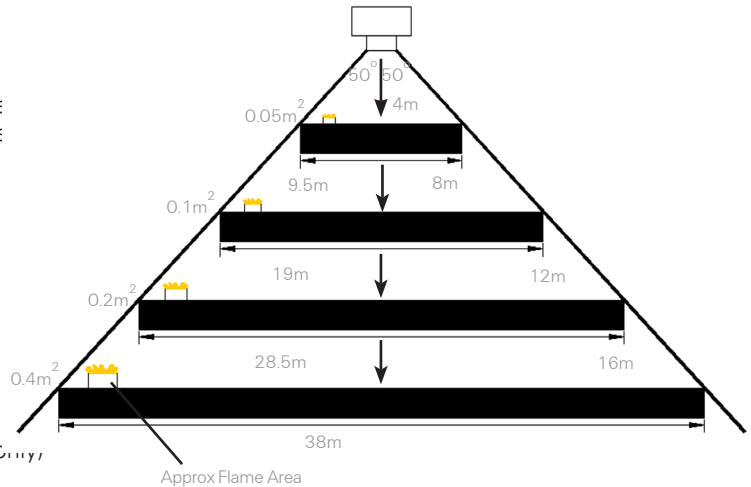
ESD:	to EN50130-4
Radiated Immunity:	to EN50130-4
Fast Transient:	to EN50130-4
Slow High Energy:	to EN50130-4
Conducted Immunity:	to EN50130-4
Emissions:	to EN61000-6-3

Mounting Base

5B	5" Universal Base
5BD	5" Universal Diode Base (601F Conventional)
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



ZETTLER, is a leading brand of fire detection products in the European market. The ZETTLER fire detection product line includes a wide range of EN54 CPD approved fire detection products carrying approvals and cross-listings, including VdS and NF. The ZETTLER product lines are available through ZETTLER Authorised Distributors as well as many Johnson Controls offices around the world.

Tyco Fire & Security GmbH, Victor von Bruns Strasse 21, CH-8212 Neuhausen am Rheinflall, Switzerland

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PSF132ZT Issue – 2. September 2017

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