

#### **FM Approvals Europe Limited**

One Georges Quay Plaza, Dublin. Ireland. D02 E440

Email: cpr@fmapprovals.com Web: www.fmapprovals.com

#### CERTIFICATE OF CONSTANCY OF PERFORMANCE

#### 2809-CPR-E0030

In compliance with Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011 (the Construction Products Regulation or CPR), this certificate applies to the construction product

#### FL5000 Multi-Spectrum Infrared Flame Detector

(Models: See Appendix)

Scope of Certificate: FL5000 Multi-Spectrum Infrared Flame Detector:
Flame Detectors – Point Detector for fire detection and fire alarm systems for buildings
Sensitivity: meets Class 1 (high, medium, and low sensitivities) for n-Heptane fire and Class 1 (high and medium sensitivities) and Class 2 (for low sensitivitiy) for Methylated Spirits fire.

#### placed on the market under the name or trade mark of

#### **General Monitors Inc**

an MSA Company 16782 Von Karman Ave. Unit 14 Irvine, California, CA 92606 United States of America

#### and produced in the manufacturing plant(s)

#### MSA Innovation, LLC

1000 Cranberry Woods Dr., Cranberry Township, Pennsylvania, PA 16066 United States of America

#### **General Monitors Ireland Limited**

Ballybrit Business Park Galway, Ireland

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the standard

#### EN 54-10:2002 + A1:2005 Flame Detectors - Point detectors

under system 1 for the performances set out in this certificate (see approval report PR458170 & PR466847 & PR467827 for details) are applied and that the factory production control conducted by the manufacturer is assessed to ensure the

#### constancy of performance of the construction product

This certificate was first issued on 04 October 2023 and will remain valid as long as neither the harmonised standard, the construction product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified product certification body.

Digitally signed by Richard Zammitt

Location: Ireland Foxit PDF Editor Version: 13.1.2

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Richard Zammitt, Certification Manager On behalf of FM Approvals Europe Limited (Project ID PR466847 & PR466847 & PR467827)

ISO 17065

NAB
ACCHIDITION
PRODUCT
CERTIFICATION
DETAILED BY SCOPE REG NO.65024



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#### **APPENDIX TO CERTIFICATE OF CONSTANCY OF PERFORMANCE**

#### 2809 - CPR - E0030

2809-CPR-E0030 FL5000 Multi-Spectrum Infrared Flame Detector Flame Detector		
Spectrum Response	Multi-Spectrum IR Bands	
Firmware	SK3608-1181 (Rev. 1.02.0168)	
Adjustable Time Delay	Up to 30 seconds; refer to the manual 10238682	
Sensitivity Range	3 Sensitivity Ranges: High, Medium, and Low; n-Heptane Fire: Class 1 for High, Medium, and Low sensitivities Methylated Spirit Fire: Class 1 for High and Medium Sensitivities and Class 2 for Low sensitivity refer to the manual 10238682	
Field of Views (FOVs)	Maximum: Horizontal 90°, Vertical 75°; refer to the manual 10238682 for more details	
Response Characteristics	Max 210 ft (64 m) for N-Heptane pan fire. Detection time typically 10 seconds; refer to the manual 10238682	
Built-in-Test	Automatic self-check to verify the lens cleanliness, functionality of electronic circuits, software	
Temperature Range	-55°C to +80°C -67°F to +176°F	
Humidity	0 to 95% RH, non-condensing	
Power Consumption	24 VDC nominal (20-32 VDC) Heater 'OFF': Max. 6.2 W Heater 'ON': Max. 9.7 W refer to the manual 10238682	
	Relay Output: Instant Alarm, Sustained Alarm, Fault. Accessory Contacts rated 8A at 30 VDC  Analog Output: Output Signal Range: 0-20mA (stepped) Fault: 1.25 mA default when HART is off, refer to the manual 10238682 COPM fault signal: 2.0 ± 0.2 mA default, refer to the manual 10238682	
Outputs	Ready: $4.05 \pm 0.2$ mA default, refer to the manual 10238682 Instant Alarm: $16.0 \pm 0.2$ mA Sustained Alarm: $20 \pm 0.2$ mA Maximum Output Signal Load: $600 \Omega$ @ 24 VDC	
	HART communications on the 0-20mA analog current (FSK) - used for maintenance, configuration changes etc.	
	RS-485 Modbus - used for maintenance, configuration changes etc.	



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mber of the FM Global Group		Linai, <u>chiemaphovals.co.uk</u> web. www.mappiovals.com	
		Bluetooth® - used for maintenance, configuration changes etc. Bluetooth® Load: 3.0 mA	
		The FL5000 operates via connection to a compatible Approved control panel, providing separate circuits for alarm signaling and for power.  Alarm latching function may be provided by the panel or the detector.	
	Status Indicators	Green, Yellow, and Red per requirements of the standard; Blue for Bluetooth® pairing	
	Enclosure	Stainless Steel 316 with Polyester TGIC Powder Coating	
	Mounting	Stainless Steel 316	
	Accessories	TL105 Test Lamp (p/n TL105-1001), Mounting Bracket (p/n 71370-1), Rain Guard (p/n 712004-1), Air Curtain (p/n 712881-1), ¾ -14 NPT Conduit Plug (p/n 10177576), M25 Conduit Plug (p/n 10203507), ¾ -14 NPT Male to M25 Female Conduit Adapter (p/n 914-196), FL4000H Upgrade Kit (p/n 10242703)	
	Certification Type	CPR ("CE")	
	CPR Certificate Number	2809-CPR-E0030	

#### **INITIAL TYPE TEST RESULTS BY NOTIFIED BODY:**

Classification & applicable standard	Assigned Rating
EN 54-10:2002 + A1:2005	Meets all requirements of Annex ZA

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