



Member of the FM Global Group

## FM Approvals Europe Limited

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# CERTIFICATE OF CONSTANCY OF PERFORMANCE

**2809 - CPR – E0010**

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

**FL500**

**Scope of Certificate:** Flame Detector – Ultraviolet/Infrared (UV/IR) Point Detector for fire detection and fire alarm systems for buildings

**Sensitivities:** High Settings meet Class 1 and Medium setting meets Class 3.

placed on the market under the name or trade mark of  
**General Monitors Inc.**

An MSA Company  
16782 Von Karman Ave. Unit 14  
Irvine, CA. 92606 USA

and produced in the manufacturing plants

**MSA Innovation LLC**  
1000 Cranberry Woods Drive  
Cranberry, PA 16066  
USA

**General Monitors Ireland**  
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 PR449305) are applied and that the factory production control conducted by the manufacturer is assessed to ensure the

## constancy of performance of the construction products

This certificate was first issued on 13<sup>th</sup> September 2018 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product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified product certification body.

Issue 4, Dublin, dated 06<sup>th</sup> October 2023

Page 1 of 3

F CPR 028(Dec/2020)

Richard Zammitt, Certification Manager  
On behalf of FM Approvals Europe Limited  
(PR449305)

This certificate remains the property of FM Approvals and has been issued in accordance with FM Approvals CPR Certification Scheme.



**APPENDIX TO CERTIFICATE OF CONSTANCY OF PERFORMANCE**

**2809 – CPR – E0010**

**FL500**

***The FL500 ultraviolet/infrared (UV/IR) Flame Detector is Certified for use:***

Class 1 = high sensitivity

Class 3 = Medium sensitivity

Operating Voltage: 24Vdc [20 to 36Vdc]

Current draw: 200mA max. [typical: 80 – 150mA]

Dry contact Form C SPDT relay outputs: 30Vdc, 5A resistive max.

Operating temperature and humidity range is -55°C to +85°C (-67°F to +185°F), 0-95%RH

4-20mA Outputs: 4mA – ready, 0mA - Fault, 2mA – COPM Fault, 8mA – IR only, 12mA – UV only, 16mA – Alarm Low, 20mA – Alarm High

Compatible FM Approved control panel for alarm and trouble reporting.

Sensitivity settings: High, Medium, Low

FL500 Flame Simulator: not FM Approvals examined

Firmware version 0

Detection times on axis at high sensitivity:

<b><i>Fuel</i></b>	<b><i>Distance (feet)</i></b>	<b><i>Response Time (s)</i></b>
n-Heptane	90	6
	60	2.7
Methanol	40	12
Methane	80	9.9
Propane	60	6.5
Butane	55	5.5
Ethane	60	2.1

Detection Distance and false alarm stimuli: see FL500 Safety and Technical Manual, 10193213/00

Field of view [ $\alpha \pm$ ] 50°

Field of view [ $\beta \pm$ ] 360°

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

<b>Classification &amp; applicable standard</b>	EN 54-10:2002 +A1:2005 – Flame Detectors – Point Detectors
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