

# 1 EU-TYPE EXAMINATION CERTIFICATE



2 **Equipment or Protective systems intended for use in Potentially Explosive Atmospheres - Directive 2014/34/EU**

3 **EU-Type Examination Certificate No:** FM18ATEX0040X

4 **Equipment or protective system:** FDS303 IR3 Multi Spectrum Flame Detector  
(Type Reference and Name)

5 **Name of Applicant:** Micropack Engineering Ltd.

6 **Address of Applicant:** Fire Training Centre  
Schoolhill  
Portlethen  
Aberdeen  
Scotland AB12 4RR

7 This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and documents therein referred to.

8 FM Approvals Ltd, notified body number 1725 in accordance with Article 17 of Directive 2014/34/EU of 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report number:

3062102 dated 10<sup>th</sup> May 2018

9 Compliance with the Essential Health and Safety Requirements, with the exception of those identified in item 15 of the schedule to this certificate, has been assessed by compliance with the following documents:

EN 60079-0:2012 + A11:2013, EN 60079-1:2014 and EN 60529:1991 + A1:2000


10 If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to specific conditions of use specified in the schedule to this certificate.

11 This EU-Type Examination certificate relates only to the design, examination and tests of the specified equipment or protective system in accordance to the directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

12 The marking of the equipment or protective system shall include:



II 2 G Ex db IIC T4 Gb Ta = -60°C to +85°C IP66

 Digitally signed by Andrew J. Was  
DN: cn=Andrew J. Was, o=FM Approvals Ltd, 1 Windsor Dials, Windsor, Berkshire, SL4 1RS, UK, ou=Assistant Vice President - Auditing & Quality Manager - EMEA, email=andrew.was@fmaprovals.com, c=GB

**Andrew Was**  
**Deputy Certification Manager, FM Approvals Ltd.**

Issue date: 18 May 2018

**THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE**

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# SCHEDULE



Member of the FM Global Group

to EU-Type Examination Certificate No. FM18ATEX0040X

**13 Description of Equipment or Protective System:**

The **FDS-303 Multi Spectrum IR3 Flame Detector** includes an aluminium or Stainless Steel assembly consisting of a threaded enclosure body, a threaded back cover and a threaded window cover. An O-ring seal is provided at each end between the enclosure body and the back cover / window cover respectively in order to prevent the ingress of dust and water.

The electrical ratings are 32Vdc maximum and 700 mA (maximum). The ambient temperature range of the equipment is from -60°C to +85°C

**14 Specific Conditions of Use:**

1. The equipment is to be installed in places where there is a low risk of mechanical damage.

**15 Essential Health and Safety Requirements:**

The relevant EHSRs that have not been addressed by the standards listed in this certificate have been identified and assessed in the confidential report identified in item 8.

**16 Test and Assessment Procedure and Conditions:**

This EU-Type Examination Certificate is the result of testing of a sample of the product submitted, in accordance with the provisions of the relevant specific standard(s), and assessment of supporting documentation. It does not imply an assessment of the whole production.

Whilst this certificate may be used in support of a manufacturer's claim for CE Marking, FM Approvals Ltd accepts no responsibility for the compliance of the equipment against all applicable Directives in all applications.

This Certificate has been issued in accordance with FM Approvals Ltd's ATEX Certification Scheme.

**17 Schedule Drawings**

A list of the significant parts of the technical documentation is annexed to this certificate and a copy has been kept by the Notified Body.

**18 Certificate History**

Details of the supplements to this certificate are described below:

Date	Description
18 May 2018	Original Issue.

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# Blueprint Report

**Micropack Engineering Ltd (1000009409)**

**Class No 3260**

**Original Project I.D. 3062102**

**Certificate I.D. FM18ATEX0040X**

<u>Drawing No.</u>	<u>Revision Level</u>	<u>Drawing Title</u>	<u>Last Report</u>	<u>Electronic Drawing</u>
2301.6007	4.6	FDS Series Enclosure - Main Body	3062102	Yes (pdf)
2301.6009	3.5	FDS Series Enclosure - Back Cover	3062102	Yes (pdf)
2301.6013	2.4	FDS Series Enclosure Painting Details	3062102	Yes (pdf)
3303.0001	1.5	Multi Spectrum IR Flame Detector Safety & Technical Manual	3062102	Yes (pdf)
3303.1001.01	A	FDS303- GENERAL ASSEMBLY	3062102	Yes (pdf)
3303.1002	B	FDS303- ELECTRONICS MODULE	3062102	Yes (pdf)
3303.1003.01	1	Heater board Schematics	3062102	Yes (pdf)
3303.1003.02	2	Window Heater Board Assembly BOM	3062102	Yes (excel)
3303.1004.01	1	Sensor and Processor board schematic	3062102	Yes (pdf)
3303.1004.02	2	Sensor and Processing Board Assembly BOM	3062102	Yes (excel)
3303.1005.01	1	Relay IO & PSU board	3062102	Yes (pdf)
3303.1005.02	2	Relay IO and PSU Assembly BOM	3062102	Yes (excel)
3303.1006.01	1	Termination board	3062102	Yes (pdf)
3303.1006.02	2	Rear Terminal and IO Protection Board Assembly BOM	3062102	Yes (excel)
3303.1008	A	FDS303 IR Sensor Moulding	3062102	Yes (pdf)
3303.6006.01	E	FDS303 - RATING LABEL	3062102	Yes (pdf)
3303.8001	D	FDS303 - WINDOW COVER	3062102	Yes (pdf)
3303.8002	C	FDS303 - WINDOW FASTENING RING	3062102	Yes (pdf)
3303.8003	D	FDS303 - SAPPHIRE WINDOW	3062102	Yes (pdf)
3303.8004	D	FDS303 - WINDOW COVER GENERAL ASSEMBLY	3062102	Yes (pdf)
3303.8005	A	Sapphire window Assembly instruction to complete Window cover 3303.8004	3062102	Yes (pdf)
3303.8006.01	E	FDS303- ENCLOSURE ASSEMBLY	3062102	Yes (pdf)