



1 **EU-TYPE EXAMINATION CERTIFICATE**

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

3 Certificate Number: **Sira 10ATEX1363X** Issue: **4**

4 Equipment: **FlameGard 5 MSIR**

5 Applicant: **MSA – The Safety Company**

6 Address: 1000 Cranberry Woods Drive  
Cranberry Township  
Pennsylvania 16066  
USA

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

8 CSA Group Netherlands B.V., notified body number 2813 in accordance with Articles 17 and 21 of Directive 2014/34/EU of the European Parliament and of the Council, dated 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 the confidential reports listed in Section 14.2.

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

EN 60079-0:2012/A11:2013

EN 60079-1:2014

EN 60079-31:2014

10 If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to Specific Conditions of Use identified in the schedule to this certificate.

11 This EU-Type Examination Certificate relates only to the design and construction of the specified equipment. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.

12 The marking of the equipment shall include the following:



II 2 G D  
Ex db IIC T5 Gb  
Ex tb IIIC T100°C Db  
(Ta = -40°C to +80°C)

Project Number 0561

Signed:

Title: Director of Operations

This certificate and its schedules may only be reproduced in its entirety and without change

**CSA Group Netherlands B.V.**  
Utrechtseweg 310,  
6812 AR, Arnhem,  
Netherlands



## SCHEDULE

### EU-TYPE EXAMINATION CERTIFICATE

Sira 10ATEX1363X  
Issue 4

#### 13 DESCRIPTION OF EQUIPMENT

The FlameGard 5 MSIR, as detailed in Figure 1, is an infrared device that is rated at 4.4 W maximum. It is manufactured from stainless steel, is cylindrical in shape and comprises a base and cover secured by five, M6, grade A2-70, hexagon socket-head cap screws. The base contains a stainless steel mounting pin and two, 3/4"-14 NPT, cable entry that accommodate suitable cable entry devices or stopping plugs. The cover contains a sapphire window and houses the PCBs and associated electronics that perform the equipment's measuring function.

**Variation 1** - This variation introduced the following changes:

- i. The option to use of Viton® as a material of manufacture of the O-ring.
- ii. The recognition of the following label drawing changes:
  - The dust marking shown on the label was modified to bring it into line with that stated on the certificate.
  - An alternative adhesive was allowed to be used.
  - The text on the drawing was amended.
  - The associated IECEx certification was included on the label for General Monitors .

**Fig. 1 - FlameGard 5 MSIR**



**Variation 2** - This variation introduced the following changes:

- i. Following appropriate assessment to demonstrate compliance with the requirements of the latest technical knowledge, EN 60079-0:2006 was replaced by EN 60079-0:2012, the marking was amended accordingly, in addition, IEC 60079-0:2007 Edition 5 is no longer required for guidance in respect of marking.
- ii. The introduction of an optional Rain Guard assembly.

**Variation 3** - This variation introduced the following changes:

- i. A Condition of Certification was introduced; this will allow the user/installer to fit an optional, End-Of-Line (EOL) resistor within the enclosure. In consequence, an 'X' suffix was added to the certificate number.
- ii. The equipment label marking was revised to merge the two manufacturing location labels onto one common drawing. The actual manufacturing premises indicated by a 'check' box on the label.
- iii. The maximum power dissipation of the equipment was corrected from 2.1 W to 4.4 W.

**Variation 4** - This variation introduced the following changes:

- i. A replacement rain guard was introduced.
- ii. To permit the use of an optional (sun shade) accessory, resulting in the introduction of a Specific Condition of Use.
- iii. To recognise the replacement of the five A2-70 304 special fasteners securing the window cover assembly with A4-70 316 stainless steel special fasteners, resulting in the introduction of a Specific Condition of Use. The description was amended accordingly.



## SCHEDULE

### EU-TYPE EXAMINATION CERTIFICATE

Sira 10ATEX1363X  
Issue 4

- iv. Removal of the previous OEM scheduled certification drawings their sheets and revisions that are no longer required to support production and are only retained for reference.
- v. Typographical correction to the material of manufacturer reference for the, Housing and base material to read from SS 316 cast to CF8M cast stainless steel annealed per ASTM A351.
- vi. Recognition that the equipment is no longer supplied with suitably certified cable glands.
- vii. The removal of the 'Condition of Manufacture' relating to the applicable O-ring seals materials, whilst recognising the use of a new O-ring material used within the equipment housing providing only additional weather protection, and no longer relied upon for explosion protection safety.
- viii. Following appropriate assessment to demonstrate compliance with the latest technical knowledge, the documents previously listed in section 9, EN 60079-0:2012, EN 60079-1:2007 and EN 60079-31:2009, were replaced by EN 60079-0:2012/A11:2013, EN 60079-1:2014 and EN 60079-31:2014, the product markings were updated accordingly.
- ix. EC Type Examination Certificate in accordance with 94/9/EC updated in accordance with Directive 2014/34/EU. (In accordance with Article 41 of Directive 2014/34/EU, EC Type Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Variations to such EC Type Examination Certificates may continue to bear the original certificate number issued prior to 20 April 2016.)
- x. The company name was changed from Mine Safety Appliances Company to MSA – The Safety Company.

## 14 DESCRIPTIVE DOCUMENTS

### 14.1 Drawings

Refer to Certificate Annexe.

### 14.2 Associated Sira Reports and Certificate History

Issue	Date	Report number	Comment
0	14 March 2011	R23689A/00	The release of the prime certificate and incorporating Variation 1.
1	10 September 2013	R31190A/00	The introduction of Variation 2.
2	09 November 2015	R70037355A	The introduction of Variation 3.
3	08 March 2018	R70173715A	This Issue covers the following changes: <ul style="list-style-type: none"><li>• EC Type-Examination Certificate in accordance with 94/9/EC updated to EU Type-Examination Certificate in accordance with Directive 2014/34/EU. (In accordance with Article 41 of Directive 2014/34/EU, EC Type-Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Variations to such EC Type-Examination Certificates may continue to bear the original certificate number issued prior to 20 April 2016.)</li><li>• The introduction of Variation 4.</li></ul>



## SCHEDULE

### EU-TYPE EXAMINATION CERTIFICATE

**Sira 10ATEX1363X**  
**Issue 4**

Issue	Date	Report number	Comment
4	31st October 2019	0561	<ul style="list-style-type: none"><li>Transfer of certificate <b>Sira 10ATEX1363X</b> from Sira Certification Service to CSA Group Netherlands B.V..</li></ul>

14.3 Certificate number Sira 09ATEX1270X Issue 4.

15 **SPECIFIC CONDITIONS OF USE** (denoted by X after the certificate number)

15.1 An End-Of-Line (EOL) resistor with a maximum power dissipation of up to 0.6 W may be fitted in the circuit inside the enclosure; however, it must be installed by the user/installer in accordance with the relevant instructions that are stipulated in the manufacturer's product manual.

15.2 CAUTION – USE FASTENERS WITH YIELD STRESS  $\geq$  450MPa.

15.3 The FlameGard 5 MSIR flanged joint, between the window cover and main body, may be sited to within a distance no less than 9.62 mm of any adjacent surface, or its sun shield when fitted.

16 **ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II** (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in the reports listed in Section 14.2.

# Certificate Annexe



**Certificate Number:** Sira 10ATEX1363X  
**Equipment:** FlameGard 5 MSIR  
**Applicant:** MSA – The Safety Company

---

## Issue 0

Drawing	Sheets	Rev.	Date (Sira stamp)	Description
910000	1 to 2	A	01 Feb 11	Nameplate MSA FlameGard 5 MSIR

## Issue 1

Drawing	Sheets	Rev.	Date (Sira stamp)	Description
910000	1 to 3	F	09 Aug 13	Nameplate MSA, Flameguard 5 MSIR

## Issue 2

Drawing	Sheets	Rev.	Date (Sira stamp)	Description
910000	1 of 2	J	10 Nov 15	Nameplate MSA, Flameguard 5 MSIR

## Issue 3

Drawing	Sheets	Rev	Date (Sira stamp)	Title
910000	1 of 1	K	13 Feb 18	Nameplate MSA, Flameguard 5 MSIR

This certificate and its schedules may only be reproduced in its entirety and without change

**CSA Group Netherlands B.V.**  
Utrechseweg 310,  
6812 AR, Arnhem,  
Netherlands