



1 **EU-TYPE EXAMINATION CERTIFICATE**

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

3 Certificate Number: **Sira 10ATEX1364X** Issue: **2**

4 Equipment: **FlameGard 5 Test Lamp**

5 Applicant: **Mine Safety Appliances 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

EN 60079-1:2007

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 d IIB+H<sub>2</sub> T4 Gb (Ta -15°C to +50°C)

Ex tb IIIC T110°C Db

Project Number 1560

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.**  
Utrechseweg 310,  
6812 AR, Arnhem,  
Netherlands



## SCHEDULE

### EU-TYPE EXAMINATION CERTIFICATE

Sira 10ATEX1364X  
Issue 2

#### 13 DESCRIPTION OF EQUIPMENT

The FlameGard 5 Test Lamp is a battery-operated, rechargeable test lamp that has a rated output of 12 VDC 130 W max and is used for UV, UV/IR or digital frequency IR flame detection systems. It is constructed from cast aluminium alloy, and incorporates a control board and Nickel Metal Hydride battery assembly that perform the equipment's measuring function. The enclosure utilises a 4½-16 UN-2A/2B thread at one end to fit a lamp cap assembly, it also incorporates a PG 9 threaded aluminium stopping plug to gain access to a jack plug and a PG 11 threaded aluminium piezo switch. The enclosure and lamp assembly are secured against loosening by a 5/64" Hex drive socket screw and the complete assembly meets the ingress protection requirements of IP 6X. The lamp cap assembly contains a sapphire window and is secured against loosening by a 4⅛-16 UNF -2A/2B threaded aluminium retainer.

#### Variation 1

This variation introduced the following change:

- i. Minor modifications to the certified drawings, none of which affect the original assessments.

#### Variation 2

This variation introduced the following change:

- i. The removal of one battery manufacturer from the list of suppliers.

#### Variation 3

This variation introduced the following change:

- i. To recognise the use of alternate and replacement terminal crimps within the battery pack assembly.
- ii. To recognise the use of alternate components on the battery pack PCB board.
- iii. To permit dimensional changes to the battery power pack.

#### Variation 4

This variation introduced the following change:

- i. Following appropriate assessment, reference to the previous standards, EN 60079-0:2004, EN 60079-1:2004, EN 61241-0:2004 and EN 61241-1:2004 were replaced by EN 60079-0:2012, EN 60079-1:2007 and IEC 60079-31:2013 Ed 2. As a result, the markings were updated and a Special Condition for Safe Use was introduced necessitating an 'X' suffix to be added to the certificate number.
- ii. The product description was updated to indicate the IP 6X rating of the enclosure.

#### Variation 5

This variation introduced the following change:

- i. The 'Harding Energy' internal battery pack and associated cells were replaced with one manufactured by 'Sanik Battery Co'.
- ii. The battery pack and the equipment marking were amended; this allows the end user to replace the battery pack as an alternative to returning the equipment to the manufacturer or their representative.
- iii. The following manufacturing instruction text was included into note 14 of drawing number 71650. "Full pack open circuit must be 11.5V or greater".

#### Variation 6

This variation introduced the following change:

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 10ATEX1364X  
Issue 2**

i. Following appropriate re-assessment, IEC 60079-31:2013 Ed 2 was replaced by EN 60079-31:2014.

**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 Variations 1 to 3 lusive.
1	19 August 2015	R70030151B	The introduction of Variations 3 to 6 lusive.
2	31st October 2019	1560	<ul style="list-style-type: none"> <li>Transfer of certificate Sira 10ATEX1364X from Sira Certification Service to CSA Group Netherlands B.V..</li> <li>EC Type-Examination Certificate in accordance with 94/9/EC updated to EU Type-Examination Certificate in accordance with Directive 2014/34/EU. <i>(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.)</i></li> </ul>

14.3 Certificate number Sira 06ATEX1301X Issue 6

**15 SPECIAL CONDITIONS FOR SAFE USE** (denoted by X after the certificate number)

15.1 The flameproof joints are other than the minimum or maximum values detailed in EN 60079-1, the values are as follows:

Location/Type	Length, L (mm)	Gap, i (mm)
Window/Flange	12.73	0.00 (no intentional gap)

**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 10ATEX1364X  
**Equipment:** FlameGard 5 Test Lamp  
**Applicant:** Mine Safety Appliances Company

---

## Issue 0

Drawing No.	Sheets	Rev.	Date (Sira stamp)	Description
910003	1 of 1	A	01 Feb 11	Nameplate MSA FlameGard 5 Test Lamp

## Issue 1

Drawing	Sheets	Rev.	Date (Sira stamp)	Title
910003	1 of 1	B	14 Aug 15	Nameplate MSA, FlameGard 5 Test Lamp

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