



1 **EU-TYPE EXAMINATION CERTIFICATE**

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

3 Certificate Number: **Sira 10ATEX1362X** Issue: **3**

4 Equipment: **FlameGard 5 UV/IR and FlameGard 5 UV/IR-H2**

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/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 IP6X

Ta = -40°C to +85°C

Project Number 1206

Signed:

Title: Director of Operations

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



SCHEDULE

EU-TYPE EXAMINATION CERTIFICATE

Sira 10ATEX1362X
Issue 3

13 DESCRIPTION OF EQUIPMENT

The FlameGard 5 UV/IR(-H2) are ultraviolet/infrared devices. It comprises a rectangular base and a cylindrical cover secured by four M6 grade A2-70 hexagon socket-head bolts. The base contains two M20 x 1.5 cable entry points for the fitting of suitable cable entry devices on one side-wall. The cover, contains a large circular quartz window, a smaller sapphire circular window, and quartz light rods.

Design options

The FlameGard 5 UV/IR(-H2) may utilise the following cable entry threadforms:

M25 x 1.5
3/4" 14 NPT
PG 13.5

FlameGard 5 UV/IR(-H2) Flame Detectors have been independently tested according to the requirements of EN 60529 to meet the requirements of IP66/67.

Variation 1 - This variation introduced the following changes:

- i. The option to use JGS1 windows as an alternative to the Quartz window type was endorsed.
- ii. Following appropriate assessment to demonstrate compliance with the latest technical knowledge, EN 60079-0:2006; IEC 60079-0:2007 Ed 5; EN 60079-1:2007 and IEC 60079-31:2008, were replaced EN 60079-0:2012, IEC 60079-1:2014 Ed 7 and IEC 60079-31:2013 Ed 2, the markings in section 12 of the certificate were updated accordingly and Special Conditions for Safe Use were amended to recognise the new standards resulting in an 'X' suffix being added to the certificate.

Variation 2 - This variation introduced the following changes:

- i. Minor editorial modification, updating certificate number NCC 13.1525 to NCC 13.1525X on sheet 2 and 4 of drawing 910002.
- ii. Following appropriate assessment to demonstrate compliance with the latest technical knowledge, the document previously listed, EN 60079-0:2012, was replaced by EN 60079-0:2012/A11:2013.
- iii. Following appropriate assessment to demonstrate compliance with the latest EN Harmonised standards, the document previously listed, IEC 60079-1:2014 Ed 7, was replaced by EN 60079-1:2014.
- iv. Following appropriate assessment to demonstrate compliance with the latest EN Harmonised standards, the document previously listed, 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.
1	08 June 2015	R70015458A	The introduction of Variation 1



SCHEDULE

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Issue	Date	Report number	Comment
2	17 August 2016	R70078106A	EC-Type Examination Certificate in accordance with 94/9/EC updated to EU-Type Examination Certificate in accordance with Directive 2014/34/EU. <ul style="list-style-type: none"><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>The introduction of Variation 2.
3	31st October 2019	1206	<ul style="list-style-type: none">Transfer of certificate Sira 10ATEX1362X from Sira Certification Service to CSA Group Netherlands B.V..

14.3 Certificate number Sira 09ATEX1198X Issue 3.

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

15.1 This equipment uses an external non-metallic coating, which may generate an ignition-capable level of electrostatic charge under certain extreme conditions. The user shall ensure that the equipment is not installed in a location where it may be subjected to external conditions (such as high-pressure steam) which might cause a build-up of electrostatic charge on non-conducting surfaces. Additionally, cleaning of the equipment shall be done only with a damp cloth.

15.2 In accordance with EN 60079-1:2014 Clause 11.3, the 4 x M6 housing retain bolts are Class A2-70 304 Stainless Steel.

15.3 In accordance with EN 60079-1:2014 Clause 5.1, the flameproof joints are not intended to be repaired.

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 10ATEX1362X

Equipment: FlameGard 5 UV/IR and FlameGard 5 UV/IR-H2

Applicant: Mine Safety Appliances Company

Issue 0

Drawing	Sheets	Rev.	Date (Sira stamp)	Title
910002	1 to 4	A	01 Feb 11	Flamgard 5 UV/IR

Issue 1

Drawing	Sheets	Rev.	Date (Sira stamp)	Title
910002	2 of 4	D	20 Apr 15	Flamgard 5 UV/IR
910002	4 of 4	D	20 Apr 15	Flamgard 5 UV/IR

Issue 2

Drawing	Sheets	Rev.	Date (Sira stamp)	Title
910002	2 of 4	F	11 Aug 16	Flamgard 5UV/IR
910002	4 of 4	F	11 Aug 16	Flamgard 5UV/IR

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