



1 **EC TYPE-EXAMINATION CERTIFICATE**

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 94/9/EC

3 Certificate Number: **Sira 10ATEX1362** Issue: **0**

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 Sira Certification Service, notified body number 0518 in accordance with Article 9 of Directive 94/9/EC of 23 March 1994, 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 60079-0:2006 EN 60079-1:2007 EN 60079-31:2009
IEC 60079-0:2007 Edition 5 (used for guidance in respect of marking).

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

11 This EC 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 IIC T5 Gb
Ex t IIIC T100°C Db IP66/67
Ta = -40°C to +85°C

D R Stubbings BA MIET
Certification Manager

Project Number 23689
C. Index 14

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SCHEDULE

EC TYPE-EXAMINATION CERTIFICATE

Sira 10ATEX1362
Issue 0

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

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.

14.3 Certificate number Sira 09ATEX1198 Issue 1.

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

None

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.

17 CONDITIONS OF CERTIFICATION

17.1 The use of this certificate is subject to the Regulations Applicable to Holders of Sira Certificates.

17.2 Holders of EC type-examination certificates are required to comply with the production control requirements defined in Article 8 of directive 94/9/EC.

17.3 Each FlameGard 5 UV/IR(-H2) enclosure shall be subjected to a routine overpressure at 20.5 bar in accordance with EN 60079-1 clause 16. There shall be no permanent deformation or damage or leakage through the enclosure walls.

Certificate Annexe

Certificate Number: Sira 10ATEX1362
Equipment: FlameGard 5 UV/IR and FlameGard 5 UV/IR-H2
Applicant: Mine Safety Appliances Company



Issue 0

Drawing No.	Sheets	Rev.	Date (Sira stamp)	Description
910002	1 to 4	A	01 Feb 11	Nameplate MSA FlameGard 5 UV/IR

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