



1 **EU-TYPE EXAMINATION CERTIFICATE**

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

3 Certificate Number: **Sira 06ATEX1301X** Issue: **7**

4 Equipment: **TL105 Test Lamp for Flame Detection**

5 Applicant: **General Monitors (Ireland) Ltd** **General Monitors Inc.**

6 Address: **Ballybrit Business Park** **26776 Simpatica Circle**  
**Galway** **Lake Forest**  
**Ireland** **California 92630**  
**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 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

The above list of documents may detail standards that do not appear on the UKAS Scope of Accreditation, but have been added through Sira's flexible scope of accreditation, which is available on request.

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 IIB+H<sub>2</sub> T4 Gb (Ta -15°C to +50°C)**  
**Ex tb IIIC T110°C Db**

Project Number    70161607

  
C Ellaby  
Deputy Certification Manager

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

**Sira Certification Service**  
Unit 6 Hawarden Industrial Park,  
Hawarden, CH5 3US, United Kingdom

Tel: +44 (0) 1244 670900  
Fax: +44 (0) 1244 681330  
Email: [ukinfo@csagroup.org](mailto:ukinfo@csagroup.org)  
Web: [www.csagroupuk.org](http://www.csagroupuk.org)



## SCHEDULE

### EU-TYPE EXAMINATION CERTIFICATE

Sira 06ATEX1301X  
Issue 7

#### 13 DESCRIPTION OF EQUIPMENT

The TL105 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 4½-16 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".

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

Sira Certification Service

Unit 6 Hawarden Industrial Park,  
Hawarden, CH5 3US, United Kingdom

Tel: +44 (0) 1244 670900  
Fax: +44 (0) 1244 681330  
Email: [ukinfo@csagroup.org](mailto:ukinfo@csagroup.org)  
Web: [www.csagroupuk.org](http://www.csagroupuk.org)



## SCHEDULE

### EU-TYPE EXAMINATION CERTIFICATE

Sira 06ATEX1301X  
Issue 7

#### Variation 6

This variation introduced the following change:

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

#### Variation 7

This variation introduced the following change:

- i. To permit changes to the minimum design length and maximum design gap of the flanged flameproof joint between the window and the enclosure. Resulting in a Specific Condition of Use being amended.
- ii. Following appropriate assessment to demonstrate compliance with the requirements of the latest standards, EN 60079-0:2012 and EN 60079-1:2007 are replaced with EN 60079-0:2012/A11:2013 and EN 60079-1:2014 respectively. The marking is subsequently modified.

## 14 DESCRIPTIVE DOCUMENTS

### 14.1 Drawings

Refer to Certificate Annexe.

### 14.2 Associated Sira Reports and Certificate History

| Issue | Date              | Report no. | Comment   |
|-------|-------------------|------------|---|
| 0     | 1 December 2006   | R51A15532A | The release of the prime certificate.   |
| 1     | 9 August 2007     | R51A16732A | The introduction of Variation 1.  |
| 2     | 07 May 2008       | R51A18262A | The introduction of Variation 2.  |
| 3     | 11 May 2010       | R22196A/00 | The introduction of Variation 3.  |
| 4     | 29 September 2014 | R70006447A | The introduction of Variation 4.  |
| 5     | 07 July 2015      | R70033416A | The introduction of Variation 5.  |
| 6     | 11 August 2015    | R70030151A | This Issue covers the following changes: <ul style="list-style-type: none"><li>• The report number in the Certificate History at Issue 5, was amended to correct a typographical error, no technical changes were involved.</li><li>• The introduction of Variation 6.</li></ul>  |
| 7     | 15 February 2018  | R70161607A | 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 7.</li></ul> |

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

Sira Certification Service  
Unit 6 Hawarden Industrial Park,  
Hawarden, CH5 3US, United Kingdom

Tel: +44 (0) 1244 670900  
Fax: +44 (0) 1244 681330  
Email: [ukinfo@csagroup.org](mailto:ukinfo@csagroup.org)  
Web: [www.csagroupuk.org](http://www.csagroupuk.org)



**SCHEDULE**

**EU-TYPE EXAMINATION CERTIFICATE**

Sira 06ATEX1301X  
Issue 7

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

15.1 The flameproof joint width between the window and flange is other than the minimum value detailed in EN 60079-1, the value is as follows:

| Location/Type | Width, L (mm) |
|---------------|---------------|
| Window/Flange | 15.9          |

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 MANUFACTURE**

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

17.2 Holders of EU-Type Examination Certificates are required to comply with the conformity to type requirements defined in Article 13 of Directive 2014/34/EU.

# Certificate Annexe



Certificate Number: Sira 06ATEX1301X  
Equipment: TL105 Test Lamp for Flame Detection  
Applicant: General Monitors (Ireland) Ltd

## Issue 0

| Drawing | Sheets | Rev. | Date:     | Description                |
|---------|--------|------|-----------|----------------------------|
| 71650   | 1 of 1 | 2    | 21 Nov 06 | Battery Pack 12V NiMH      |
| 71656   | 1 of 1 | 2    | 21 Nov 06 | Specification TL105 Design |
| 71674   | 1 of 1 | 2    | 21 Nov 06 | Nameplate                  |
| 71681   | 1 of 1 | 1    | 21 Nov 06 | Plug, PG9                  |

## Issue 1

| Drawing | Sheets | Rev. | Date:     | Description                |
|---------|--------|------|-----------|----------------------------|
| 71650   | 1 of 1 | B    | 19 Jul 07 | Battery Pack 12V NiMH      |
| 71656   | 1 of 1 | A    | 30 Nov 06 | Specification TL105 Design |
| 71674   | 1 of 1 | A    | 30 Nov 06 | Nameplate                  |
| 71681   | 1 of 1 | A    | 30 Nov 06 | Plug, PG9                  |

## Issue 2

| Drawing | Sheets | Rev. | Date:     | Description           |
|---------|--------|------|-----------|-----------------------|
| 71650   | 1 of 1 | C    | 24 Apr 08 | Battery Pack 12V NiMH |

## Issue 3

| Drawing | Sheets | Rev. | Date (Sira stamp) | Description           |
|---------|--------|------|-------------------|-----------------------|
| 71650   | 1 of 1 | D    | 08 Apr 10         | BATTERY PACK 12v NiMH |

## Issue 4

| Drawing | Sheets | Rev. | Date (Sira stamp) | Title                      |
|---------|--------|------|-------------------|----------------------------|
| 71656   | 1 of 1 | B    | 22 Aug 14         | Specification TL105 Design |
| 71674   | 1 of 1 | B    | 21 Aug 14         | Nameplate                  |

## Issue 5

| Drawing | Sheets | Rev. | Date (Sira stamp) | Title                 |
|---------|--------|------|-------------------|-----------------------|
| 71650   | 1 of 1 | F    | 25 Jun 15         | Battery Pack 12v NiMH |
| 71674   | 1 of 1 | C    | 25 Jun 15         | Nameplate             |

Issue 6 – no new drawings were introduced.

## Issue 7

| Drawing | Sheets | Rev. | Date (Sira stamp) | Title                      |
|---------|--------|------|-------------------|----------------------------|
| 71656   | 1 of 1 | C    | 31 Jan 18         | Specification TL105 Design |
| 71674   | 1 of 1 | F    | 28 Nov 17         | Nameplate                  |

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