

### INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	IECEx SIR 14.00577	K issue No.:2	Certificate history: Issue No. 2 (2018-2-15)	
Status:	Current		Issue No. 1 (2015-7-15) Issue No. 0 (2014-9-29)	
Date of Issue:	2018-02-15	Page 1 of 4		
Applicant:	<b>General Monitors</b> Ballybrit Business Pa Galway <b>Ireland</b>	(Ireland) Limited <sup>rk</sup>		
Equipment: Optional accessory:	TL105 Test Lamp fo	r Flame Detection		
Type of Protection:	Flameproof and Dus	st by Enclosure		
Marking:	Ex db IIB+H <sub>2</sub> T4 Gb Ex tb IIIC T110°C Db Ta = -15 °C to +50 °C			
Approved for issue on behalf of the IECEx C Ellaby Certification Body:				
Position:		Deputy Certification Manager		
Signature: (for printed version)		C. Elak	$\square$	
Date:		2018-02-	115	
<ol> <li>This certificate and schedule may only be reproduced in full.</li> <li>This certificate is not transferable and remains the property of the issuing body.</li> <li>The Status and authenticity of this certificate may be verified by visiting the OfficiaLECEx Website.</li> </ol>				
Certificate issued by: SIRA C Unit 6, Hav Hawarde Un	ertification Service CSA Group varden Industrial Park n, Deeside, CH5 3US nited Kingdom		CSA Group	



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Manufacturer:

General Monitors (Ireland) Limited Ballybrit Business Park Galway Ireland

Additional Manufacturing location(s): General Monitors Inc. 26776 Simpatica Circle Lake Forest California 92630 United States of America

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

### **STANDARDS:**

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2011 Edition: 6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-1 : 2014-06 Edition: 7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-31 : 2013 Edition: 2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.

### TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report: GB/SIR/ExTR14.0228/00

GB/SIR/ExTR15.0194/00

GB/SIR/ExTR18.0030/00

#### Quality Assessment Report:

GB/SIR/QAR07.0014/04

US/UL/QAR10.0004/02



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Schedule

#### EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

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  $4V_{2}$ -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  $4V_{8}$ -16 UNF-2A/2B threaded aluminium retainer.

#### SPECIFIC CONDITIONS OF USE: YES as shown below:

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

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



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#### DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Issue 1 - this Issue introduced the following changes:

1. The 'Harding Energy' internal battery pack and associated cells were replaced with one manufactured by 'Sanik Battery Co'.

2. The battery pack and the equipment marking was amended; this allows the end user to replace the battery pack as an alternative to returning the equipment to the manufacturer or their representative.

3. The following manufacturing instruction text was included into note 14 of drawing number 71650. "Full pack open circuit must be 11.5 V or greater".

**Issue 2** – this Issue introduced the following changes:

1. 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.

2. Following appropriate assessment to demonstrate compliance with the requirements of the latest standard, IEC 60079-1:2007-04 is replaced with IEC 60079-1:2014. The marking is subsequently modified.