



UK Type Examination Certificate CML 23UKEX1044X Issue 0

United Kingdom Conformity Assessment

Product or Protective System Intended for use in Potentially Explosive Atmospheres 1 UKSI 2016:1107 (as amended) - Schedule 3A, Part 1

2 Equipment **TL105 Test Lamp for Flame Detection**

3 Manufacturer **General Monitors Inc.** General Monitors (Ireland) Ltd

Ballybrit Business Park 4 Address 16782 Von Karman Avenue,

> Unit 14, Irvine, Galway California, 92606, Ireland

USA

- The equipment is specified in the description of this certificate and the documents to which it 5 refers.
- Eurofins E&E CML Limited, Newport Business Park, New Port Road, Ellesmere Port, CH65 4LZ, 6 United Kingdom, Approved Body Number 2503, in accordance with Regulation 43 of the Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016, UKSI 2016:1107 (as amended), 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 Schedule 1 of the Regulations.

The examination and test results are recorded in the confidential reports listed in Section 12.

- If an 'X' suffix appears after the certificate number, it indicates that the equipment is subject to specific conditions of use (affecting correct installation or safe use). These are specified in Section 14.
- This UK Type Examination certificate relates only to the design and construction of the specified equipment. Further requirements of the Regulations apply to the manufacturing process and supply of the product. These are not covered by this certificate.
- Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the confidential report, has been demonstrated through compliance with the following documents:

EN IEC 60079-0:2018 EN 60079-1:2014 EN 60079-31:2014

The equipment shall be marked with the following:



Ex db IIB+H2 T4 Gb Ex tb IIIC T110°C Db Ta=-15°C to +50°C







11 Description

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 5/64² 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.

12 Certificate history and evaluation reports

| Issue | Date | Associated report | Notes |
|-------|-------------|-------------------|----------------------------|
| 0 | 24 May 2023 | R16134D/00 | Issue of Prime Certificate |

Note: Drawings that describe the equipment are listed in the Annex.

13 Conditions of Manufacture

The following conditions are required of the manufacturing process for compliance with the certification.

i. Where the product incorporates certified parts or safety critical components, the manufacturer of the product defined on this certificate shall continually monitor these parts/components for any modifications introduced by the manufacturer(s) of these constituent parts. If the manufacturer of any constituent part introduces any changes which affect the compliance of the certified product that is the subject of this certificate, the manufacturer is required to have this certificate updated.

14 Specific Conditions of Use

The following conditions relate to safe installation and/or use of the equipment.

i. 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 |

Certificate Annex

Certificate Number CML 23UKEX1044X

Equipment TL105 Test Lamp for Flame Detection

Manufacturer General Monitors General Monitors (Ireland) Ltd





The following documents describe the equipment defined in this certificate:

Issue 0

| Drawing No | Sheets | Rev | Approved date | Title |
|------------|--------|-----|---------------|--------------------------------------|
| 71650 | 1 of 1 | F | 24 May 2023 | Battery Pack 12V NRH |
| 71656 | 1 of 1 | В | 24 May 2023 | Specification, TL105 Design |
| 71674 | 1 of 1 | K | 24 May 2023 | Nameplate, Portable UV/IR, Test Lamp |
| 71681 | 1 of 1 | Α | 24 May 2023 | Plug, PG9 with Undercut |