

UK Type Examination Certificate CML 21UKEX1502X Issue 1

United Kingdom Conformity Assessment

- 1 Product or Protective System Intended for use in Potentially Explosive Atmospheres UKSI 2016:1107 (as amended) – Schedule 3A, Part 1
- 2 Equipment **Scotia Series and KF1L Series LED Luminaires**
- 3 Manufacturer **Hubbell Limited t/a Hawke International; Killark, a Division of Hubbell Inc. (Delaware)**
GAI-Tronics; Chalmit Lighting, Victor Lighting and Transtar
- 4 Address **Ashton Road 2112 Fenton Logistics Park Blvd.**
Bredbury Park Industrial Estate Fenton, MO 63026
Bredbury United States of America
Stockport SK6 2QN

- 5 The equipment is specified in the description of this certificate and the documents to which it refers.
- 6 Eurofins E&E CML Limited, Newport Business Park, New Port Road, Ellesmere Port, CH65 4LZ, United Kingdom, Approved Body Number 2503, in accordance with Regulation 42 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.

- 7 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.
- 8 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.
- 9 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 60079-0:2012+A11:2013 EN 60079-1:2014 EN IEC 60079-7:2015+A1:2018
EN 60079-31:2014

- 10 The equipment shall be marked with the following:



II 2 G D

Ex db eb IIB (+H₂ Option) T* Gb

Ex tb IIIC T***°C Db IP66

Ta = -20°C to **°C (STD Version)

Ta = -50°C to **°C (LT Version)

* Refer to description for T class, maximum surface temperature and ambient.





11 Description

The Scotia luminaires are LED based units that have integrated driver electronics and are rated at 120 to 277 V ac 50/60 Hz.

The enclosures are cast from an aluminium alloy, EN1706 AC-44100KF LM6. The cover of the luminaire is secured to the main enclosure using twelve M8 fastening screws, forming a flanged joint, and has a tempered glass rectangular window cemented into position. The array of LEDs is mounted inside a flameproof compartment, behind the window. There is a separate flameproof compartment housing the driver circuit which is segregated from the LED compartment by a component approved bushing. There is a flanged joint formed by a cover on the other side of the driver circuit compartment, on the back of the luminaire, secured by another twelve M8 fasteners. This back cover has another compartment moulded into it which houses some component approved increased safety terminals. This increased safety compartment is segregated from the driver circuit compartment by another bushing, has a cover which is secured by four fastening screws and has two M20 entries with the alternative option of M25 threaded entries in the sides. The luminaires may be fitted externally with a handle, a reflector and a wire guard.

There are several variants with different ratings, these are described in the tables below.

Type identification	Watts **	Current *A	T* @ Ta 40°C	T* @ Ta 55°C	T**°C @ Ta 40°C	T**°C @ Ta 55°C
SCOD/**L/LE/*	125	1.0 – 0.5	T6	T5	T85°C	T100°C
SCOD/**L/LE/*	110	0.9 – 0.4	T6	T5	T85°C	T100°C
SCOD/**L/LE/*	105	0.9 – 0.4	T6	T5	T85°C	T100°C
SCOD/**L/LE/*	90	0.8 – 0.4	T6	T5	T85°C	T100°C

** = Lumens (x1000) up to a maximum of 15

* = Options where LT is low temperature routine pressure testing see table below



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Type Identification /*	Description
LT	Low temperature version, lower Ta = -50°C
M25	M25 entry option
H2	Gas group IIB+H ₂

All fasteners used to secure flameproof joints are stainless steel with a minimum grade of A4.

The equipment may also be supplied and marked with the following model numbers:

Type identification	Watts **	Current *A	T* @ Ta 40°C	T* @ Ta 55°C	T**°C @ Ta 40°C	T**°C @ Ta 55°C
KF1L19530	195	1.6 – 0.7	T5	N/A	T85°C	N/A
KF1L16530	165	1.4- 0.6	T5	N/A	T85°C	N/A
KF1L15030	150	1.3- 0.5	T5	N/A	T85°C	N/A
KF1L12530	129	1.0-0.5	T6	T5	T85°C	T100°C
KF1L11030	111	0.9-0.4	T6	T5	T85°C	T100°C
KF1L10530	103	0.9-0.4	T6	T5	T85°C	T100°C
KF1L09030	79	0.8-0.4	T6	T5	T85°C	T100°C

(N/A = combination of power and ambient temperature is not allowed).

Variation 1

This variation introduced the following modification:

- i. To recognize a change to the applicant's and manufacturer's name and address.

12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	25 June 2021	R14157G/00	Issue of the prime certificate. CML 14ATEX1086X, Issue 4 is attached and shall be referred to in conjunction with this certificate.
1	30 Apr 2024	R17491A/00	Introduction of Variation 1

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



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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.
- ii. The LED compartment of each unit marked for a low ambient temperature of -50°C and gas group IIB+H₂ shall be subjected to a 13 Bar hydrostatic routine overpressure test, for 15 seconds, in accordance with EN/IEC 60079-1 clause 16. There shall be no deformation or damage to the enclosure.
- iii. Each unit manufactured shall be subjected to a dielectric strength test of $(1,000 + 2U) \times 1.2$ which shall be applied for a minimum of 100 ms in accordance with EN/IEC 60079-7 clause 6.1 (the LED driver may be disconnected for the test). There shall be no breakdown.
- iv. Equipment shall be marked in accordance with the Tables in Section 11.
- v. When adaptors and stopping plugs are used in the construction of the luminaires, the manufacturer shall ensure that they are installed in accordance with any Special Conditions for Safe Use associated with them.

14 Specific Conditions of Use (Special Conditions)

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

- i. In accordance with EN/IEC 60079-1 clause 5.1, the critical dimensions of all non-threaded flamepaths are: 9.5 mm minimum in length with a 0.05 mm maximum gap.
- ii. The leads connected to the terminals shall be insulated for the appropriate voltage and this insulation shall extend to within 1 mm of the metal of the terminal throat.
- iii. All terminal screws, used and unused, shall be tightened to between 1.2 Nm and 2 Nm.
- iv. The fixture shall only be installed and wired in an ambient temperature of -10°C to $+80^{\circ}\text{C}$.

Certificate Annex

Certificate Number CML 21UKEX1502X
Equipment Scotia Series and KF1L Series LED Luminaires
Manufacturer Hubbell Limited t/a Hawke International; GAI-Tronics;
Chalmit Lighting, Victor Lighting and Transtar



The following documents describe the equipment defined in this certificate:

Issue 0

Drawing No	Sheets	Rev	Approved date	Title
H054697	1 of 1	1	25 June 2021	Scotia Certified Nameplate

Issue 1

None.