

### INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www,iecex.com

Certificate No.:

IECEx CSA 14.0010

Issue No: 2

Certificate history:

Status:

Current

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Issue No. 2 (2015-12-17) Issue No. 1 (2015-04-06)

Issue No. 0 (2014-05-28)

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Date of Issue:

2015-12-17

Applicant

Killark, a Division of Hubbell Inc. (Delaware)

3940 Dr. Martin Luther King Drive,

St. Louis, MO 63113 United States of America

Electrical Apparatus:

LED Luminaires, Series KF1L

Optional accessory:

Type of Protection:

Ex de: Ex tb

Marking:

Ex de IIB+H<sub>2</sub> T6... T5 Gb (-20°C ≤ Ta ≤ +40°C...+55°C) <150 W

Ex de IIB+ $H_2$  T5... T4 Gb (-20°C  $\leq$  Ta  $\leq$  +40°C...+55°C)  $\geq$ 150 W

Ex de IIB+H, T6... T5 Gb (-50°C ≤ Ta ≤ +40°C...+55°C) - LT Version, <150 W

Ex de IIB+H<sub>2</sub> T5... T4 Gb (-50°C ≤ Ta ≤ +40°C...+55°C) - LT Version, ≥150 W

Ex de IIB T6... T5 Gb (-50°C ≤ Ta ≤ +40°C...+55°C) <150 W

Ex de IIB T5... T4 Gb (-50°C  $\leq$  Ta  $\leq$  +40°C...+55°C)  $\geq$ 150 W Ex tb IIIC T76°C...T91°C Db (-50°C  $\leq$  Ta  $\leq$ +40°C...+55°C) <150 W

Ex tb IIIC T85°C...T100°C Db (-50°C ≤ Ta ≤+40°C...; +55°C) ≥150 W

IP 66

Approved for issue on behalf of the IECEx

Certification Body:

Dorin Stochitoiu

Position:

Signature:

(for printed version)

Date:

Technical Advisor

1. This certificate and schedule may only be reproduced in full.

2. This certificate is not transferable and remains the property of the issuing body.



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3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

CSA Group
178 Rexdale Boulevard
Toronto, Ontario M9W IR3
Canada
and
1707 - 94th Street
Edmonton, AB T6N 1E6
and
8503 East Pleasant Valley Road,
Independence, Ohio, USA
44131-5516
Canada





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Manufacturer.

Killark, a Division of Hubbell Inc. (Delaware)

3940 Dr. Martin Luther King Drive,

St. Louis, MO 63113 United States of America

Additional Manufacturing

location(s):

Hubbell Ltd T/A Chalmit Lighting, Victor Lighting and Transtar

388 Hillington Road, Glasgow G52 4BL United Kingdom

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

Explosive atmospheres - Part 0: General requirements

Edition:6.0

IEC 60079-1: 2007-04

Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"

Edition:6

IEC 60079-31: 2008

Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure 't'

Edition:1

IEC 60079-7: 2006-07

Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

Edition:4

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:

CA/CSA/ExTR14.0011/00

CA/CSA/ExTR14.0011/01

CA/CSA/ExTR14.0011/02

Quality Assessment Report:

GB/BAS/QAR06.0027/05

US/UL/QAR07:0004/04



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Schedule

### **EQUIPMENT**:

Equipment and systems covered by this certificate are as follows:

The KF1L Series LED Luminaire is a floodlight utilising Light Emitting Diodes. The assembly is aluminium and has three separate compartments, a flameproof LED compartment, a flameproof driver compartment and an increased safety terminal compartment. All compartments provide protection by enclosure (Ex tb). The luminaire may be painted with aluminium metallic flake powder coat. Mounting is provided by a stainless steel, yoke arm.

The terminal box is provided for the connection of 277 VAC max, 195 W max, 50/60 Hz to the luminaire via increased safety terminals. Cable entry to the terminal box is via metric or NPT threaded holes.

CONDITIONS OF CERTIFICATION: NO



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

Issue 1 – this Issue introduced the following changes; addition of alternate manufacturing location only, there are no technical changes to the product.

Issue 2 – this Issue introduced the following changes: introduction of three, additional LED drivers and allow the equipment to be marked suitable for 195 W, 165 W and 150 W. The product description was revised to increase the maximum wattage from 125 W to 195 W. Markings were revised accordingly and were aligned with the ATEX certification.