


# UK CA

## UK TYPE EXAMINATION CERTIFICATE

No. **3CT 22UKEX1005X**

- 1 UNITED KINGDOM CONFORMITY ASSESSMENT
- 2 **UK TYPE EXAMINATION CERTIFICATE**
- 3 **Product or Protective System Intended for use in Potentially Explosive Atmospheres**  
**UKSI 2016:1107 (as amended) – Schedule 3A, Part 1**
- 4 Type Examination Certificate No.: **3CT 22UKEX1005X**
- 5 Product: **LED Floodlight luminaires**
- 6 Manufacturer: **Killark Division, Hubbell Inc. (Delaware)** | **Chalmit, A Division of HUBBELL INCORPORATED (Delaware)**
- 7 Address: **2112 Fenton Logistics Park Blvd. Fenton, MO, 63026 USA.** | **388 HILLINGTON ROAD, GLASGOW, UK G52 4BL**
- 8 This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- 9 3C Test Ltd, Approved Body number 8508, 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 product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Schedule 1 of the Regulations.  
The examination and test results are recorded in the confidential report **UKEX1728-1**.
- 10 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:  
**EN IEC 60079-0:2018**      **EN 60079-31:2014**
- 11 Except in respect of those requirements listed at section 18 of the schedule to this certificate.
- 12 If the sign “X” is placed after the certificate number, it indicates that the product is subject to specific conditions of use specified in the schedule to this certificate.
- 13 This TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Regulations apply to the manufacturing process and supply of this product. These are not covered by this certificate.
- 14 The marking of this product shall include the following:  
 **II 2D Ex tb IIIC T95°C D** -See Annex Page Table 2 for detail of the T Class

**STANDARD VERSION:**

$-50^{\circ}\text{C} < T_{\text{amb}} < +65^{\circ}\text{C} < 120\text{W}$

$-50^{\circ}\text{C} < T_{\text{amb}} < +40^{\circ}\text{C} / +55^{\circ}\text{C} > 120\text{W}$

**BATTERY BACKUP VERSION**

$-20^{\circ}\text{C} < T_{\text{amb}} < +50^{\circ}\text{C}$

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



- 13 Schedule to UK Type Examination Certificate
- 14 Certificate Number 3CT 22UKEX1001X

**15 Description of Product**

This certificate covers the model KFLX /ARXC Series LED Floodlight luminaires for use in hazardous locations with increase safety methods of protection. The model KFLX and ARXC series LED luminaire have model variation of Lumens of light output and a standard model (KFLX....ARXC) and Emergency Version (KFLX...iE../ARXC/...EM). The model KFLX/ARXC series LED luminaires composite of two compartments the driver housing and LED housing. The driver and the LED housing constructed with casting Aluminum Alloy. The drive housing is hosting the AC connection terminal block, Surge protector, LED driver/ battery charger and battery (for the emergency). The LED driver hosting the LED board(s).

The KFLX/ARXC Series LED luminaires are intended to be installed on aiming points and aiming angles with mounting arrangements secured with lock washers or self-locking nuts and bolts with the optional mounting accessories.

**Type designation**

Killark's "KFLX" Series, Chalmit's "ARXC" Series.  
See Annex Pages for Detail of Models, and Temperature classification.

**Electrical data**

Input voltage range. 120-277VAC 100-250VDC, (560-60) Watts. See Annes Page Table 1 for detail.

- 16 **Test report No. (associated with this certificate issue):** UKEX1728-1

**17 Specific Conditions of Use Schedule of Limitations**

1. TO PREVENT IGNITION OF HAZARDOUS ATMOSPHERES, DISCONNECT BALLAST/FIXTURE FROM SUPPLY CIRCUIT BEFORE OPENING. KEEP TIGHTLY CLOSED WHEN IN OPERATION.
2. DO NOT OPEN, MAINTAIN OR SERVICE IN AN AREA WHERE AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT.
3. CLEAN LENS WITH DAMP CLOTH TO AVOID STATIC DISCHARGE.
4. THE LUMINAIRE SHALL ONLY BE INSTALLED WHERE THERE IS A LOW RISK OF MECHANICAL DAMAGE.

**18 Essential Health and Safety Requirements (Regulations Schedule 1)**

In addition to the Essential Health and Safety Requirements covered by the standards listed at item 9, all other requirements are demonstrated in the relevant reports.



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**19 Drawings and Documents**

Technical Documents				
Drawing No	Sheets	Rev	Date	Title
E51886-1B	1	B	Aug. 31, 2021	KFL-X ASSEMBLY, IEC CERTIFICATION PROTECTION CODE Ex db, Ex tb
E51886-2B	1	B	Aug. 31, 2021	KFL-X ASSEMBLY, IEC CERTIFICATION DOUBLE STACK
E51886-3C	1	C	Nov. 08, 2022	KFL-X ASSEMBLY, IEC CERTIFICATION NAMEPLATE, STANDARD LUMINAIRE
E51886-4C	1	C	Nov. 08, 2022	KFL-X ASSEMBLY, IEC CERTIFICATION NAMEPLATE, BATTERY BACK-UP
E16157 1_1	1	B	May 6, 1987	Inline Fuse holder & Fuse(6Amp) Assembly.
E51886-1B	1	B	Aug. 31, 2021	KFL-X ASSEMBLY, IEC CERTIFICATION PROTECTION CODE Ex db, Ex tb

**Instructions**

Document	Sheets	Rev	Title
K1505 KIL00921505	4	R12	INSTALLATION, OPERATION & MAINTENANCE DATA SHEET For KFLX SERIES LED LUMINAIRE
ARRAN_X_IOM	4	1	INSTALLATION, OPERATION & MAINTENANCE DATA SHEET For Arran-X SERIES LED LUMINAIRE

You can check the validity of this certificate into our website at:



Arbi Aloui P.P

Steve Youngman  
 Certification Officer  
 Ex Products and Systems, United Kingdom  
 Silverstone, 11 February 2023



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**Annex**

**Table 1, Equipment name/model number**

Item	Detail																																					
Type identification	<p>Model: KFL3030PL (Sample)</p> <table border="1" data-bbox="719 636 1211 701"> <tr> <td>KFLXX/ARXC</td> <td>30</td> <td>iE</td> <td>30</td> <td>F</td> </tr> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> </table> <ol style="list-style-type: none"> <li>1. <b>Killark's Model:</b> KFLX , <b>Chalmit's Model:</b> ARXC</li> <li>2. <b>Type of Lens-Output light Wattage:</b> <table border="1" data-bbox="687 792 1241 1086"> <thead> <tr> <th>KFLX / Chalmit's Series.</th> <th colspan="2">Output Power</th> </tr> </thead> <tbody> <tr><td>7 / 07L</td><td>60</td><td>Watt</td></tr> <tr><td>10 / 10L</td><td>90</td><td>Watt</td></tr> <tr><td>12 / 12L</td><td>100</td><td>Watt</td></tr> <tr><td>14 / 14L</td><td>120</td><td>Watt</td></tr> <tr><td>16 / 16L</td><td>135</td><td>Watt</td></tr> <tr><td>20 / 20L</td><td>180</td><td>Watt</td></tr> <tr><td>22 / 22L</td><td>200</td><td>Watt</td></tr> <tr><td>30 / 30L</td><td>280</td><td>Watt</td></tr> </tbody> </table> </li> <li>3. <b>Battery Backup</b>                      ___: No Battery Backup                      iE: Battery Backup Operation selected. (Killark)                      EM: Battery Backup Operation selected. (Chalmit).                 </li> <li>4. <b>Input Voltage:</b>                      30: 120-277 V ac, 50/60 Hz                      34: 100-250Vdc / 120-277 Vac, 50/60 Hz                 </li> <li>5. <b>Options:</b>                      F – Single Fuse                      FF – Double Fuse                      NSP—No Surge Protector                      TBx – Terminal Block (x = Variations)                      TBLx – Terminal Block (x = Variations) with Looping Facilities                      xxxO -Silicone Optic (XHP50 Board only xx= optic pattern)                      Px – Photocell factory installed (x = Factory Wired Voltage)                      SY – Stainless Steel Yoke                      xH –Optional Paint (i.e. YH = Yellow Housing).                      PL – Polycarbonate Lens                      KM—Knuckle Mount                      PM-- Pole Mount                      YYZZ –White LED Chromaticity where YY= correlated color temperature (CCT) minimum 3000K; ZZ = Color Rendering Index (CRI) maximum 95 (No value=Standard 5000K CCT 70 CRI minimum)                      WG –Wire Guard                      TURTLE-Amber colored LEDs primarily used to protect wildlife                      CISPR-Inventronics driver                 </li> </ol>	KFLXX/ARXC	30	iE	30	F	1	2	3	4	5	KFLX / Chalmit's Series.	Output Power		7 / 07L	60	Watt	10 / 10L	90	Watt	12 / 12L	100	Watt	14 / 14L	120	Watt	16 / 16L	135	Watt	20 / 20L	180	Watt	22 / 22L	200	Watt	30 / 30L	280	Watt
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**Table 2 Temperature Classification**

i. Standard Version.

Killark's Model:	Output Power	Voltage *	Frequency (Hz)	Current (A)	T <sub>amb</sub> :					
					40°C	55°C	65°C	40°C	55°C	65°C
					IIC	IIC	IIC	IIIC (°C)	IIIC (°C)	IIIC (°C)
KFL730	60	120-277	50/60	0.5-0.21	T5	T4	T3	100	160	160
KFL1030	90	120-277	50/60	0.8-0.3	T5	T4	T3	100	160	160
KFL1230	100	120-277	50/60	0.8-0.3	T5	T4	T3	100	160	160
KFL1430	120	120-277	50/60	1.0-0.4	T5	T4	T3	100	160	160
KFL1630	135	120-277	50/60	1.0-0.4	T5	T4	T3	100	160	160
KFL2030	180	120-277	50/60	1.5-0.7	T4	T3	--	100	--	--
KFL2230	200	120-277	50/60	2.3-1.0	T4	T3	--	135	--	--
KFL3030	280	120-277	50/60	2.3-1.0	T4	T3	--	135	--	--
*KFL4030	360	120-277	50/60	3.0-1.3	T4	T3	--	100	--	--
*KFL5030	480	120-277	50/60	4.0-1.7	T4	T3	--	135	--	--
*KFL6030	560	120-277	50/60	4.7-2.0	T4	T3	--	135	--	--
Chalmit's Model:										
ARXC/07L/LE	60	120-277	50/60	0.5-0.21	T5	T4	T3	100	160	160
ARXC/10L/LE	90	120-277	50/60	0.8-0.3	T5	T4	T3	100	160	160
ARXC/12L/LE	100	120-277	50/60	0.8-0.3	T5	T4	T3	100	160	160
ARXC/14L/LE	120	120-277	50/60	1.0-0.4	T5	T4	T3	100	160	160
ARXC/16L/LE	135	120-277	50/60	1.0-0.4	T5	T4	T3	100	160	160
ARXC/20L/LE	180	120-277	50/60	1.5-0.7	T4	T3	--	100	--	--
ARXC/22L/LE	200	120-277	50/60	2.3-1.0	T4	T3	--	135	--	--
ARXC/30L/LE	280	120-277	50/60	2.3-1.0	T4	T3	--	135	--	--
*ARXC/40L/LE	360	120-277	50/60	3.0-1.3	T4	T3	--	100	--	--
*ARXC/50L/LE	480	120-277	50/60	4.0-1.7	T4	T3	--	135	--	--
*ARXC/60L/LE	560	120-277	50/60	4.7-2.0	T4	T3	--	135	--	--

\* Double stack configuration.

ii. Battery Backup

Killark's Model	Output Power	Voltage *	Frequency (Hz)	Current (A)	T <sub>amb</sub> :			
					40°C	50°C	40°C	50°C
					IIC	IIC	IIIC (°C)	IIIC (°C)
KFL7iE1/0530	60	120-277	50/60	0.5-0.21	T5	T4	160	160
KFL14iE/0530	120	120-277	50/60	0.8-0.3	T5	T4	160	160
Chalmit's Model:								
ARXC/07/LE/EM	60	120-277	50/60	0.5-0.21	T5	T4	160	160
ARXC/14/LE/EM	120	120-277	50/60	0.8-0.3	T5	T4	160	160

- The electrical ratings list above based on the AC input that test with relevant models with maximum output voltage and the maximum output power. It is also representing the models have dual voltage input option of Alternating current and direct current.