



1 ATTESTATION D'EXAMEN CE DE TYPE

2 **Appareil ou système de protection** destiné à être utilisé en atmosphères explosibles (**Directive 94/9/CE**)

3 Numéro de l'attestation d'examen CE de type
LCIE 13 ATEX 3023 X

4 Appareil ou système de protection :
Projecteur de lumière à LED
Type : Ex-KFXXXX*

5 Demandeur : Shenzhen KHJ Semiconductor Lighting Co., LTD
Adresse : 4-5 Floor, Building 7, HuangBeiLingJingXuan Industrial park, No.2 Dong Huan Road, Yousong, LongHua town, Bao'an District, Shenzhen, China

6 Fabricant : Shenzhen KHJ Semiconductor Lighting Co., LTD
Adresse : Se référer à l'adresse du demandeur.

7 Cet appareil ou système de protection et ses variantes éventuelles acceptées sont décrits dans l'annexe de la présente attestation et dans les documents descriptifs cités en référence.

8 Le LCIE, organisme notifié sous la référence 0081 conformément à l'article 9 de la directive 94/9/CE du Parlement européen et du Conseil du 23 mars 1994, certifie que cet appareil ou système de protection est conforme aux exigences essentielles de sécurité et de santé pour la conception et la construction d'appareils et de systèmes de protection destinés à être utilisés en atmosphères explosibles, données dans l'annexe II de la directive. Les résultats des vérifications et essais figurent dans le rapport confidentiel N° 118327-636261.

9 Le respect des exigences essentielles de sécurité et de santé est assuré par la conformité à :

EN 60079-0 :2009 ; EN 60079-1 :2007 ; EN 60079-7 :2007 ; EN 60079-31 :2009

10 Le signe X lorsqu'il est placé à la suite du numéro de l'attestation, indique que cet appareil ou système de protection est soumis aux conditions spéciales pour une utilisation sûre, mentionnées dans l'annexe de la présente attestation.

11 Cette attestation d'examen CE de type concerne uniquement la conception et la construction de l'appareil ou du système de protection spécifié, conformément à l'annexe III de la directive 94/9/CE.

Des exigences supplémentaires de la directive sont applicables pour la fabrication et la fourniture de l'appareil ou du système de protection. Ces dernières ne sont pas couvertes par la présente attestation.

12 Le marquage de l'appareil ou du système de protection doit comporter les informations détaillées au point 15.

Fontenay-aux-Roses, le 8 avril 2013

1 EC TYPE EXAMINATION CERTIFICATE

2 **Equipment or protective system** intended for use in potentially explosive atmospheres (**Directive 94/9/EC**)

3 EC type examination certificate number
LCIE 13 ATEX 3023 X

4 Equipment or protective system :
LED Floodlight
Type : Ex-KFXXXX*

5 Applicant : Shenzhen KHJ Semiconductor Lighting Co., LTD
Address : 4-5 Floor, Building 7, HuangBeiLingJingXuan Industrial park, No.2 Dong Huan Road, Yousong, LongHua town, Bao'an District, Shenzhen, China

6 Manufacturer : Shenzhen KHJ Semiconductor Lighting Co., LTD
Address : Refer to applicant's address.

7 This equipment or protective system and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

8 LCIE, notified body number 0081 in accordance with article 9 of the Directive 94/9/EC of the European Parliament and the Council of 23 March 1994, certifies that this equipment or protective system has been found to comply with the essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II to the Directive. The examination and test results are recorded in confidential report N° 118327-636261.

9 Compliance with the Essential Health and Safety Requirements has been assured by compliance with :

EN 60079-0 :2009 ; EN 60079-1 :2007 ; EN 60079-7 :2007 ; EN 60079-31 :2009

10 If the sign X is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

11 This EC type examination certificate relates only to the design and construction of this specified equipment or protective system in accordance with annex III to the directive 94/9/EC.

Further requirements of the directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

12 The marking of the equipment or protective system shall include information as detailed at 15.



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13 ANNEXE

14 ATTESTATION D'EXAMEN CE DE TYPE

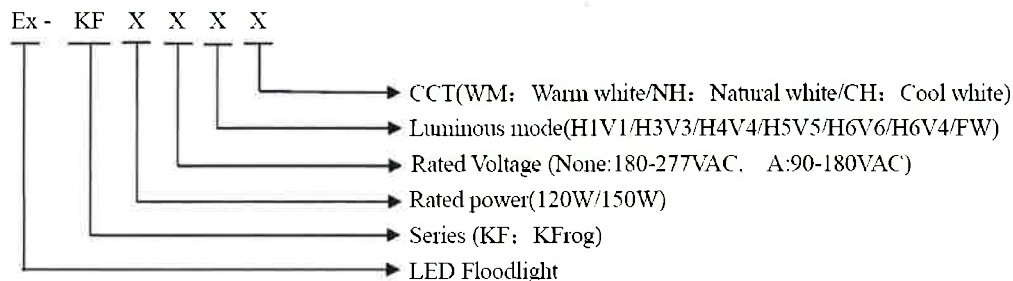
LCIE 13 ATEX 3023 X

15 DESCRIPTION DE L'APPAREIL OU DU SYSTEME DE PROTECTION

Projecteur de lumière à LED
Type : Ex-KFXXXX*

Les projecteurs à LED sont composés d'un compartiment pour la source de lumière et d'un compartiment pour la transmission de la puissance protégé par une enveloppe antidéflagrante, et d'un compartiment pour les bornes du luminaire protégé par un système de sécurité augmentée.

* : La dénomination du type est détaillée ci-dessous :



Paramètres spécifiques du ou des modes de protection concernés :

Tension d'alimentation : 180-277 (VAC) ou 90-180 (VAC)
Puissance : 120 (W) ou 150 (W)
Fréquence : 50(Hz) / 60 (Hz)

Le marquage doit être :

Shenzhen KHJ Semiconductor Lighting Co., LTD
Adresse : ...

Type : Ex-KFXXXX*

N° de fabrication : ... Année de fabrication : ...



Ex d e IIB T5 ou T6 Gb
Ex tb IIIC T95°C ou T80°C Db IP66
LCIE 13 ATEX 3023 X

AVERTISSEMENT - NE PAS OUVRIR SOUS TENSION
AVERTISSEMENT - APRES MISE HORS TENSION,
ATTENDRE 10 MINUTES AVANT L'OUVERTURE

L'appareil doit également comporter le marquage normalement prévu par les normes de construction qui le concerne.

16 DOCUMENTS DESCRIPTIFS

Dossier de certification N° TF-KFrog-ATEX rév 00 du 2012/11/20.
Ce dossier comprend 31 rubriques (42 pages).

13 SCHEDULE

14 EC TYPE EXAMINATION CERTIFICATE

LCIE 13 ATEX 3023 X

15 DESCRIPTION OF EQUIPMENT OR PROTECTIVE SYSTEM

LED floodlight
Type : Ex-KFXXXX*

The LED floodlights are composed of a light source compartment and a power driving board compartment protected by explosion-proof enclosure and a terminal compartment protected by increased safety.

* : The type denomination is detailed below :

Specific parameters of the concerned protection mode:

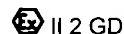
Rated power : 180-277 (VAC) or 90-180 (VAC)
Power : 120 – 150 (W)
Frequency : 50 (Hz) / 60 (Hz)

The marking shall be :

Shenzhen KHJ Semiconductor Lighting Co., LTD
Address : ...

Type : Ex-KFXXXX*

Serial number : ... Year of construction : ...



Ex d e IIB T5 or T6 Gb
Ex tb IIIC T95°C or T80°C Db IP66
LCIE 13 ATEX 3023 X

WARNING - DO NOT OPEN WHEN ENERGIZED
WARNING - AFTER DEENERGIZING, DELAY 10 MINUTES BEFORE OPENING

The equipment shall also bear the usual marking required by the manufacturing standards applying to such equipment.

16 DESCRIPTIVE DOCUMENTS

Certification file N° TF-KFrog-ATEX rev 00 dated 2012/11/20.
This file includes 31 items (42 pages).



13 ANNEXE (suite)

14 ATTESTATION D'EXAMEN CE DE TYPE

LCIE 13 ATEX 3023 X

17 CONDITIONS SPECIALES POUR UNE UTILISATION SÛRE

Température ambiante d'utilisation : - 40°C à +55°C
Se référer au dessin N°110702-00-ATEX de la documentation technique pour connaître les détails concernant les joints antidéflagrants.

« ATTENTION – UTILISER DES FERMETURES AVEC RESISTANCE A LA TRACTION $\geq 450\text{MPa}$ »

18 EXIGENCES ESSENTIELLES DE SECURITE ET DE SANTE

Couvertes par les normes listées au point 9.

19 VERIFICATIONS ET ESSAIS INDIVIDUELS

Chaque appareil doit être soumis à un test de surpression statique à 1,5 bars (150 kPa) conformément au paragraphe 16.1 de la norme EN 60079-1:2007

20 CONDITIONS DE CERTIFICATION

Les détenteurs d'attestations d'examen CE de type doivent également satisfaire les exigences de contrôle de production telles que définies à l'article 8 de la directive 94/9/CE.

13 SCHEDULE (continued)

14 EC TYPE EXAMINATION CERTIFICATE

LCIE 13 ATEX 3023 X

17 SPECIAL CONDITIONS FOR SAFE USE

Ambient operating temperature : - 40°C up to +55°C
Refer to drawing N°110702-00-ATEX of the technical documentation for flameproof joints detail.

« CAUTION – USE FASTENERS WITH YIELD STRESS $\geq 450\text{MPa}$ »

18 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS

Covered by standards listed at 9.

19 ROUTINE VERIFICATIONS AND TESTS

Each apparatus shall be submitted to a static over pressure test at 1,5 bars (150 kPa) according to clause 16.1 of EN 60079-1:2007

20 CONDITIONS OF CERTIFICATION

Holders of EC type examination certificates are also required to comply with the production control requirements defined in article 8 of directive 94/9/EC.



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

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

Certificate No.:	IECEx CQM 13.0003X	issue No.:0	Certificate history:
Status:	Current		
Date of Issue:	2013-01-12	Page 1 of 3	
Applicant:	Shenzhen KHJ Semiconductor Lighting Co., Ltd. 4-5 Floor, Building 7, Jingxuan Industry Zone, No.2 Donghuan Road, Longhua Town, Baoan District, Shenzhen, China Postal Code:518109 China		
Electrical Apparatus:	LED Floodlight Model Ex-KFrog Series		
Optional accessory:			
Type of Protection:	Flamproof enclosure "d", Increased safety "e", Protection by enclosure "t"		
Marking:	Ex d e IIB T5 or T6 Gb; Ex tb IIIC T95°C or T80°C Db IP66 Tamb: -40°C~+55°C		
Approved for issue on behalf of the IECEx Certification Body:	Zhang Wei		
Position:	General Manager		
Signature: (for printed version)			
Date:	2013-01-12		

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

Certificate issued by:

China Quality Mark Certification Group Co., Ltd.
No. 33 Zengguang Road, Haidian District,
Beijing City, Postal code: 100037
China





IECEx Certificate of Conformity

Certificate No.: IECEx CQM 13.0003X

Date of Issue: 2013-01-12

Issue No.: 0

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Manufacturer: **Shenzhen KHJ Semiconductor Lighting Co., Ltd.**
4-5 Floor, Building 7, Jingxuan Industry Zone, No.2 Donghuan Road, Longhua
Town, Baoan District, Shenzhen, China
Postal Code: 518109
China

Additional Manufacturing location
(s):

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 : 2007-10 Edition: 5	Explosive atmospheres - Part 0: Equipment - General requirements
IEC 60079-1 : 2007-04 Edition: 6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-31 : 2008 Edition: 1	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
IEC 60079-7 : 2006-07 Edition: 4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

*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:
CN/CQM/ExTR13.0001/00

Quality Assessment Report:

CN/CQM/QAR12.0005/00



IECEx Certificate of Conformity

Certificate No.: IECEx CQM 13.0003X

Date of Issue: 2013-01-12

Issue No.: 0

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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

Description of equipment

The LED floodlights are composed of a light source compartment, a power driving board compartment, a terminal compartment. The light source compartment and the power driving board compartment are protected by "d". The terminal compartment is protected by "e". Bushings are used between the light source part and the power pack part, and between the power pack part and the terminal part. A terminal is installed in the terminal part, a LED driving circuit board is installed in the power driving board compartment.

The main data list are as following:

Rated Voltage	Rated Power	Ta	Temperature Class		IP code
			Gas	Dust	
☐ 90~180VAC	☐ 120W	-40℃~+55℃	T6	T80℃	IP66
☐ 180~277VAC	☐ 150W	-40℃~+55℃	T5	T95℃	

CONDITIONS OF CERTIFICATION: YES as shown below:

1. Repair of the flameproof joints must be made in compliance with the structural specifications provided by the manufacturer. Repairs must not be made on the basis of values specified in tables 1 and tables 3 of IEC 60079-1.
2. The assembly should be equipped with suitably certified cable glands with a compatible mode of protection for the intended use. The unused holes should be closed by suitably certified plugs.
3. The LED floodlights shall be mounted only in accordance with manufacture's instruction.
4. Warning: Do not open when energized.
5. Warning: After de-energizing, delay 10 minutes before opening.