



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 CML 15.0022

Issue No: 3

Certificate history:

Issue No. 3 (2019-08-28)

Issue No. 2 (2018-12-03)

Issue No. 1 (2015-12-21)

Issue No. 0 (2015-04-08)

Status: **Current**

Page 1 of 4

Date of Issue: **2019-08-28**

Applicant: **Abtech Limited**
199 Newhall Road,
Lower Don Valley,
Sheffield,
S9 2QJ
United Kingdom

Equipment: **Gamma LED Luminaire**

Optional accessory:

Type of Protection: **Non-Sparking and Dust protected**

Marking:

Ex nA IIC T* Gc
Ex tb III C T**C Db and Ex tc III C T**C Dc
Tamb = Up to -50°C to +55°C
See Annex for Temperature Class and ambient limitations

*Approved for issue on behalf of the IECEx
Certification Body:*

H M Amos MIET

Position:

Technical Manager

*Signature:
(for printed version)*

Date:

August 28, 2019

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](http://www.iecex.com).

Certificate issued by:

Eurofins E&E CML Limited
Unit 1, Newport Business Park
New Port Road
Ellesmere Port, CH65 4LZ
United Kingdom





IECEX Certificate of Conformity

Certificate No: IECEX CML 15.0022

Issue No: 3

Date of Issue: **2019-08-28**

Page 2 of 4

Manufacturer: **Abtech Limited**
199 Newhall Road,
Lower Don Valley,
Sheffield,
S9 2QJ
United Kingdom

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 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 60079-15 : 2010 Explosive atmospheres - Part 15: Equipment protection by type of protection "n"

Edition:4

IEC 60079-31 : 2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

Edition:2

*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:

[GB/CML/ExTR15.0022/00](#)

[GB/CML/ExTR15.0103/00](#)

[GB/CML/ExTR18.0278/00](#)

Quality Assessment Report:

[GB/CML/QAR16.0021/02](#)



IECEX Certificate of Conformity

Certificate No: IECEX CML 15.0022

Issue No: 3

Date of Issue: 2019-08-28

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Abtech Gamma LED Floodlight / Low bay luminaire is a range of Non sparking (Ex nA) luminaires, rated at 110V ac to 254 Vac.

See Annex for full description and Conditions of Manufacture

SPECIFIC CONDITIONS OF USE: NO



IECEX Certificate of Conformity

Certificate No: IECEX CML 15.0022

Issue No: 3

Date of Issue: 2019-08-28

Page 4 of 4

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

Issue 1

This Issue introduced the following changes:

1. Permit the use of a new driver and LED arrangement, covered under the LX2GAM4LB series.

Issue 2

This Issue introduced the following changes:

1. To include the previous variation 'Rating schedule' to the product description.
2. Permit the use of a new driver arrangement and an increase in ambient temperature, covered under the LX2GAM4LB series.

Issue 3

1. To update QAR reference

Annex:

[Certificate Annex IECEX CML 15.0022 Issue 3.pdf](#)

Annexe to: IECEx CML 15.0022 Issue 3
Applicant: Abtech Ltd
Apparatus: Gamma LED Luminaire



Description of Equipment

The Abtech Gamma LED Floodlight / Low bay luminaire is a range of Non sparking (Ex nA) luminaires, rated at 110V ac to 254 Vac. The Gamma LED Floodlight comprises of a single enclosure, manufactured from either stainless steel or mild steel protected from corrosion by a suitable coating. Optionally, an additional coating may be applied to the stainless steel versions. Silicone rubber gaskets are used to seal the enclosures.

The main enclosure, approximately 400 mm high by 400 mm wide and a depth of 110 mm. The enclosure may be manufactured larger than minimum/typical dimensions.

The enclosure is sealed using a toughened safety glass window. The enclosure houses a metal reflector, LED driver and an optical assembly comprising of Philip Luxeon M LED's and acrylic rods, optionally other LED's maybe used provided the given surface temperatures are not exceeded.

The normal method of mounting is via a single saddle bracket; alternatively any other method of mounting may be used providing the enclosure is not penetrated. The driver compartment, accessible through the rear cover, houses the electronic driver and the mains terminal block

Cable entry holes for conduit, suitably approved cable glands or blanking plugs can be fitted into any face of the enclosure provided clearance for the cable gland and cables is sufficient. These must be sealed to minimum IP64 or higher to match IP rating.

See table * for details of wattage, T ratings and ambient temperature range.

Rating schedule – Voltage range: 110 ~ 254 Vac (Nominal), Up to -50°C to +55°C									
Product Ref.	LED Type	Current /Voltage	Power	Driver	Temp class and Surface Temp				Cable rating
					Tamb 55°C		Tamb 40°C		
LX2GA6L-30	LXR7-SW30	0.7A / 34.5V	97 W	EUC-16Q070DV	T3	T100°C	T4	T85°C	80°C
LX2GA6L-40	LXR7-SW40	0.7A / 34.5V	97 W	EUC-16Q070DV	T3	T100°C	T4	T85°C	80°C
LX2GA6L	LXR7-SW50	0.7A / 34.5V	97 W	EUC-16Q070DV	T3	T100°C	T4	T85°C	80°C
LX2GA6L-57	LXR7-SW57	0.7A / 34.5V	97 W	EUC-16Q070DV	T3	T100°C	T4	T85°C	80°C
LX2GA6L-65	LXR7-SW65	0.7A / 34.5V	97 W	EUC-16Q070DV	T3	T100°C	T4	T85°C	80°C

Note: Current stated above is maximum allowable and voltage is nominal and may be different depending on the driver fitted.

Unit 1, Newport Business Park
 New Port Road
 Ellesmere Port
 CH65 4LZ

T +44 (0) 151 559 1160
 E info@cmllex.com

www.cmllex.com

Company Reg No. 8554022 VAT No. GB163023642





Rating schedule – Voltage range: 110 ~ 254 Vac (Nominal), Up to -50°C to +55°C									
Product Ref.	LED Type	Current /Voltage	Power	Driver	Temp class and Surface Temp				Cable rating
					Tamb 55°C		Tamb 40°C		
LX2GAM4 LB-40	PW40-H001	0.688A / 35.02V	96 W	EUC-096S070DV	T3	T100°C	T4	T85°C	80°C
LX2GAM4 LB-50	PW50-H001	0.688A / 35.02V	96 W	EUC-096S070DV	T3	T100°C	T4	T85°C	80°C
LX2GAM4 LB	PW57-H001	0.688A / 35.02V	96 W	EUC-096S070DV	T3	T100°C	T4	T85°C	80°C
LX2GAM4 LB-65	PW65-H001	0.688A / 35.02V	96 W	EUC-096S070DV	T3	T100°C	T4	T85°C	80°C

Note: Current stated above is maximum allowable and voltage is nominal and may be different depending on the driver fitted.

Rating schedule – Voltage range: 108 ~ 279 Vac (Maximum), Up to -40°C to +70°C									
Product Ref.	LED Type	Current /Voltage	Power	Driver	Temp class and Surface Temp				Cable rating
					Tamb 55/70°C		Tamb 40°C		
LX2GAM4L B-40	PW40-H001	0.688A / 35.02V	<96 W	T1M1UNV150 P-150L	T3	T100°C	T4	T85°C	83°C
LX2GAM4L B-50	PW50-H001	0.688A / 35.02V	<96 W	T1M1UNV150 P-150L	T3	T100°C	T4	T85°C	83°C
LX2GAM4L B	PW57-H001	0.688A / 35.02V	<96 W	T1M1UNV150 P-150L	T3	T100°C	T4	T85°C	83°C
LX2GAM4L B-65	PW65-H001	0.688A / 35.02V	<96 W	T1M1UNV150 P-150L	T3	T100°C	T4	T85°C	83°C

Note: Current and Voltage stated above is the maximum allowable.

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 shall ensure that any changes to those parts or components do not affect the compliance of the certified product that is the subject of this certificate.
- ii. Each unit manufactured shall be subjected to a electric strength test in accordance with EN 60079 15:2010 clause 23.2.1 at 1000v +2Un for 60 s. Alternately at 1.2 times this test voltage for at least 100 ms.
- iii. The manufacturer shall mark a maximum ambient range of -40°C to +70°C when fitting the T1M1UNV150P-150L driver, depending on Temperature class.