



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 SIR 12.0093X

Issue No: 10

Certificate history:

Issue No. 10 (2019-06-10)

Issue No. 9 (2019-03-29)

Issue No. 8 (2018-11-27)

Issue No. 7 (2016-11-08)

Issue No. 6 (2015-10-23)

Issue No. 5 (2015-04-07)

Issue No. 4 (2014-05-06)

Issue No. 3 (2013-12-12)

Issue No. 2 (2013-08-28)

Issue No. 1 (2013-06-25)

Status: **Current**

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Date of Issue: **2019-06-10**

Applicant: **Dialight Corporation**
1501 Route 34 South
Farmingdale
New Jersey 07727
United States of America

Equipment: **ELA Series LED Linear Luminaire and ELEA Variants**

Optional accessory:

Type of Protection: **Increased Safety, Encapsulation and Dust by Enclosure**

Marking:

Ex e mb IIC T4 Gb
Ex tb IIIC T135°C Db
Ta = -20°C to +60°C

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

N Jones

Position:

Certification Manager

*Signature:
(for printed version)*

Date:

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:

SIRA Certification Service
CSA Group
Unit 6, Hawarden Industrial Park
Hawarden, Deeside, CH5 3US
United Kingdom

sira
CERTIFICATION





IECEX Certificate of Conformity

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Manufacturer: **Dialight Corporation**
1501 Route 34 South
Farmingdale
New Jersey 07727
United States of America

Additional Manufacturing location(s):

Dialight de México S. de R.L. de C.V. (Plant 1)
C. Lirios S/N, Col. Carlos Pacheco
Ensenada,
Baja California 22830
Mexico

Dialight Corporation Penang Sdn Bhd
2593, Jalan Perusahaan,
Kawasan Perusahaan Perai,
13600 Perai, Pulau Penang
Malaysia

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 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-18 : 2009 Edition:3	Explosive atmospheres Part 18: Equipment protection by encapsulation "m"
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:

GB/SIR/ExTR13.0052/00	GB/SIR/ExTR13.0183/00	GB/SIR/ExTR13.0239/00
GB/SIR/ExTR13.0345/00	GB/SIR/ExTR14.0109/00	GB/SIR/ExTR15.0105/00
GB/SIR/ExTR15.0287/00	GB/SIR/ExTR16.0197/00	GB/SIR/ExTR18.0214/00
GB/SIR/ExTR19.0099/00	GB/SIR/ExTR19.0161/00	

Quality Assessment Report:

[GB/SIR/QAR11.0014/09](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The ELA Series LED Linear Luminaires and ELEA Variants are suitable for fixed installations and are designed for use with an electrical supply of 110 Vac to 250 Vac, 50/60Hz. They comprise an enclosure constructed from stainless steel or steel that has an elliptical cross section. This enclosure is fitted with two end caps that are secured with two, M6 screws; the end caps can have up to two cable entry holes for cable glands that are suitable for the application and ATEX certified by a notified body. There are two sizes of enclosure, a 2 foot version and a 4 foot version, these utilise the following main parts:

2 foot version: · One, polycarbonate optic
· A potted assembly of 28 LEDs that may be supplied in any colour

4 foot version: · Two, polycarbonate optics
· A potted assembly of 56 LEDs that may be supplied in any colour

Each polycarbonate optic is secured using six, M6 screws and they are sealed with a silicone gasket, thus maintaining the IP54/IP64 ratings (as applicable). All fastening screws are fitted with silicone washers.

Refer to the Annexe for additional information

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. The ELA Series LED Linear Luminaires and ELEA Variants shall only be installed in areas of low mechanical impact risk.
2. This equipment may generate an ignition-capable level of electrostatic charge under certain extreme conditions. The user should ensure that the equipment is not installed in a location where it may be subjected to external conditions (such as high-pressure steam) which might cause a build-up of electrostatic charge on non-conducting surfaces. Additionally, cleaning of the equipment should be done only with a damp cloth.



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

This issue, Issue 10, recognises the following change; refer to the certificate annex to view a comprehensive history:

1. The product name change from "ELA Series LED Linear Luminaire" to "ELA Series LED Linear Luminaire and ELEA Variants". The product description and specific conditions of use were amended accordingly.

Annex:

[IECEX SIR 12.0093X Issue 10 Annexe.pdf](#)

Annexe to: IECEx SIR 12.0093X Issue 10
Applicant: Dialight Corporation
Apparatus: ELA Series LED Linear Luminaire and
ELEA Variants



The potted assemblies incorporate LEDs that that dissipate a maximum of 1.2 W each, these are mounted onto a heat sink along with a potted power supply and one of the following supply terminals:

Manufacturer	Type Ref.	Coded	Certificate Number
Weidmüller	Type BK	Ex e II	IECEX SIR 05.0035U
Weidmüller	Type MK	Ex e II	IECEX SIR 05.0037U
Wago	Type 862	Ex e II	IECEX PTB 05.0003U

It is recognised that, in addition to the IP 64 requirements needed to comply with the certifying standards, the ELA Series LED Linear Luminaires and Emergency variants have been independently tested according to the requirements of IEC 60529 to meet IP 66 and IP 67.

Conditions of Manufacture

The Manufacturer shall comply with the following:

- The encapsulated parts of the apparatus shall be subjected to a visual inspection. No visible damage of the compound shall be evident, such as cracks, exposure of the encapsulated parts, flaking, impermissible shrinkage, discoloration, swelling decomposition or softening, as required by IEC 60079-18:2009 Clause 9.1.
- An electric strength test of $2U + 1000$ V (where U is the supply voltage) with a minimum of 1500 V ac, shall be applied between circuit and casing for at least 1 minute as required by IEC 60079-7:2006, Clause 6.1. No breakdown shall occur.

Full certificate change history

Issue 1 – this Issue introduced the following changes:

1. 2 foot and 4 foot emergency luminaire versions were introduced to the range. The emergency versions comprise the standard luminaire with the addition of a battery enclosure, secured to the exterior of the standard housing via two metallic couplers and located where the cable entry was previously situated. The battery pack and an isolation switch are fitted within the battery enclosure. The potted driver for the emergency version remains within the standard luminaire housing, although utilises a modified circuit. The type reference and coding applied to the standard version is applicable to the emergency version, hence unchanged, although the label of the emergency version states 'maintained emergency luminaire'.
2. An internal pluggable connector was added as an optional replacement to the certified terminal block. This is applicable to both standard and emergency luminaires.
3. The dust marking stated on the certificate was amended to bring it into line with the intention of IEC 60079-0.

Issue 2 – this Issue introduced the following changes:

1. The use of a 3 A protection fuse was allowed as an alternative to the existing 1.5 A fuse fitted within the encapsulated emergency driver; this modification only applies to the Emergency Luminaires.
2. The product description to be updated with the following statement; "It is recognised that, in addition to the IP 64 requirements needed to comply with the certifying standards, the ELA Series LED Linear Luminaires and Emergency variants have been independently tested according to the requirements of IEC 60529 to meet IP 66 and IP 67."

Date: 10 June 2019

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Form 9530 Issue 1

Sira Certification Service

Unit 6 Hawarden Industrial Park,
Hawarden, CH5 3US, United Kingdom

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Annexe to: IECEx SIR 12.0093X Issue 10
Applicant: Dialight Corporation
Apparatus: ELA Series LED Linear Luminaire and
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Issue 3 – this Issue introduced the following changes:

1. The use of optional, heat shrink tubing over the main compartment and battery compartment was approved.
2. An alternative 'one piece enclosure model' of the emergency variant where the battery compartment forms part of the main compartment was recognised.

Issue 4 – this Issue introduced the following changes:

1. Minor modifications to the potted emergency power supply which include:
 - Addition of an EMC filter PCB and axial ferrite bead on driver input cable within the potted assembly resulting in extension in the overall length of the driver from 200 mm to 231 mm.
 - Addition of a braid to the driver supply cable and pass-thru cable for mechanical protection
 - Addition of a snap ferrite to the driver supply cable and battery cable

Issue 5 – this Issue introduced the following changes:

1. The introduction of an optional alternative aluminium housing, which may have a powder coating.
2. The recognition that the aluminium version may use an alternative end cap gasket.
3. The introduction of an optional safety strap and terminal block sizes for all models was authorised.
4. The replacement of copper and brass external earth components with stainless steel versions for corrosive environments was approved.

Issue 6 – this Issue introduced the following change:

1. The introduction of alternative internal pluggable connectors.

Issue 7 – this Issue introduced the following change:

1. The Applicant and Manufacturer's name and address were changed

From:	To:
Dialight Europe PLC	Dialight Corporation
Exning Road	1501 Route 34 South
Newmarket	Farmingdale
Suffolk CB8 0AX	New Jersey 07727
UK	USA

Issue 8 – this Issue introduced the following change:

1. An additional option of supplying the luminaires with a two-phase input with 120° phase angle instead of a single-phase input was introduced for the same supply ratings of 110 Vac to 250 Vac, 50/60Hz.

Issue 9 – this Issue introduced the following change:

1. To record the addition of alternative manufacturing plants as follows:

- i. Dialight de México S. de R.L. de C.V. (Plant 1)
C. Lirios S/N, Col. Carlos Pacheco
Ensenada,
Baja California 22830
Mexico
- ii. Dialight Corporation Penang Sdn Bhd
2593, Jalan Perusahaan,
Kawasan Perusahaan Perai,
13600 Perai, Pulau Penang
Malaysia

Date: 10 June 2019

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Form 9530 Issue 1

Sira Certification Service

Unit 6 Hawarden Industrial Park,
Hawarden, CH5 3US, United Kingdom

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Web: www.csagroupuk.org

Annexe to: IECEx SIR 12.0093X Issue 10
Applicant: Dialight Corporation
Apparatus: ELA Series LED Linear Luminaire and
ELEA Variants



Issue 10 – this Issue introduced the following change:

1. The product name change from “ELA Series LED Linear Luminaire” to “ELA Series LED Linear Luminaire and ELEA Variants”. The product description and specific conditions of use were amended accordingly.