

United Kingdom

IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION

IEC Certification System for Explosive Atmospheres

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

Certificate No .:	IECEx SIR 12.0093X	Page 1 of 4	Certificate history:
Status:	Current	Issue No: 12	Issue 11 (2020-01-28) Issue 10 (2019-06-10)
Date of Issue:	2022-06-08		Issue 9 (2019-03-29) Issue 8 (2018-11-27)
Applicant:	Dialight Corporation 1501 Route 34 South Farmingdale New Jersey 07727 United States of America		Issue 7 (2016-11-08) Issue 6 (2015-10-23) Issue 5 (2015-04-07) Issue 4 (2014-05-06) Issue 3 (2013-12-12) Issue 2 (2013-08-28)
Equipment:	ELA Series LED Linear Luminaire and I	ELEA Variants	
Optional accessory:			
Type of Protection:	Increased Safety, Encapsulation and D	ust by Enclosure	
Marking:	Ex eb mb IIC T4 Gb Ex tb IIIC T135°C Db Ta = -20°C to +60°C		
Approved for issue of Certification Body:	n behalf of the IECEx	Michelle Halliwell	
Position:		Director Operations, UK & Industrial E	urope
Signature: (for printed version)			
Date: (for printed version)			
 This certificate and This certificate is not The Status and auth 	schedule may only be reproduced in full. t transferable and remains the property of the issuing lenticity of this certificate may be verified by visiting w	body. www.iecex.com or use of this QR Code.	
Certificate issue	d by:		
CSA Group Tes Unit 6, Hawarde Hawarden. Dee	ting UK Ltd n Industrial Park side CH5 3US	(5)	CSA GROUP™

IECEx Certificate of Conformity

Certificate No.:	IECEx SIR 12.0093X	Page 2 of 4	4
Date of issue:	2022-06-08	Issue No: 7	12
Manufacturer:	Dialight Corporation 1501 Route 34 South Farmingdale New Jersey 07727 United States of America		
Manufacturing locations:	Dialight Corporation 1501 Route 34 South Farmingdale New Jersey 07727 United States of America	Dialight Corporation Penang Sdn Bhd No 1666, Lorong Perusahaan Maju 8 Pulau Pinang 13600, Perai Malaysia	Dialight de México S. de R.L. de C.V. (Plant 1) C. Lirios S/N, Col. Carlos Pacheco Ensenada Baja California 22830 Mexico

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 equipment 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 60079-0:2017 Edition:7.0	Explosive atmospheres - Part 0: Equipment - General requirements
IEC 60079-18:2017 Edition:4.1	Explosive atmospheres - Part 18: Protection by encapsulation "m"
IEC 60079-31:2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
IEC 60079-7:2017 Edition:5.1	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

This Certificate **does not** indicate compliance with 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 Reports:

GB/SIR/ExTR13.0052/00 GB/SIR/ExTR13.0345/00 GB/SIR/ExTR15.0287/00 GB/SIR/ExTR19.0099/00 GB/SIR/ExTR22.0036/00 GB/SIR/ExTR13.0183/00 GB/SIR/ExTR14.0109/00 GB/SIR/ExTR16.0197/00 GB/SIR/ExTR19.0161/00

GB/SIR/ExTR13.0239/00 GB/SIR/ExTR15.0105/00 GB/SIR/ExTR18.0214/00 GB/SIR/ExTR19.0327/00

Quality Assessment Report:

GB/SIR/QAR11.0014/12



IECEx Certificate of Conformity

Certificate No .:

IECEx SIR 12.0093X

2022-06-08

Date of issue:

Page 3 of 4 Issue No: 12

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.



Date of issue:

IECEx Certificate of Conformity

Certificate No.: IECEx SIR 12.0093X

Page 4 of 4

Issue No: 12

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above) This issue, Issue 12 recognises the following change; refer to the certificate annex to view a comprehensive history:

1. The recognition of an alternative lens gasket material GP250.

2022-06-08

Annex:

IECEx SIR 12.0093X Issue 12 Annexe.pdf

Annexe to: IECEx SIR 12.0093X Issue 12

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	Туре ВК	Ex eb IIC	IECEx TUR 18.0019U
Weidmüller	Туре МК	Ex eb IIC	IECEx TUR 18.0019U
Wago	Туре 862	Ex eb IIC	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:

- 1. 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 60079-18:2017, 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 60079-7:2017, Clause 6.1. No breakdown shall occur.
- 3. The equipment covered by this certificate incorporates previously certified devices, it is therefore the responsibility of the manufacturer to continually monitor the status of the certification associated with these devices, and the manufacturer shall inform **CSA Group** of any modifications of the devices that may impinge upon the explosive safety design of their products.

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: 08 June 2022

Annexe to: IECEx SIR 12.0093X Issue 12

Applicant: Dialight Corporation



Apparatus: ELA Series LED Linear Luminaire and ELEA Variants

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:
 - 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

Annexe to: IECEx SIR 12.0093X Issue 12

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.
- **Issue 11** this Issue introduced the following changes:
 - 1. Following appropriate assessment for the existing products to demonstrate compliance with the latest technical knowledge, IEC 60079-0:2011 Ed. 6 was replaced by IEC 60079-0:2017 Ed. 7, IEC 60079-7:2006 Ed. 4 was replaced by IEC 60079-7:2017 Ed. 5.1, IEC 60079-18:2009 Ed. 3 was replaced by IEC 60079-18:2017 Ed. 4.1 and IEC 60079-31:2008 Ed 1 was replaced by IEC 60079-31:2013 Ed. 2, the marking was amended accordingly.
 - 2. Addition of an alternate Thermal Protective Device (TPD)
 - 3. Change of address for a manufacturing location

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

Dialight Corporation Penang Sdn Bhd No 1666, Lorong Perusahaan Maju 8 13600 Perai Pulau Pinang Malaysia

Issue 12 – this Issue introduced the following change:

1. The recognition of an alternative lens gasket material GP250.