



1 TYPE EXAMINATION CERTIFICATE

- 2 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU
- 3 Certificate Number: Sira 19ATEX3003X
- 4 Equipment: The Dialight SafeSite Stainless Steel LED Linear luminaire
- 5 Applicant: Dialight Corporation
- 6 Address: 1501 Route 34 South, Farmingdale, NJ 07727, United States of America
- 7 This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

Issue:

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8 CSA Group Netherlands B.V., certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design of Category 2 3 equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 14.2.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

EN IEC 60079-0:2018

EN 60079-7:2015+A1 :2018

EN 60079-18:2015+A1 :2017

- 10 If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to Specific Conditions of Use identified in the schedule to this certificate.
- 11 This Type Examination Certificate relates only to the design of the specified equipment, and not to specific items of equipment subsequently manufactured. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.
- 12 The marking of the equipment shall include the following:

II 3 G

Ex ec mc IIC T4 Gc (Ta -20°C to +60°C)



Signed: J A May

Title: Director of Operations

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DQD 544.15 Issue Date: 2022-04-14





SCHEDULE

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Sira 19ATEX3003X Issue 2

13 DESCRIPTION OF EQUIPMENT

The Dialight SafeSite Stainless Steel LED Linear luminaires are fixed installation lighting equipment, intended for use in potentially explosive atmospheres in Zone 2. The equipment can be installed as indoor or outdoor equipment.

The electrical equipment has an input voltage rating of 100 - 277 Vac, 50/60 Hz. The enclosure is made of stainless steel or steel containing less than 7.5 % by mass magnesium, titanium and zirconium. It has an elliptical cross-section. There are two basic variants of the product in terms of sizes of enclosure, a 2 foot and a 4 foot version. Both enclosure variants have similar construction. They are fitted with two end caps each end that are secured with screws with specific torque requirements. Each end cap is secured with 2 x M6 screws with silicone sealing washers located under head. There can be up to two gland entries each end. The equipment contains cable entries for mains connection, which are permitted to be connected only via IECEx and ATEX suitably approved cable glands. All unused cable entry points are closed off and sealed by IECEx and ATEX suitably certified blanking plugs.

The mains connection entering the equipment enclosure via certified cable gland terminates at one of the following terminals which is located/mounted inside the enclosure (which are also IECEx / ATEX approved):

Manufacturer	Type / Model Reference	Ex coding & Tamb range	Certificate Numbers
Wago Kontakkttechnik	Wago 862 series	Ex e IIC Gb	PTB 03 ATEX 1189U
GmbH & Co. KG	terminals	ExelMb	
Hansastraße 27, 32423		Tamb -55 °C to +105 °C	
Minden, Germany			
Wago Kontakkttechnik	Wago 2004 series Rail-	Ex eb IIC Gb	PTB 05 ATEX 1095U
GmbH & Co. KG	mounted Terminal	Ex eb I Mb	
Hansastraße 27, 32423	blocks	🐵 II 2 G	
Minden, Germany			
		Tamb -55 °C to +85 °C	

Note: The standards used to certify the internal component-certified devices used in the construction of the equipment may differ from those listed above. The technical differences were evaluated and found satisfactory – for detail see ExTR.

2 foot version can contain up to 28 LEDs whereas the 4 foot version can have up to 56 LEDs. There are multiple colour options for the LEDs (see Instruction Manual). The lighting fixture has two clear polycarbonate lenses in its optical system, inner and outer lenses. The inner lenses covers a linear group of 7 LEDs with a white reflector. The light engine / LED assembly which is mounted on aluminium heatsink is enclosed within the stainless steel housing with an overall exterior lens, with cylindrical lens feature. Each group of 7 LEDs are within sealed compartments, each compartment is secured and sealed within encapsulation material with an internal volume less than 10 cm³.

Each polycarbonate optic fixture is secured to the enclosure using six M6 screws, with a sealing gasket to maintain enclosure Ingress Protection ratings of IP64 (the enclosure has been independently tested to IPX6 and IPX7 in accordance with IEC 60529). All fastening screws have silicone sealing washers located under the head, with specific torque requirements.

The equipment contains one potted driver (for both 2 foot and 4 foot variants) that supplies power to the LED assemblies via internal connectors and wiring.





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Variation 1 - This variation introduced the following changes:

- i. The recognition that the use of an alternative lens gasket material GP250.
- ii. Minor drawing amendments (technical) to drawings to reflect the changes above.
- iii. The re-instatement of the Conditions of Manufacture.

14 DESCRIPTIVE DOCUMENTS

14.1 Drawings

Refer to Certificate Annexe.

14.2 Associated Reports and Certificate History

Issue	Date	Report number	Comment
0	01 February 2019	R70201838A	The release of the prime certificate.
1	15 October 2019	4107	Transfer of certificate Sira 19ATEX3003X from Sira
			Certification Service to CSA Group Netherlands B.V.
2	08 June 2022	R80086574A	The introduction of Variation 1.

15 SPECIFIC CONDITIONS OF USE (denoted by X after the certificate number)

- 15.1 The following conditions apply when these products are used in hazardous gas atmospheres:
 - i. Under certain extreme circumstances, the non-metallic parts incorporated in the enclosure of this equipment may generate an ignition-capable level of electrostatic charge. Therefore, the equipment shall not be installed in a location where the external conditions are conducive to the build-up of electrostatic charge on such surfaces. In addition, the equipment shall only be cleaned with a damp cloth.
 - ii. End user must ensure that all cable entry holes will be fitted with a suitably certified cable gland, or a suitably certified stopping plug that is suitable for the application. The type of cable, glands and stopping plugs shall be suitable for use at minimum service temperature range of -20 °C to +73 °C.
 - iii. Torque settings for outer enclosure screws must be maintained adequately by the end user to minimum torque 3.3 Nm.
 - iv. The end user must ensure that the cables or range of cables used in conjunction with the Ex approved cable glands are suitable for use with those glands.
 - v. The terminals inside the enclosure shall only be fitted with wires that have cross sectional area falling within the following limitations for field wiring applications:

WAGO 862 series terminals: single core, finely stranded and standard: minimum 0.5 $\rm mm^2$ to 4 $\rm mm^2$

WAGO 2004 series rail-mounted terminal blocks: single core, finely stranded and standard: minimum 0.5 $\rm mm^2$ to 6 $\rm mm^2$

- vi. The equipment must be installed such that the supply cable is protected from mechanical damage. The cable shall not be subjected to tension or torque. If the cable is to be terminated within an explosive atmosphere then the free end shall be terminated in a suitably certified termination facility.
- vii. The equipment should only be mounted where there is no presence of any external stray magnetic fields that could potentially induce circulating currents.





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viii. A minimum clearance of 3 mm between bare live parts of terminal block and earthed metal enclosure shall be maintained.

16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in the reports listed in Section 14.2.

17 CONDITIONS OF MANUFACTURE

- 17.1 The use of this certificate is subject to the Regulations Applicable to Holders of CSA Group Netherlands B.V. certificates.
- 17.2 Holders of Type Examination Certificates are required to comply with the conformity to type requirements defined in Article 13 of Directive 2014/34/EU.
- 17.3 Manufacturer shall ensure that the equipment is installed with suitably approved Ex stopping plugs or blanking element for unused entries. The stopping plugs shall have temperature rating of at least 73 °C and provide ingress protection rating of minimum IP64.
- 17.4 Threaded blanking elements used for unused entries shall only be removable with the aid of a tool.
- 17.5 In accordance with EN 60079-18:2015+AMD1:2017 Clause 9.1, each manufactured "m" equipment shall be subjected to a visual inspection. No damage shall be evident, such as cracks in the compound, exposure of the encapsulated parts, flaking, inadmissible shrinkage, swelling, decomposition, failure of adhesion (separation of any adhered parts) or softening.
- 17.6 Before the power supply is potted, in accordance with EN 60079-7:2015+AMD1:2018 Clause 7.1, each manufactured sample of the equipment shall be subjected to an electric strength test using the following test voltage(s) for at least 60 seconds: 1554 Vr.m.s. + 5 % applied between the input terminals (Live and Neutral) and metal enclosure. Alternatively, a test shall be carried out at test voltage 1865 Vr.m.s. for at least 100 ms. In each of the case, no breakdown shall occur.
- 17.7 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.

Certificate Annexe

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Certificate Number:	Sira 19ATEX3003X
Equipment:	The Dialight SafeSite Stainless Steel LED Linear luminaire
Applicant:	Dialight Corporation

Issue 0

Drawing no.	Sheets	Rev.	Stamp date	Description
8854-EUL-0002-00	1 to 8	А	18 Jan 19	General Assembly and Parts list
1500-DRV-0005-EX	1 of 1	А	18 Jan 19	Driver circuitry – Electronic schematic
9100-117-3739-99X	1 of 1	А	18 Jan 19	Marking Label, IECEx and ATEX
9100127371599	1 to 6	А	01 Feb 19	Operating Instructions
3600-EUL-0002-00	1 of 1	А	18 Jan 19	Lens gasket
3600-EUL-0001-00	1 of 1	А	18 Jan 19	End cap gasket

Issue 1. No new drawings were introduced

Issue 2

Drawing	Sheets	Rev.	Date (Stamp)	Title
3600-EUL-0002-00	1 of 1	В	April 26, 2022	Lens Gasket
8854-EUL-0002-00	1 to 8	С	April 26, 2022	General Assembly and parts list
9100-117-3739-99X	1 to 1	С	April 26, 2022	SS LINEAR PRODUCT LBL, ATEX/IECEX ZONE 2
9100127371599	1 to 6	С	April 26, 2022	Operating Instructions