



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 11.0046X

Issue No: 4

Certificate history:

Issue No. 4 (2019-06-07)

Issue No. 3 (2017-04-05)

Issue No. 2 (2012-12-13)

Issue No. 1 (2011-06-30)

Issue No. 0 (2011-06-20)

Status: **Current**

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Date of Issue: **2019-06-07**

Applicant: **Aanderaa Data Instruments AS**
Sanddalsringen 5b
N-5225 Nesttun
Norway

Equipment: **ILED Aquarius Windsock/Obstruction, ILED Lyra U-code 3nm/U-code 5nm and Power Supply ULD35W**

Optional accessory:

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

Marking:

Luminaires

Ex eb IIC T4 Gb

Ex tb IIIC T135°C IP66 Db

Ta = -40°C to +55°C

Power Supply

Ex eb mb IIC T4 Gb

Ex tb IIIC T135°C Db IP66

Ta = -40°C to +55°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: **Aanderaa Data Instruments AS**
Sanddalsringen 5b
N-5225 Nesttun
Norway

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 : 2007-10 Edition:5	Explosive atmospheres - Part 0:Equipment - 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/ExTR11.0142/01](#) [GB/SIR/ExTR12.0292/00](#) [GB/SIR/ExTR17.0068/00](#)
[GB/SIR/ExTR19.0149/00](#)

Quality Assessment Report:

[NO/NEM/QAR14.0006/05](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The equipment comprises luminaire/light fittings connected to a dedicated power supply using a length of permanently connected cable terminated with glands that are suitable for the application and have been certified by a notified body. It is supplied as a complete unit and the luminaires and the dedicated power supply are not intended to be used separately. In addition, the electrical ratings of the outputs of the power supply are set by the manufacturer and are limited to the defined maximum supply ratings of the particular luminaire used. Refer to the Annex for more information.

SPECIFIC CONDITIONS OF USE: YES as shown below:

Refer to the Annex.



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

Issue 1 - this Issue introduced the following change:

1. Issue to allow Sira R22360A/01 to replace R22360A/00.

Issue 2 - this Issue introduced the following change:

1. The luminaires, which were previously certified in their own right, are now always provided with a dedicated power supply. The Description of Equipment was therefore modified to introduce the power supply and remove the ratings applicable to the luminaires. The introduction of the power supply also necessitated the application of two, new Conditions of Certification/Special Conditions for Safe Use.
2. A new Type of luminaire was recognised, this is identical to an existing model, but has a de-rated power, the available Types and Versions were therefore clarified in the Description of Equipment.
3. The Conditions of Certification/Special Conditions for Safe Use that were previously applied are considered to be covered by Codes of Practice and were therefore removed.
4. The certificate product name was change from Windsock and Obstruction Luminaires to that shown on page 1.

Issue 3 - this Issue introduced the following change:

1. The recognition of an additional manufacturing location: Aanderaa Data Instruments AS, Sanddalsringen 5b, N-5225 Nesttun, Norway.

Issue 4 - this Issue introduced the following change:

1. Change of applicant and manufacturer's name and address from IMT B.V., Pascalweg 10A, 4104 BG Culemborg, The Netherlands to Aanderaa Data Instruments AS, Sanddalsringen 5b, N-5225 Nesttun, Norway.
2. Updated Delo material type.
3. Include modifications to glass tube.
4. Minor administrative drawing changes.
5. The certification coding has been updated.

Annex:

[IECEX SIR 11_0046X Iss4 Annex.pdf](#)

Annexe to: I ECEX SIR 11.0046X Issue 4
Applicant: Aanderaa Data Instruments AS
Apparatus: I LED Aquarius Windsock/ Obstruction, I LED Lyra U-code 3nm/ U-code 5nm and Power Supply ULD35W



EQUIPMENT (continued)

Luminaires

There are two Types of luminaire fittings, ILED AQUARIUS and ILED LYRA, the difference being the ratings; each Type is available as the following Versions:

The external earth is provided adjacent to a hole down the centre of the unit which is used for mounting purposes.

- Windsock
- Obstruction
- U-code 5NM (this is a flashing version of identical construction to the other models)
- U-code 3NM (this is a flashing version of identical construction to the other models)
- The manufacturer also uses the term 'Type X' to refer to any of these above models as an alternative name, such as "beacon" etc.

The luminaires consist of a cylindrical glass/polycarbonate lens with an aluminium endplate, sealed with a silicone ring, at either end. The endplates are secured to a central, aluminium section using eight, counter-sunk, hexagon socket screws, four on each side, with o-rings used as seals. There are 'flats' around the outside of the central, aluminium section to accommodate 12 LEDs mounted on PCBs. The LEDs are connected in series and a potting material covering the wire links between each PCB is used as a method of strain relief. The external earth is provided adjacent to a hole down the centre of the unit which is used for mounting purposes. The fitting has an M12 x 1.5 entry for a suitably certified cable gland that supports the permanently connected cable.

Power Supply

The power supply uses a component approved, increased safety enclosure, this enclosure can be made from plastic (dimensions 260 x 160 x 93 mm) or stainless steel (dimensions 200 x 200 x 81 mm). The following items are fitted onto an aluminium plate inside the enclosure:

- A 15 mm mounting rail to IEC 60715:1995 Am. 1 for mounting 12 component approved' terminals.
- A component approved, encapsulated driver circuit, this device is contained in its own aluminium enclosure.

There are up to three entries for supply and output connections and there is the option for the power supply entry to be provided with or without a component approved cable gland. The available Types and supply ratings are as follows:

Version	Voltage range
I LED ULD35W AC in plastic enclosure	90 Vac to 250 Vac
I LED ULD35W DC in plastic enclosure	24 Vdc \pm 10%
I LED ULD35W AC in stainless steel enclosure	90 Vac to 250 Vac
I LED ULD35W DC in stainless steel enclosure	24 Vdc \pm 10%

Annexe to: I ECEX SIR 11.0046X Issue 4
Applicant: Aanderaa Data Instruments AS
Apparatus: I LED Aquarius Windsock/ Obstruction, I LED
Lyra U-code 3nm/ U-code 5nm and Power
Supply ULD35W



Conditions of Manufacture

The Manufacturer shall comply with the following:

- i. Each luminaire and power supply shall be subjected to a dielectric strength test in accordance with IEC 60079-7:2006 clause 6.1 for at least 1 second. Alternatively, 1.2 x the test voltage may be applied and maintained for at least 100 ms.
- ii. All luminaires must be supplied to the end user complete with the power supply detailed on the certificates. The outputs of the power supply must be factory set to within the limits of the maximum permitted supply ratings of the applicable luminaire, as defined on the manufacturer's drawings and marked on the luminaire.
- iii. The manufacturer shall provide the user/installer with an appropriate copy of the certificate for each component certified device that is fitted to/fitted inside the equipment.

Specific Conditions of Use

The User/Installer shall comply with the following:

- i. The power supply and luminaires listed on this certificate shall only be used in conjunction with each other and are not approved for use as individual items.
- ii. The factory settings of the outputs of the encapsulated circuit within the power supply shall not be adjusted by the end user.