



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 KSCP 23.0045X** Page 1 of 3 [Certificate history:](#)

Status: **Current** Issue No: 0

Date of Issue: 2023-10-24

Applicant: **HARDO Czapski i Wspolnicy Spolka Jawna**
Spacerowa 5
32-083 Balice
Poland

Equipment: **Ex Linear Light Fixture with LED modules OptiLine**-***** series**

Optional accessory:

Type of Protection: **increased safety "e", protection by encapsulation "m", dust protection by enclosure "t"**

Marking: **OptiLine **-*****---**

Ex ec IIC T4 Gc

Ex tb IIIC T70°C Db

$-40^{\circ}\text{C} \leq T_{\text{amb}} \leq +50^{\circ}\text{C}$

OptiLine **-***A1-**

Ex ec IIC T4 Gc

Ex tb IIIC T70°C Db

$0^{\circ}\text{C} \leq T_{\text{amb}} \leq +45^{\circ}\text{C}$

OptiLine **-***CBX and CBY**

Ex ec mc IIC T4 Gc

Ex tb IIIC T70°C Db

$-30^{\circ}\text{C} \leq T_{\text{amb}} \leq +50^{\circ}\text{C}$

Approved for issue on behalf of the IECEx
Certification Body:

Sang He Kim

Position:

President of the Board

Signature:
(for printed version)

Date:
(for printed version)

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 www.iecex.com or use of this QR Code.



Certificate issued by:

KSC POLAND Sp. z o.o.
Chorzowska 150 Street
Katowice 40-101
Poland





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Date of issue: 2023-10-24

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Manufacturer: **HARDO Czapski i Wspolnicy Spolka Jawna**
Spacerowa 5
32-083 Balice
Poland

Manufacturing locations: **HARDO Czapski i Wspolnicy Spolka Jawna**
Spacerowa 5
32-083 Balice
Poland

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](#) Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

[IEC 60079-18:2017](#) Explosive atmospheres - Part 18: Protection by encapsulation "m"
Edition:4.1

[IEC 60079-31:2013](#) Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

[IEC 60079-7:2017](#) Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition:5.1

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 Report:

[PL/KSCP/ExTR23.0045/00](#)

Quality Assessment Report:

[PL/KSCP/QAR22.0019/01](#)



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Date of issue: 2023-10-24

Issue No: 0

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

Ex Linear Light Fixture with LED modules OptiLine**_***** series is LED luminaire. Enclosure of OptiLine fixture is made from glass fibre reinforced polyester (GRP) bottom housing and polycarbonate (PC) top housing being diffuser of light fixture. Diffuser is available in three different versions: transparent, opal and frozen. Connection of both casing element is performed with silicone foam gasket. It is anticipated that outer electrical wires go through certified cable glands inside of the enclosure. Unused holes can be plugged with certified blanking elements. Diameters of cable glands and/or blanking elements is M20 or M25. Depending on used elements, fixture has ingress protection class IP 66/67. Refer to certificate addendum.

SPECIFIC CONDITIONS OF USE: YES as shown below:

- The equipment includes external non-metallic parts. the user shall therefore ensure that the equipment is not installed in a location where it may be subjected to external conditions which might cause a build-up of electrostatic charges on non-conducting surfaces. Additionally, cleaning of the equipment shall be done with a damp cloth.

Annex:

[IECEX_KSCP_23.00045X_Addendum.pdf](#)



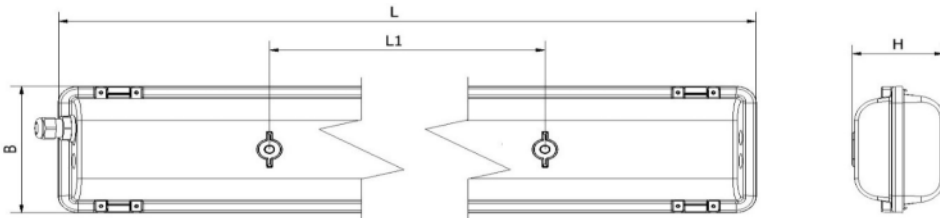
Addendum to IECEx Certificate

Reference Number.....:	IECEx KSCP 23.0045X
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Description

Ex Linear Light Fixture with LED modules OptiLine**-* series is LED luminaire. Enclosure of OptiLine fixture is made from glass fibre reinforced polyester (GRP) bottom housing and polycarbonate (PC) top housing being diffuser of light fixture. Diffuser is available in three different versions: transparent, opal and frozen. Connection of both casing element is performed with silicone foam gasket. It is anticipated that outer electrical wires go through certified cable glands inside of the enclosure. Unused holes can be plugged with certified blanking elements. Diameters of cable glands and/or blanking elements is M20 or M25. Depending on used elements, fixture has ingress protection class IP 66/67. Fixture is constructed as one compartment device. Enclosure of fixture is opened/closed by stainless steel clips disallowing opening it without proper tool. Inside the housing, there is a bottom frame made of powder-coated steel. Depending on fixture configuration, bottom frame has place for mounting; LED module driver, cable terminals, pass-through cables, Ni-Cd battery packages, CBX and CBY modules. It is possible to use LED drivers with DALI system (Ex certified components) in luminaires. Bottom frame is mounted to bottom GRP body by screws suitable to non-metallic materials.

Dimensions:



TYP	L	L1	B	H
OptiLine 60-*****	670	400	173	107
OptiLine 12-*****	1276	800	173	107

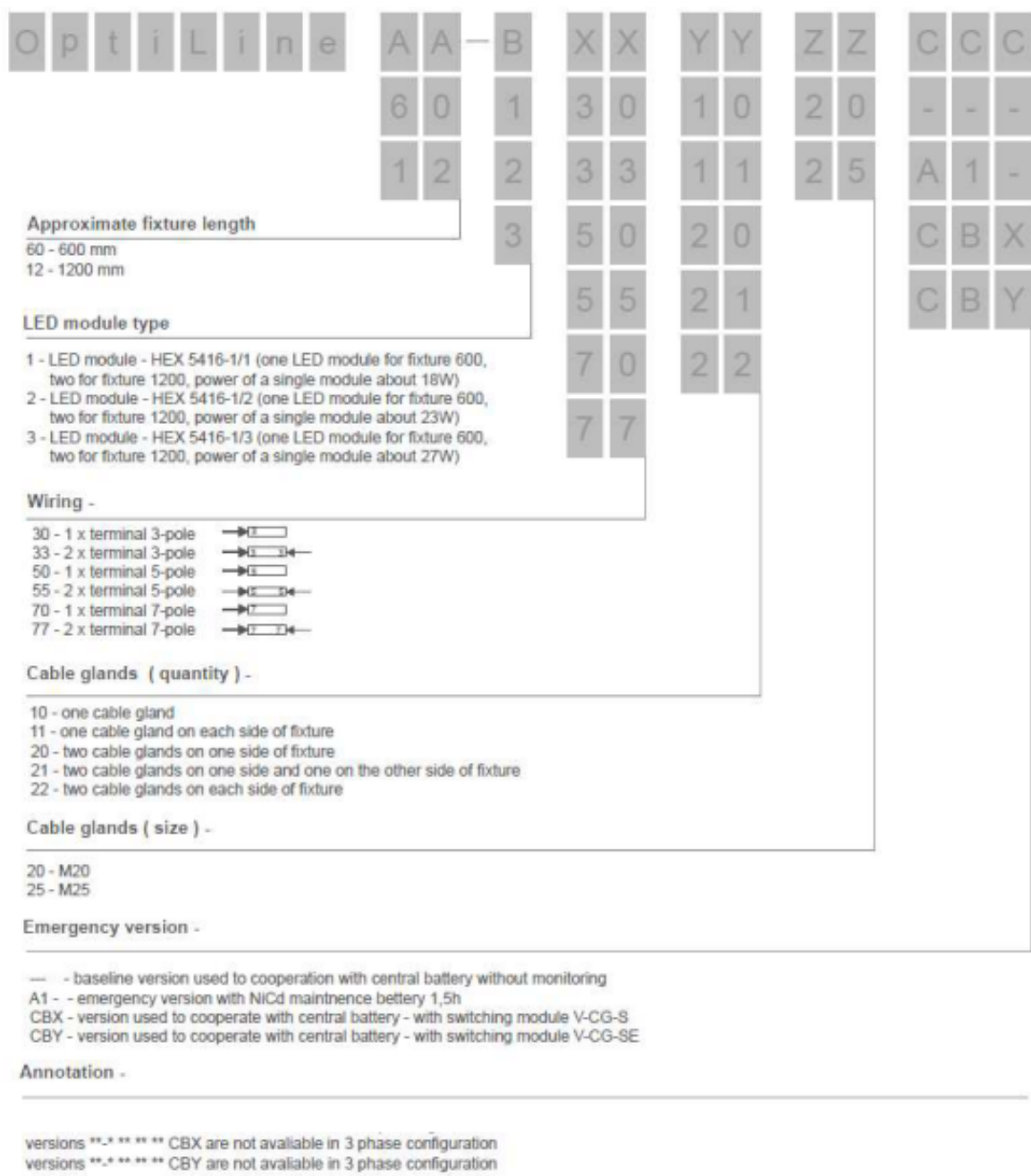
Product will be marked as follows:

Item	Detail
Manufacturer's name or Registered trade mark	HARDO.
Address	32-083 Balice, ul. Spacerowa 5, Poland
Type identification	OptiLine**-*
Serial no. and date of manufacture	Serial no: Not specified, Date: dd.mm.yyyy
IECEx Certificate number	IECEx KSCP 23.0045X
Ex Code	OptiLine **-* Ex ec IIC T4 Gc Ex tb IIIC T70°C Db OptiLine **-*A1-; Ex ec IIC T4 Gc Ex tb IIIC T70°C Db OptiLine **-*CBX and CBY;

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	Ex ec mc IIC T4 Gc Ex tb IIIC T70°C Db
Ambient	OptiLine **_*****_---; $-40^{\circ}\text{C} \leq T_{\text{amb}} \leq +50^{\circ}\text{C}$ OptiLine **_*****A1-; $0^{\circ}\text{C} \leq T_{\text{amb}} \leq +45^{\circ}\text{C}$ OptiLine **_*****CBX and CBY; $-30^{\circ}\text{C} \leq T_{\text{amb}} \leq +50^{\circ}\text{C}$
Rating	230 V AC/DC, 50 Hz, 20.1 W ~ 59.0 W
Ingress protection	IP 66/ 67 (separately tested against IEC 60529 requirements)
Warnings	- Do not open when an explosive atmosphere is present - Potential electrostatic charging hazard – see instructions

OptiLine series have various options, those model names and type explanations are given below;



The following previously certified Ex component are permitted to be installed in the luminaries:

Component Description	Manufacturer	Component Name	Ex Mark	Certificate
LED module power supply / DALI	HADLER GmbH	LED driver Luxtronic Linear VI LED EGC type 3 C 180 08 0 / LED driver Luxtronic Linear VI LED DALI EGC type 3 C 180 08 6	Ex ec IIC Gc	IECEX IBE 19.0029U
LED module emergency power supply / DALI	HADLER GmbH	LED driver Luxtronic Integrated Emergency Unit type 3D 180 14 0 / LED driver Luxtronic Integrated Emergency Unit DALI type 3 D 180 14 6	Ex ec IIC Gc	IECEX IBE 17.0007U
Power supply terminal WAGO series 862	WAGO Kontakttechnik GmbH&Co. KG	4-wire power supply terminal WAGO 862	Ex eb IIC Gb	IECEX PTB 05.003U
Power supply terminal WAGO series 262	WAGO Kontakttechnik GmbH&Co. KG	4-wire power supply terminal WAGO 262	Ex eb IIC Gb	IECEX PTB 04.004U

Routine testing:

- i. The OptiLine**_***** luminaires covered by this certificate incorporate the use of previously certified components and equipment. It is therefore the responsibility of the manufacturer to continually monitor the status of the certification associated with these components.
- ii. The luminaires shall be subjected to a routine test as per IEC 60079-18 clause 9.2 and IEC 60079-7 clause 7.1, performed at 1500V r.m.s. for 60 seconds.
- iii. Each piece of "m" equipment shall be subjected to a visual inspection in accordance with IEC 60079-18 clause 9.1. No damage shall be evident such as cracks in the compound, exposure of the encapsulated parts, flaking, inadmissible shrinkage, swelling, decomposition, failure of adhesion or softening

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