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Schema di certificazione

# CESI-ATEX

[1] **SUPPLEMENTARY EU-TYPE EXAMINATION CERTIFICATE**

[2] **Equipment or Protective System intended for use  
in potentially explosive atmospheres  
Directive 2014/34/EU**

[3] Supplementary EU-Type Examination Certificate number:

**CESI 14 ATEX 057 X/02**

[4] Product: Helideck lighting system type **HPDEX-H-x** and **HPDEX-C-y**

[5] Manufacturer: Calzoni S.r.l.

[6] Address: Via A. De Gasperi n.7, 40012 Calderara di Reno (BO) - Italy

[7] This supplementary certificate extends EC-Type Examination Certificate CESI 14 ATEX 057X to apply to products designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to..

[8] CESI, notified body n. 0722 in accordance with Article 17 of the Directive 2014/34/EU of the Parliament and Council of 26 February 2014, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report n. EX-B6018944.

[9] In accordance with Article 41 of Directive 2014/34/EU, EC-Type Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Supplementary certificates to such EC-Type Examination Certificates, and new issues of such certificates, may continue to bear the original certificate number issued prior to 20 April 2016

[10] If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

[11] This EU-TYPE EXAMINATION CERTIFICATE relates only to the design, examination and tests of the specified equipment or protective system in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

[12] The marking of the equipment or protective system shall include the following:

**Ex II 2G Ex mb IIC T6 Gb**

This certificate may only be reproduced in its entirety and without any change, schedule included.

Date 19<sup>th</sup> 09.2016 - Translation issued the 19<sup>th</sup> 09.2016

**Prepared**  
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**Verified**  
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**Approved**  
Roberto Piccin

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**CESI S.p.A.**  
Testing & Certification Division  
Business Area Certification  
Il Responsabile

*(Roberto Piccin)*



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## Schedule

[14] SUPPLEMENTARY EU-TYPE EXAMINATION CERTIFICATE n. CESI 14 ATEX 057 X/02

[15] **Description of the variation to the product**

Variation 2.1 Added IP67 degree of protection

Variation 2.2: - Updating to standards: EN 60079-0:2012+A11:2013 and EN60079-18:2015

### Description of equipment...

The lighting System **HPDEX** is a series of signals system developed for Helideck.

The System consists of a series of lighting segments, totally encapsulated, formed by 6 LED lighting elements, colour: amber (*mod. HPDEX-C-x*) or green (*mod. HPDEX-H-y*).

The addition of the degree of protection IP67, has not involved mechanical or electrical modifications to the lighting systems **HPDEX**.

The System **HPDEX**, was previously assessed in compliance with EN 60079-0:2012 and EN 60079-18:2009 With this supplement the System have been re-assessed on the basis of the EN 60079-0:2012+A11:2013 and EN 60079-18:2015standard

### Electrical characteristics

Product / Model	Maximum rated voltage	Maximum current (for single branch)
<b>HPDEX-C</b>	18 Vdc	350 mA
<b>HPDEX-C-4</b>	72 Vdc	350 mA
<b>HPDEX-C-5</b>	2 x 45Vdc (2 branches 45 Vdc each)	350 mA
<b>HPDEX-C-6</b>	2 x 54Vdc (2 branches 54 Vdc each)	350 mA
<b>HPDEX-C-7</b>	2 x 62Vdc (2 branches 62 Vdc each)	350 mA
<b>HPDEX-H</b>	2 x 60Vdc (2 branches 60 Vdc each)	350 mA
<b>HPDEX-H-A</b>	2 x 60Vdc (2 branches 60 Vdc each)	350 mA

The lighting lines shall be powered by "LED drivers" modules with self-regulating output voltage according to the load and the maximum current of 350mA.

Ambient temperature: from -30°C up to +55°C

Degree of protection: IP 66/67

[16] **Report n. EX-B6018944**

### Routine tests

Each lighting segment or lighting line shall be subjected to a visual inspection and dielectric strength test, according to clause 9 of the EN 60079-18 standard.

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## Schedule

[14] **SUPPLEMENTARY EU-TYPE EXAMINATION CERTIFICATE n. CESI 14 ATEX 057 X/02**

[17] **Special conditions for safe use (X)**

- The conditions of the installation, use and maintenance of the Helideck lighting system HPDEX, are included within the Safety Instruction. For a safe use these Instruction are to be followed precisely.
- The System HPDEX lighting line shall installed on rigid and smooth metal surfaces.
- The System HPDEX power cables, shall be terminated in a junction box that guarantees a type of protection provided in Section 1 of EN 60079-0 standard and compatible with the installation area.
- The lighting lines shall be powered by "LED drivers" modules with self-regulating output voltage according to the load and the maximum current of 350mA.
- The "LED drivers" modules, if installed in hazardous areas, shall be protected with a type of protection provided in Section 1 of EN 60079-0 standard.
- Do not separate the System's components, when energized.
- WARNING! clean external plastic parts with a damp cloth.
- The ambient temperature Tamb has range: from -30°C up to +55°C.

[18] **Essential Health and Safety Requirements**

Compliance with the Essential Requirements of Safety and Health, is not affected by the variations subject of this supplement and has been assured by compliance with the following standards:

- EN 60079-0:2012 + A11:2013 - Explosive atmospheres – Part 0: Equipment – General requirements.
- EN 60079-18:2015 - Explosive atmospheres – Part 18: Equipment protection by encapsulation "m".

The manufacturer is allowed to affix the CE marking.

[19] **Descriptive documents (prot. EX-B6018948)**

- |   |       |                |
|---|-------|----------------|
| - TECHNICAL DESCRIPTION n.TD8143104, Rev. B V.1; pg. 50         | dated | 08.06.2016     |
| - SAFETY INSTRUCTIONS n.TD8143791, Rev. B V.1; pg. 15           | dated | 08.06.2016     |
| - LABEL FRAME HPDEX-H(-x), n. D8416318; Rev.C; pg. 1            | dated | 08.06.2016     |
| - LABEL FRAME HPDEX-C(-y), n. D8416319; Rev.C; pg. 1            | dated | 08.06.2016     |
| - LABEL LINE LIGHT GREEN HPDEX-H(-x), n. D8416330; Rev.D; pg. 1 | dated | 08.06.2016     |
| - LABEL LINE LIGHT AMBER HPDEX-C(-y), n. D8416331; Rev.D; pg. 1 | dated | 08.06.2016     |
| - HAPEX-C OVERALL DIMENSIONS, n. D8115433; Rev.C; pg. 1         | dated | 08.06.2016     |
| - HPDEX-C, n. D8215427; Rev.E; pg. 1                            | dated | 08.06.2016     |
| - HPDEX-C-4, n. D8216342; Rev.C; pg. 1                          | dated | 08.06.2016     |
| - HPDEX-C-5, n. D8216343; Rev.C; pg. 1                          | dated | 08.06.2016     |
| - HPDEX-C-6, n. D8216344; Rev.C; pg. 1                          | dated | 08.06.2016     |
| - HPDEX-C-7, n. D8216345; Rev.C; pg. 1                          | dated | 08.06.2016     |
| - HPDEX-H, n. D8215555; Rev.D; pg. 1                            | dated | 08.06.2016     |
| - HPDEX-H-A, n. D8216341; Rev.D; pg. 1                          | dated | 08.06.2016     |
| - Fac-simile Dichiarazione di Conformità UE; pg. 1              | dated | September 2016 |

One copy of all documents is kept in CESI files.

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## Schedule

[14] **SUPPLEMENTARY EU-TYPE EXAMINATION CERTIFICATE n. CESI 14 ATEX 057 X/02**

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### Certificate history

Issue N°	Issue Date	Summary description of variation
02	19.09.2016	Added degree of protection IP67 and standards update
01	28.05.2015	Extended temperature range up to +55 °C
00	13/11/2014	First Issue of the Certificate