

EU-TYPE EXAMINATION CERTIFICATE

- [2] EQUIPMENT OR PROTECTIVE SYSTEM INTENDED FOR USE IN POTENTIALLY EXPLOSIVE ATMOSPHERES DIRECTIVE 2014/34/EU
- [3] EU-Type Examination Certificate Number: **Presafe 20 ATEX 39851X** **Issue 1**
- [4] Product: **HPLN Series LED Explosion protected luminaire**
- [5] Manufacturer: **Cooper Crouse-Hinds S.A.**
- [6] Address: **Avda. Santa Eulàlia, 290
08223 Terrassa
Spain**
- [7] This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- [8] DNV GL Presafe AS, notified body number 2460, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.
- The examination and test results are recorded in confidential reports listed in section 16.
- [9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
**EN IEC 60079-0:2018, EN 60079-1:2014, EN 60079-7:2015, EN 60079-18:2015,
EN 60079-28:2015 and EN 60079-31:2014.**
- [10] If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.
- [11] This EU - TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.
- [12] The marking of the product shall include the following:

 **Ex code, see schedule**

Date of issue:
2020-09-25



Ståle Sandstad

Ståle Sandstad
For DNV GL Presafe AS

The Certificate has been digitally signed.
See www.dnvgl.com/digitalsignatures for info



[13] **Schedule**

[14] **EU-Type Examination Certificate No:** Presafe 20 ATEX 39851X Issue 1

[15] **Description of Product**

The HPLN Series LED Explosion protected luminaire consists one Ex e driver chamber and one Ex d LED light source chamber, a Ex bushing is installed in the heatsink to do the electrical connection of those two chambers. The whole product meets the requirements of Ex tb also, and there is a small breather chamber located in the side of heatsink, the breather chamber is relevant to Ex tb only. There are three configurations of the products, the difference between them are the heatsink and adaptor, the other parts are the same. In the driver chamber, one or two Ex driver(s), some Ex terminals and one SPD (optional) are installed. In the LED chamber, the LED light sources meet the requirements of inherently safe optical radiation. The threaded joint between the adapter and the stanchion mounting cover is NPT 1 1/2 - 1 1/2, the torque to fasten the threaded joint is 100 Nm.

Type designation

HPLN	-	□	-	□	-	□	-	□	-	□	-	□	-	□	-	□	-	□	-	□
Ta:																				
Default: -40°C																				
LT: -50°C																				
Breather Valve:																				
Default: Without breather valve																				
BV: Breather valve																				
Surge protect device:																				
Default: Standard version																				
S: High version																				
Suffixes:																				
S812: Trunnion mount kit with pin																				
S831: Safety cable																				
S890: Quick clip																				
Guard:																				
Default: Without guard G: With guard																				
Glass type:																				
Default: Clear glass F: Foggy glass																				

Beam angle:

Default: without lens
 W: Wide angle (120°)
 M: Medium angle (60°)
 N: Narrow angle (25°)

Mounting type:

Blank=no cover (an option of the luminaire body which must be assembled to the cover in field to make up a complete assembled luminaire)
 J: 1½" stanchion, 25° angled
 P: 1½" stanchion, straight
 2A: ¾" Pendant 3A: 1" Pendant
 20A: 20mm Pendant 25A: 25mm Pendant
 2B: ¾" Cone Pendant 3B: 1" Cone Pendant
 2C: ¾" Ceiling 3C: 1" Ceiling
 20C: 20mm Ceiling 25C: 25mm Ceiling
 2HA: ¾" Flexible Pendant
 2TW: ¾" Wall 3TW: 1" Wall
 20TW: 20mm Wall 25TW: 25mm Wall

LED color temperature:

W1: 2700K W2: 3000K C1: 4000K
 C2: 5000K C3: 5700K



Total Luminous Flux.:

3L: 3000 Lm 5L: 5000 Lm 7L: 7000 Lm
 9L: 9000 Lm 11L: 11000 Lm
 15L: 15000 Lm
 21L: 21000 Lm 25L: 25000 Lm



HPLN: Basic catalog series designation

Ex code

Products with Ex driver (INVENTRONICS, TPS 19 ATEX 079136 0266 U) installed:

-  II 2 G Ex db eb mb op is IIC T4 Gb
-  II 2 D Ex tb op is IIIC T95°C Db

Products with Ex driver (Eaton, DEMKO 19 ATEX 2304U) installed:

-  II 2 G Ex db eb mb op is IIC T* Gb (see below table for details of temperature classes)
-  II 2 D Ex tb op is IIIC T95°C Db

Type	Temperature class		Temperature class	
	T*	Ta	T*	Ta
HPLN-3L...	T5	-40°C/-50°C to +55°C	-	-
HPLN-5L...	T5	-40°C/-50°C to +55°C	-	-
HPLN-7L...	T5	-40°C/-50°C to +55°C	-	-
HPLN-9L...	T5	-40°C/-50°C to +50°C	T4	-40°C/-50°C to +55°C
HPLN-11L...	T5	-40°C/-50°C to +50°C	T4	-40°C/-50°C to +55°C
HPLN-15L...	T5	-40°C/-50°C to +50°C	T4	-40°C/-50°C to +55°C
HPLN-21L...	T5	-40°C/-50°C to +45°C	T4	-40°C/-50°C to +55°C
HPLN-25L...	T5	-40°C/-50°C to +40°C	T4	-40°C/-50°C to +55°C

Electrical Data

Rated voltage: 100~240 V a.c. 50/60 Hz or 125~250 V d.c.

Rated parameters:

Type	LED PCB	Max. power	Driver
HPLN-3L...	5 pcs. connection in series	95 W	1 x MU060H105AQ_MB or 1 x EUD-060S120DT-FT01
HPLN-5L...	8 pcs. connection in series		
HPLN-7L...	10 pcs. connection in series		
HPLN-9L...	30 pcs. connection in series		
HPLN-11L...	36 pcs. connection in series		
HPLN-15L...	2x (23 pcs. connection in series)	130 W	2 x MU060H105AQ_MB or 2 x EUD-060S120DT-FT01
HPLN-21L...	2x (35 pcs. connection in series)	205 W	2 x MU100H120AQ_MB or 2 x EUD-096S105DTAFT01
HPLN-25L...	2x (41 pcs. connection in series)		

Degrees of protection (IP Code)

IP66

Ambient temperature:

- 40°C to +55°C (when the INVENTRONICS LED driver is installed)
- 40°C to +40°C or -40°C to +45°C or -40°C to +50°C or -40°C to +55°C (when the Eaton LED driver and CLB... bushing are installed, refer to the Ex code for the relationship between temperature class and Ta)
- 50°C to +40°C or -50°C to +45°C or -50°C to +50°C or -50°C to +55°C (when the Eaton LED driver and LB... bushing are installed, refer to the Ex code for the relationship between temperature class and Ta)

Routine tests

- Each flameproof enclosure of 11L must be subjected to routine overpressure test of 1.6 MPa for at least 10 s according to clause 16 of EN 60079-1.
- The flameproof enclosure of 15L and 25L must be subjected to batch overpressure test of 1.6 MPa for at least 10 s according to clause 16 of EN 60079-1.
- A dielectric strength test shall be carried out at 1500V for at least 1 min according to requirements of clause 7.1 (6.1) of EN 60079-7:2015.

[16] **Report No.:** 2020-9031, Rev. 01
Project No.: PRJN-182727-2020-PA-CHN

[17] **Specific Conditions of Use**

- The product must be connected to electricity supplies with a prospective short-circuit current of max.1500A.
- Repairs of the flameproof joints must be made in compliance with the structural specifications provided by the manufacturer. Repairs must not be made on the basis of values specified in table 4 of EN 60079-1.
- Before application, separate ATEX certified Ex eb IIC Gb or/and Ex tb IIIC Db IP66 cable gland or plug should be incorporated in the Ex e chamber.
- Before application, separate ATEX certified Ex tb IIIC Db IP66 plug or breather/drains should be incorporated in the heatsink.

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

Essential Health and Safety Requirements (EHSRs) are covered by the standards listed at item 9.

[19] **Drawings and documents**

As listed in confidential report 2020-9031.

[20] **Certificate History**

Issue	Description	Issue date	Report no.
0	Original issue	2020-03-06	2020-9031, Rev. 00
1	For the stanchion mounting cover, an adapter is added to be installed at one end into the cover with NPT threaded joint. The built-in Ex drivers were updated, the way to determine the end product temperature class was updated accordingly.	2020-09-25	2020-9031, Rev. 01

END OF CERTIFICATE