



Italia

CERTIFICATE

- [1] **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:
TÜV IT 24 ATEX 0179 X
- [4] Equipment or Protective System: Ex flexible strip light, model No.: CES-EX-LP-
mb-F2010 series
- [5] Manufacturer: Shenzhen CESP Co., Ltd.
- [6] Address: Room 601, 602, 603, 605, Wangcheng Bldg, No.3 Longguan East
Rd, Qinghua Community, Longhua St, Longhua Dist, Shenzhen
City, Guangdong Province - CHINA
- [7] This equipment or protective system and any acceptable variation thereto is specified in the
schedule to this certificate and the documents therein referred to.
- [8] TÜV Italia, notified body no. 0948 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 report no. R 24 EX 022 rev.0
- [9] Compliance with the Essential Health and Safety Requirements has been assured by
compliance with:
EN IEC 60079-0:2018; EN 60079-18:2015 + A1:2017; EN 60079-28:2015
- [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 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:



II 2G Ex mb op is IIC T4 Gb
II 2D Ex mb op is IIIC T135°C Db
-40°C ≤ Ta ≤ +80°C

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

Issue date: 04th April 2024



PRD N° 081B

Membro degli Accordi di Mutuo Riconoscimento
EA, IAF e ILAC
Signatory of EA, IAF and ILAC Mutual
Recognition Agreements



TÜV Italia S.r.l.
Notified body N° 0948

Alberto Carelli
Alberto Carelli

**Industry Service – Real Estate & Infrastructure
Managing Director**

TÜV Italia has been authorized by Italian government to operate as notified body for the certification of equipment or protective
system intended for use in potentially explosive atmospheres. This document is not valid without official signature and logo. The
internal reference code is 722345903.



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SCHEDULE

[14]

**EU-TYPE EXAMINATION CERTIFICATE
no. TÜV IT 24 ATEX 0179 X**

Certificate History

Revision:	Description:	Report rev.:	Issue Date:
-	First issued	-	2024-04-04

[15] **Description of equipment**

CES-EX-LP-mb-F2010 are series LED flexible strip light with encapsulation enclosure which is made by rubber mixings of silicone rubber. The whole electrical parts are protected by Ex 'm' type. The limitation of power is 4W to 240W. The rated input voltage is 48V DC/AC. Details please refer the "Rated characteristics". The model CES-EX-LP-mb-F2010 series is intended to be used in explosive gas and dust atmosphere, EPL are Gb and Db. Ambient temperature is from -40°C to + 80°C.

The driver, adaptor and external connections are not integrated in this product and are not covered in this certification.

Rated characteristics

CES-EX-LP-aa-F2010b-ccccV-dd-eee-fffM-gggW series,
Model designation:

<u>CES-EX-LP-</u>	<u>aa</u>	-	<u>F2010</u>	<u>b</u>	-	<u>cccc</u>	<u>V</u>	-	<u>dd</u>	-	<u>eee</u>	-	<u>fff</u>	<u>M</u>	-	<u>ggg</u>	<u>W</u>
	↑		↑	↑		↑	↑		↑		↑		↑	↑		↑	↑
	I		II			III	IV		V		VI		VII	VIII		IX	X

Remark: a, b, c, d, e, f and g are variables

I -- Certification series:

CES-EX-LP

II -- Level of protection:

aa= mb

III -- Model designation:

F2010: Light body section size is W20*H10mm;

IV -- Typical light output model:

B: Single colour;

V -- Input voltage:

cccc= AC 24, DC 24, AC 36, DC 36, AC 48 or DC 48;

VI -- Unit of voltage:

V

VII -- LED numbers per meter:

dd= 84 (when cccc=AC 24 or DC 24);

dd= 88 (when cccc =AC 36 or DC 36);

dd= 84 (when cccc =AC 48 or DC 48);

Remark: Different LEDs per meter correspond to different powers per meter(W/M)

VIII -- Light color

eee= W, R, G or A;

Remark: W= white, R= Red, G= Green, A= Amber



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IX -- Lengths of light

fff are numbers, stand for lengths of light. The length is variable and the minimum step is 0.5.

The length of the light varies according to different EPL, input voltage(cccc), LED number per meter (ddd), and light color(eee):

fff min.=0.5, fff max.=48, when aa=mb, b=B, cccc= AC 24 or DC 24;

fff min.=0.5, fff max.=96, when aa=mb, b=B, cccc= AC 36 or DC 36;

fff min.=0.5, fff max.=72, when aa=mb, b=B, cccc= AC 48 or DC 48;

Remark: Details refer to "Model difference":

X -- Unit of length

M

XI -- Powers of light

ggg are numbers, stand for powers of light. The power is variable and correspond to light length.

The length of the light varies according to different EPL, input voltage(cccc), LED number per meter (ddd), and light color(eee):

ggg min.=2.5, ggg max.=240, when aa=mb, b=B, cccc= AC 24 or DC 24;

ggg min.=1.25, ggg max.=240, when aa=mb, b=B, cccc= AC 36 or DC 36;

ggg min.=1.67, ggg max.=240, when aa=mb, b=B, cccc= AC 48 or DC 48;

Remark: Details refer to "Model difference":

XII -- Unit of power

W

Model difference:

Model: mb-F2010b-ccccV-dd-eee-fffM-gggW series:			
	dd stands for LED numbers per meter	eee stands for light color	gg stands for power of light, hh stands for length of light
b=B cccc =AC 48V or DC 48V	dd =84	eee =W	fff =0.5~20, step is 0.5 ggg =6~240, step is 6,
		eee=R,G or A	fff =0.5~24, step is 0.5 ggg =5~240, step is 5,
b=B cccc =AC 36V or DC 36V	dd =88	eee =W	fff =0.5~20, step is 0.5 ggg =6~240, step is 6,
		eee=R,G or A	fff =0.5~24, step is 0.5 ggg =5~240, step is 5,
b=B cccc =AC 24V or DC 24V	dd =84	eee =W	fff =0.5~20, step is 0.5 ggg =6~240, step is 6,
		eee=R,G or A	fff =0.5~24, step is 0.5 ggg =5~240, step is 5,



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Warning label

None.

[16] **Report no.** R 24 EX 022 rev.0**Routine tests**

The manufacture shall carry out below tests as 100%:

1. Visual inspection, no any damage shall be evident.
 2. Dielectric strength test:
 - 1) 600VAC between input terminal and enclosure for 0.1s at least.
- No breakdown shall occur.

[17] **Special conditions for safe use**

1. The ambient temperature range is from -40°C to +80°C applying for CES-EX-LP-mb-F2010 series.
2. The equipment shall be protected from impacts with high impact energy.

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

Assured by compliance with the standards set out in the [9].

[19] **Drawings and Documents****Listed documents** (prot. 722345903)

Title:	Description:	Pag.	Rev:	Date:
CES-EX-LP-003	Drawing_Label_Printing-Ex-mb op is-F2010 series T4	1	A2	2024-01-03
CES-EX-LS-A1	User Manual	9	V0	2024-01-03

One copy of all documents is kept in TÜV Italia files.