



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 TPS 19.0047X	Page 1 of 4	<u>Certificate history:</u>
Status:	Current	Issue No: 4	Issue 3 (2023-09-28)
Date of Issue:	2023-11-28		Issue 2 (2021-03-04)
Applicant:	Shenzhen Clear Lighting Co., Ltd. 901#, 9F, Unit B, Block B(South Area), Zhuoyue Meilin Center Plaza, Meilin Road, Meilin Street, Futian District. Shenzhen 518049 China		Issue 1 (2020-09-09)
Equipment:	LED Flexible Strip Light. Model: ma-F2010, mb-F2010, mc-F1617 series.		Issue 0 (2020-02-13)
Optional accessory:			
Type of Protection:	encapsulation "m"		
Marking:	For ma-F2010 series Ex ma I Mb For mb-F2010 series Ex mb I Mb Ex mb IIC T6 Gb Ex mb IIIC T80°C Db or (alternative) Ex mb IIC T4 Gb Ex mb IIIC T135°C Db For mc-F1617 series, Ex mc IIC T6 Gc Ex mc IIIC T80°C Dc		

Approved for issue on behalf of the IECEx
Certification Body:

Frank Zhu, MSc.

Position:

Technical Certifier

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.
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Certificate issued by:

TÜV SÜD Product Service GmbH
Ridlerstr. 65
D-80339 Munich
Germany



Product Service



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Manufacturer: **Shenzhen Clear Lighting Co., Ltd.**
901#, 9F, Unit B, Block B(South Area), Zhuoyue Meilin Center
Plaza, Meilin Road, Meilin Street, Futian District
Shenzhen City, Guangdong Province 518049
China

Manufacturing
locations:

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 60079-18:2014](#) Explosive atmospheres – Part 18: Equipment protection by encapsulation “m”
Edition:4.0

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 Reports:

[DE/TPS/ExTR19.0026/00](#)

[DE/TPS/ExTR19.0026/01](#)

[DE/TPS/ExTR19.0026/02](#)

Quality Assessment Reports:

[DE/TPS/QAR19.0011/00](#)
[DE/TPS/QAR19.0011/03](#)

[DE/TPS/QAR19.0011/01](#)

[DE/TPS/QAR19.0011/02](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The equipment "ma-F2010, mb-F2010, mc-F1617 series" are three different lighting effects explosion-proof flexible strip luminaires with encapsulation enclosure which are made by same rubber mixings of silicone rubber. The whole electrical parts are protected by Ex 'm' type. The limitation of power is 0.5W to 240W. The rated input voltage is 48V DC/AC. The model ma-F2010 as a device which is intended to be used in mine atmosphere, EPL is Mb; The model mb-F2010 series is intended to be used in explosive mine, gas and dust atmosphere, EPL are Mb, Gb and Db; The model mc-F1617 series is intended to be used in EPL Gc and Dc explosive gas and dust atmosphere. The driver and adaptor are not integrated in this product and are not covered in this certification.

Ignition risk by optical radiation as per IEC 60079-0 clause 6.6.4 has been evaluated which fulfills the requirement of IEC 60079-28.

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. The ambient temperature range is from -30°C to +40°C applying for ma-F2010 and mb-F2010 series; The alternative ambient temperature range is from -40°C to +80°C applying for mb-F2010 series; The ambient temperature range is from -30°C to +50°C only applying for mc-F1617 series.
2. The equipment is in equipment protection level "Mb", although the equipment was evaluated as Ex "ma", it does not comply with EPL "Ma".
3. The equipment shall be protected from impacts with high impact energy.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Correct typo