

## **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 CML 17.0004** 

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Certificate history:

Status:

Current

Issue No: 3

Issue 2 (2019-11-26) Issue 1 (2019-03-15) Issue 0 (2017-04-05)

Date of Issue:

2023-03-30

Applicant:

**Cortem Group** Via Aquileia

10-34070 Villese (GO)

Equipment:

**SLED Lighting Fixtures** 

Optional accessory:

Type of Protection:

Flameproof "db", Increased Safety "eb", Restricted Breathing "nR", Dust Ignition "tb/tc"

H M Amos

Marking:

Ex db eb IIB+H2 T4/T5/T6 Gb

Ex tb IIIC T100°C/T98°C/T95°C/T93°C/T90°C/T85°C Db IP66

Ex nR IIC T., °C Gc

Ex to IIIC T.. °C Do IP66

Refer to Annex for ambient temperatures

Approved for issue on behalf of the IECEx

Certification Body:

**Certification Officer** Position:

Signature:

30/03/2023 (for printed version)

(for printed version)

1. This certificate and schedule may only be reproduced in full.

This certificate is not transferable and remains the property of the issuing body.
 The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate issued by:

**Eurofins E&E CML Limited** Unit 1, Newport Business Park **New Port Road** Ellesmere Port, CH65 4LZ **United Kingdom** 







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Date of issue:

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Manufacturer:

**Cortem Group** 

Via Aquileia

10-34070 Villese (GO)

Italy

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 60079-1:2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"

Edition:7.0

IEC 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

Edition:2

IEC 60079-7:2015 Explosive atmospheres – Part 7: Equipment protection by increased safety "e"

Edition:5.0

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:

GB/CML/ExTR17.0010/00 GB/CML/ExTR19.0046/00 GB/CML/ExTR19.0238/00

GB/CML/ExTR22.0273/00

**Quality Assessment Report:** 

IT/CES/QAR06.0002/15



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### **EQUIPMENT**:

Equipment and systems covered by this Certificate are as follows:

The Lighting Fixtures SLED wide area flood light series is suitable for use in outdoor and indoor hazardous areas, where inflammable or explosive vapours, gases or dusts are present.

Refer to Annex for full description and Conditions of Manufacture.

SPECIFIC CONDITIONS OF USE: NO No special conditions of safe use.



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## DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

This issue introduced the following changes:

1. To introduce the SLED-1000 (two compartment) and the SLED-401 and SLED-601 (single compartment) to the SLED lighting fixture range.

2. To update the dust marking to include op is.

#### Issue 2

This issue introduced the following changes:

- 1. To allow the addition of a new model; ED-1001.l, SL
- 2. Update of a condition of manufacture to include the new model number.

#### Issue 3

This issue introduced the following changes:

- 1. To update the commercial codes for previously certified models
- 2. To include two additional model series, SLED-MN-400... and SLED-MN-600....
- 3. To assess the equipment against the latest IEC 60079-0:2017 standard
- 4. To remove IEC 60079-28:2015 from the list of applicable standards
- 5. The product description and Conditions of Manufacture have been updated to recognise the above modifications.

### Annex:

Certificate Annex IECEx CML 17\_0004 Issue 3.pdf





Annexe to: IECEx CML 17.0004 Issue 3

Applicant: Cortem Group

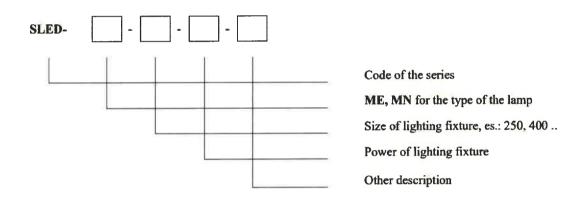
Apparatus: SLED Lighting Fixtures

## Description

The Lighting Fixtures SLED wide area floodlight series is suitable for use in outdoor and indoor hazardous areas, where inflammable or explosive vapours, gases or dusts are present.

The flameproof models were originally contained in the certificate and now have code SLED-ME-...

The Ex-tb models have code SLED-MN-...



The SLED-ME-600.. are made with two separate explosion proof compartments, one containing the LED board, another containing the control gear. In the SLED-ME-400.. and in the SLED-ME-250.. there is only one flameproof compartment with the LED board and the control gear.

These flameproof floodlights are made by a body and a cover containing a glass window. These two components are joined by a flanged joint with screws.

The SLED-MN-.. models are made by one volume body dust tight, the glass is enclosed in the body by plates and screws on a O-ring gasket.

In all the models electrical terminations to the lighting fixture are through an increased safety housing on the rear.

The minimum ambient temperature of installation is in relation to the model of floodlight, as per the following table.

Minimum	SLED-ME	-20°C	-40°C
Ambient		(IIB+H2)	(IIB)
Temperature	SLED-MN	-60°C	



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## Maximum ambient temperature and relative temperature classes/maximum surface temperatures

MOD	+40°C TEMP. CLASS / MAX SURFACE TEMP. (°C)	+50°C TEMP. CLASS / MAX SURFACE TEMP. (°C)	+55°C TEMP. CLASS / MAX SURFACE TEMP. (°C)	+60°C TEMP. CLASS / MAX SURFACE TEMP. (°C)
SLED-ME-250120	T6/T85°C	T5/T100°C		
SLED-ME-250180	T5/T98°C	unavailable		
SLED-ME-400200	T6/T85°C	T5/T100°C		
SLED-ME-400300	T5/T90°C	T5/T100°C	unavailable	
SLED-ME-600300	T6/T85°C	T5/T100°C		
SLED-ME-600400	T5/T93°C	T4/T103°C	unavailable	
SLED-ME-600500	T6/T85°C	T5/T95°C	T5/T100°C	unavailable

MOD	+40°C TEMP. CLASS / MAX SURFACE	+50°C TEMP, CLASS / MAX SURFACE	+55°C TEMP. CLASS / MAX SURFACE	+60°C TEMP. CLASS / MAX SURFACE
	TEMP. (°C)	TEMP. (°C)	TEMP. (°C)	TEMP. (°C)
SLED-MN-400100	T6/T81°C	T5/T91°C	T5/T96°C	T4/T101°C
SLED-MN-400150	T5/T85°C	T5/T95°C	T4/T100°C	T4/T105°C
SLED-MN-400200	T5/T85°C	T5/T95°C	T4/T100°C	T4/T105°C
SLED-MN-600300	T5/T83°C	T5/T93°C	T4/T98°C	T4/T103°C
SLED-MN-600400	T5/T91°C	T4/T101°C	T4/T110°C	T4/T111°C
SLED-MN-600500	T5/T95°C	T4/T105°C	T4/T110°C	T4/T115°C



## Conditions of Manufacture

The following are conditions of manufacture:

- i. Where the product incorporates certified parts or safety critical components, the manufacturer of the product defined on this certificate shall continually monitor these parts/components for any modifications introduced by the manufacturer(s) of these constituent parts. If the manufacturer of any constituent part introduces any changes which affect the compliance of the certified product that is the subject of this certificate, the manufacturer is required to have this certificate updated.
- ii. When installed, the equipment shall be subjected to a dielectric strength test using a test voltage of 1500 Vac applied between the circuit and earth for 60 s. Alternatively, a voltage of 20% higher may be applied for 1 s. There shall be no evidence of flashover or breakdown and the maximum current flowing shall not exceed 5 mA.
- iii. The routine overpressure test for the SLED-ME-.. models shall be carried out in accordance with the static method (IEC 60079-1, clause 15.1.3.1) at the following pressures:
  - 12.6 Bar LED enclosure (SLED-ME-600300, SLED-ME-600400 and SLED-ME-600500)
  - 15.8 Bar control gear enclosure (SLED-ME-600300, SLED-ME-600400 and SLED-ME-600500)
  - 12.6 Bar full enclosure (SLED-ME-250120, SLED-ME-400200, SLED-ME-250180 and SLED-ME-400300)
- iv. Separately certified Ex-Component terminals shall be installed in accordance with the manufacturer's instructions. The creepage and clearance distances shall be in accordance with IEC 60079-7 or IEC 60079-15 (as applicable). Any unused terminals shall be tightened.
- v. A routine restricted breathing test as per Clause 12.2.2 of EN IEC 60079-15. Equipment with a test port where the volume of the enclosure will be unchanged due to pressure (as applicable).

## **Specific Conditions of Use**

None

Components covered by Ex Certificates issued to older editions of Standards

None