CESI

CERTIFICATE

CESI S.p.A.
Via Rubattino 54
I-20134 Milano - Italy
Tel: +39 02 21251
Fax: +39 02 21255440
e-mail: info@cesi.it
www.cesi.it

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 03 ATEX 074 /05

[4] Product: Lighting fixtures serie EXEL...

[5] Manufacturer: **CORTEM S.p.A.**

[6] Address: Via Aquileia 10, I - 34070 Villesse (GO), Italia

[7] This supplementary certificate extends EC–Type Examination Certificate CESI 03 ATEX 0074 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.4
The examination and test results are recorded in confidential report n. EX- B6020158

[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:

II 2GD
Ex de mb IIC T4 Gb or Ex de IIC T4 Gb
Ex tb IIIC T70°C, T80°C Db
IP66

Date 30/09/2016 - **Translation issued the** 30/09/2016

Prepared	**Verified**	**Approved**
Sergio Mezzetti	Mirko Balaz	Roberto Piccin

CESI S.p.A.
Testing & Certification Division
Business Area Certification
Responsabile
(Roberto Piccin)

[13] **Schedule**

[14] **SUPPLEMENTARY EU-TYPE EXAMINATION CERTIFICATE n. CESI 03 ATEX 074 / 05**

[15] **Description of the variation**

- New lamp holders type CORTEM G-0598
- Supports for lamp holders type CORTEM G-0598

Description of the equipment

The lighting fixtures series EXEL-..., are made by a body in glass fiber polyester reinforced and by a transparent part in polycarbonate. There are suitable for use tubular fluorescent lamps with bi-pin cap G13 and lamp holders type G-0598 with separate certification.(CESI 15ATEX 036U).
The lighting fixtures series EXEL-... can be utilized for three types of service: normal service, normal + emergency service, emergency service only.

The lighting fixtures series EXEL-..., can be assembled with electronic ballast, with separate certification, type EB... (CESI 00ATEX 031U) or type EBV-1 (CESI 13ATEX 034U).

Depending of the type of service and of the ballast assembled, the lighting fixtures series EXEL..., can have the followings marking:

Lighting fixtures with electronic ballast EB...

⟨Ex⟩ **II 2GD**
Ex de IIC T4 Gb
Ex tb IIIC T70°C, T80°C Db
IP66
for normal service + emergency service

Lighting fixtures with electronic ballast EB-V-1

⟨Ex⟩ **II 2GD**
Ex de mb IIC T4 Gb
Ex tb IIIC T70°C, T80°C Db
IP66
for normal service + emergency service

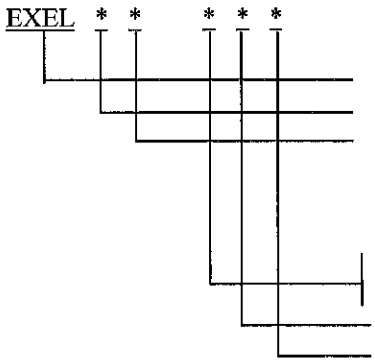
⟨Ex⟩ **II 2GD**
Ex de IIC T4 Gb
Ex tb IIIC T70°C, T80°C Db
IP66
for emergency service only with EI-58 unit

[13] **Schedule**

[14] **SUPPLEMENTARY EU-TYPE EXAMINATION CERTIFICATE n. CESI 15 ATEX 016X/01**

Description of the equipment (follows)

The lighting fixtures series EXEL-... are identified by the following code:



Serial code
1; 2: Number of tubular fluorescent lamps
18; 36: Lamp power (W)

Additional code for lighting fixtures for emergency service

EF: Lighting fixtures for normal + emergency service
EE: Lighting fixtures for emergency service only
4; 7: Capacity of emergency battery pack (Ah)
E: Emergency battery pack in external enclosure

Electrical characteristics of lighting fixtures series EXEL...

Nominal power:	1x18W, 1x36W, 2x18W or 2x36W
Frequency:	50/60Hz
Number of lamps:	1 o 2 fluorescent tubes T8 with bi-pin cap G13
Degree of protection	IP 66 (EN 60529)
NiCd battery voltage:	6V
NiCd battery capacity:	4Ah or 7Ah

Lighting fixtures with electronic ballast EB:

Nominal voltage:	110/230/240Vac	110/230/240 Vdc
Voltage range:	100÷264Vac	100÷264Vdc

Lighting fixtures with electronic ballast EBV-1:

Nominal voltage:	110/230/240Vac	110/230/240 Vdc
Voltage range:	99÷264Vac	99÷264Vdc

Lighting fixtures for emergency service only, with EI-58 unit:

Nominal voltage:	110/230/240Vac	110/230/240 Vdc
Voltage range:	100÷264Vac	100÷264Vdc

Ambient temperature

- 40°C ÷ + 55°C
- 20°C ÷ + 50°C for lighting fixtures with internal battery pack
- 20°C ÷ + 55°C for lighting fixtures with battery pack installed on external housing

Cable entries

The accessories used for cable entries and for closing unused openings shall be certified according to EN 60079-0, EN 60079-7 and EN 60079-31 standards.
A minimum degree of protection IP66 shall be guaranteed according to EN 60529 standard.

[13] **Schedule**

[14] **SUPPLEMENTARY EU-TYPE EXAMINATION CERTIFICATE n. CESI 15 ATEX 016X/01**

Temperature class and maximum surface temperature

Type of lighting fixtures	Ambient Temp.	Temp. Class	Max. surface Temp.	Note
EXEL-118 EXEL-218 EXEL-136 EXEL-236	- 40°C ÷ +55°C	T4	T80°C	None
EXEL-118EF4 EXEL-118EF7 EXEL-218EF4 EXEL-218EF7 EXEL-118EE4 EXEL-118EE7 EXEL-136EF4 EXEL-136EF7 EXEL-236EF4 EXEL-236EF7 EXEL-136EE4 EXEL-136EE7	- 20°C ÷ +50°C	T4	T70°C	Battery pack installed inside of lighting fixtures
EXEL-118EF4E EXEL-118EF7E EXEL-218EF4E EXEL-218EF7E EXEL-118EE4E EXEL-118EE7E EXEL-136EF4E EXEL-136EF7E EXEL-236EF4E EXEL236EF7E EXEL-136EE4E EXEL-136EE7E	- 20°C ÷ +55°C	T4	T80°C	Battery pack installed on separate enclosure

-Minimum ambient temperature of installation for lighting fixtures with EBV-1 ballast is – 40°C; CORTEM guarantees the operations with a minimum ambient temperature of -25°C.
- The minimum operating ambient temperature for lighting fixtures with battery pack for emergency is -20°C
- The lighting fixtures for emergency service, installed at ambient temperature up to + 55 °C shall be supplied with battery pack in separated enclosure.

Warning label

For all lighting fixtures
"Caution electrostatic charges – clean only by wet cloth or antistatic products."

For lighting fixtures for normal service
"Do not open when energized"

For lighting fixtures for emergency service only
"Do not open when an explosive gas atmosphere may be present"

[16] **Report n.** EX-B6020158

Routine tests
The dielectric test with applied voltage shall be performed on the luminaries series EXEL-..., at 1,5 KV between the terminals and earth. (according to clause 7.1 of the EN 60079-7) at least for 60sec.

[17] **Special conditions for safe use**
None

[13] **Schedule**

[14] **SUPPLEMENTARY EU-TYPE EXAMINATION CERTIFICATE n. CESI 03 ATEX 074 / 05**

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

Compliance with the Essential Health and Safety Requirements is not affected by this variation.
The Essential Health and Safety Requirements are covered by compliance to the following standards:.

EN 60079-0: 2012+ A11: 2013	Electrical apparatus for explosive gas atmospheres: General requirements
EN 60079-1 : 2007-	Explosive atmospheres: Flameproof enclosures "d"
EN 60079-7: 2007-	Explosive atmospheres: increased safety "e"
EN 60079-18: 2009-	Explosive atmospheres: protection by encapsulation "m
EN 60079-31: 2014-	Explosive atmospheres : dust ignition protection by enclosure "t"

[19] **Descriptive documents** (prot. EX-B6020168)

- Technical Nr. A4-6533 (5 pg.)	Rev. 0	dated	31/05/2016
- Drawing n. A1-6532	Rev. 0	dated	18/04/2016
- Drawing n. A3-6553	Rev. 0	dated	31/05/2016
- Safety Instructions F-383 (11 pg.)	Rev. 2	dated	18/04/2016
- Facsimile EU Declaration of Conformity n. 0028		dated	30/05/2016
- Facsimile EU Declaration of Conformity n. 0151		dated	30/05/2016
- Data sheets of materials (1+2 pg)	Rev. 0	dated	31/05/2016

One copy of all documents is kept in CESI files.

Certificate history

Issue n.	Issue Date	Summary description of variation
05	2016/09/30	- new lamp holders type G-0598 and related support
04	2015/03/27	- new max. ambient temperature + 55°C - updating to new standard edition: EN 60079-31: 2014
03	2013/09/10	- construction and electrical variation (new components) - new ambient temperature range - updating to new standard editions: EN 60079-0: 2012; EN 60079-18: 2009; EN 60079-31 2009
02	2009/05/08	- construction variation - new electrical characteristics - new temperature class - updating to new standard editions: EN 60079-0: 2006; EN 60079-1: 2007; EN 60079-7: 2007; EN 61241-0: 2006; EN 61241-1: 2004
01	2006/03/29	- new category 2GD - new ambient temperature range - new electrical characteristics
00	2003/04/04	First issue of certificate CESI 03 ATEX 074