

Inspection and Certification Services

[1]

121

EC-TYPE EXAMINATION CERTIFICATE

Equipment or Protective Systems or Component Intended for use in Potentially explosive atmospheres Directive 94/9/EC

EC-Type Examination Certificate number: [3]

CESI 00 ATEX 012

Luminaires series LXB-...V for tubular fluorescent lamps [4] Equipment:

COR.TEM S.p.A. 151 Manufacturer:

Via Aquileia 6, I - 34070 Villesse (Gorizia) [6] Address:

- This equipment or protective system and any acceptable variation thereto is specified in the schedule to this [7] certificate and the documents therein referred to.
- CESI, notified body n° 0722 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, 181 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.

The examination and test results are recorded in confidential report n° EX-A0/012118.

Compliance with the Essential Health and Safety Requirements has been assured by compliance with: 191

EN 50019: 1994 + prAA: May 1999 EN 50018: 1994 EN 50014: 1997 + A1..A2

- [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.
- This EC-TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified $\Pi\Pi\Pi$ equipment or protective system. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment or protective system.
- The marking of the equipment or protective system shall include the following:

II 2 G EEx ed IIC T5

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

April 10th, 2000 date

translation issued on January 17th, 2001

prepared

CERT - M. Balaz

CENTRO ELETTROTECNICO SPERIMENTALE ITALIANO

CERT - U. Colombo approved

Responsabile Area Gartificazione

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[13]

Schedule

[14] EC-TYPE EXAMINATION CERTIFICATE N° CESI 00 ATEX 012

[15] Description of equipment

The luminaires series LXB-...V for tubular fluorescent lamps are identified by a code as follows:

The enclosure of luminaires is made in aluminium and the transparent part in tempered glass.

The luminaires are suitable for the use of tubular fluorescent lamps with G13 bi-pin lampholder.

Electrical characteristics

Rated voltage

110 V; 230 V

Rated frequency

50/60 Hz

Rated power

18 W; 36 W; 2x18 W; 2x36 W

Degree of protection

IP 54

Ambient temperature

-20 ÷ 50 °C

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

[13] Schedule

[14] EC-TYPE EXAMINATION CERTIFICATE N° CESI 00 ATEX 012

[16] Report N° EX-A0/012118

Descriptive documents (prot. EX-A0/012121)

- n° A4-4038 Rev. 1 (32 p.)	dated	01.04.2000
- n° A1-4037 Rev. 1	dated	01.04.2000
- n° A3-4039 Rev. 1	dated	01.04.2000
- n* A3-4040 Rev. 1	dated	01.04.2000
- n° A3-4041 Rev. 1	dated	01.04.2000
- n° A3-4042 Rev. 1	dated	01.04.2000
- n° A4-4043 Rev. 1	dated	01.04.2000
- n° F-247 Rev. 0 (8 p.)	dated	04.10.1999
- n° 485/99	dated	07.10.1999
- n" CE/0011	dated	07.10.1999

One copy of all documents is kept in CESI files.

[17] Special conditions for safe use

None.

[18] Essential Health and Safety Requirements

The verifications and tests on the bi-spin lampholder have been performed according to the document **FINAL DRAFT EN 50019 prAA** May 1999, giving additional requirements for the use of bi-pin tubular fluorescent lamps in luminaires.

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

EXTENSION n. 01/02



to EC-Type Examination Certificate CESI 00 ATEX 012

Equipment:

Luminaires series LXB-...V for tubular fluorescent lamps

Manufacturer:

COR.TEM S.p.A.

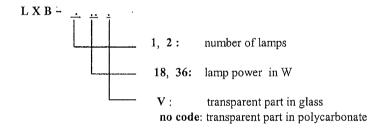
Address:

Via Aquileia 10, Villesse, Gorizia (Italy)

Admitted variation

- new types LXB-... with protective transparent tube in polycarbonate

Identification of the luminaires



Report n. EX-A2/014627

Descriptive documents (prot. EX-A2/014625)

- n. A4-4242 Rev. 0

dated 12.03.2002

- n. A1-4241 Rev. 0

dated 12.03.2002

One copy of all documents is kept in CESI files.

This extension and annexed descriptive documents must be annexed to the EC-Type Examination Certificate CESI 00 ATEX 012.

This document may only be reproduced in its entirety and without any change.

date

15th May 2002 - translation issued on 15th May 2002

prepared

CERT - M. Balaz

approved

CERT - U. Colombo

CENTRO ELETTROTECNICO SPERIMENTALE ITALIANO Business Unit Certificazione/

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Prot. A1/033255 Keywords

P: 1

13010R

214200

48010M

66540E

CESI

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Capitale sociale 8 550 000 Euro interamente versato Codice fiscale e numero iscrizione CCIAA 00793580150

Registro Imprese di Milano Sezione Ordinaria N. R.F.A. 429222 P.I. IT00793580150

EXTENSION n. 02/06



to EC-Type Examination Certificate CESI 00 ATEX 012

Equipment:

Luminaries series LXB-...V for tubular fluorescent lamps

Manufacturer:

COR.TEM S.p.A.

Address:

Via Aquileia 10, Villesse, Gorizia (Italy)

Admitted variation

- New category II 2 GD (added protection against the risk of explosion from combustible dusts in conformity with the standard EN 50281-1-1)
- New models of the luminaries, series LXB-...E with emergency operation.
- New electrical characteristics.

The results of verifications and tests are reported in the confidential report EX-A6035601.

Identification and description of the equipment

The marking of the luminaries, series LXB.. shall include the following:.



II 2 GD EEx ed IIC T5 IP 65 T100°C

This extension and annexed descriptive documents must be annexed to the EC-Type Examination Certificate CESI 00 ATEX 012.

This document may only be reproduced in its entirety and without any change.

date

29th May 2006

translation issued on 29th May 2006

prepared

Mirko Balaz

CFS

approved

Fiorenzo Bregani

Centro Elettrotecnico Sperimentale Italiano Giacinto Motta SpA Business Unit GENERAZIONE

Il Responsabile

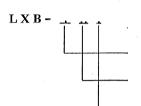
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EXTENSION n. 02/06

to EC-Type Examination Certificate CESI 00 ATEX 012

Identification and description of the equipment (follow)

The luminaries series LXB for normal service with electronic ballast are identified by a code as follows:



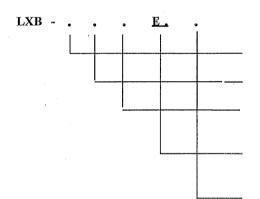
1, 2: number of lamps

18, 36: lamp power in W

V: transparent part in glass

no code: transparent part in polycarbonate

The luminaries series LXB with emergency operations are identified by a code as follows:



1, 2 (number of lamps)

18, 36 (lamp power [W])

V: transparent part in glass no code: transparent part in polycarbonate

EF (luminaries for normal + emergency service)

EE (luminaries for emergency service only)

4, 7 (capacity of the battery in Ah)

Electrical characteristics

Rated voltage

110 V / 230 V / 277 V

Rated power

18 W; 36 W; 2x18 W; 2x36 W

Rated frequency

50/60 Hz

Degree of protection

IP 65 (IEC 60529-2001)

Ambient temperature

-20 ÷ + 50 °C

NiCd battery:

- rated voltage

6 V

- capacity

4 or 7 Ah

Temperature class of the luminaries of category II 2 GD: T5.

Maximum surface temperature T of the luminaries of category II 2 GD: T 100°C.

The luminaires series LXB are suitable for use of tubolar fluorescent lamps with bi-pin cap G13.

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EXTENSION n. 02/06

to EC-Type Examination Certificate CESI 00 ATEX 012

Identification and description of the equipment (follow)

Cable entries

The accessories used for cable entries and for closing unused apertures shall be certified according to EN 50014, EN 50019 and EN 50281-1-1 standards. A minimum degree of protection IP 65 shall be guaranteed according to EN 60529 standards.

Warning label (for models with transparent part in polycarbonate)

Report n. EX-A6035601

Descriptive documents (prot. EX-A6035604)

- n. A4-4420 Rev. 0 (2 pg.)	dated	20.03.2003
- n. A1-4419 Rev. 0	dated	20.03.2003
- n. A4-4870 Rev. 0	dated	12.05.2006
- Safety instructions F-247 Rev. 1 (8 pg.)	dated	20.03.2003
- EC declaration of conformity no CE/0011	dated	22.03.2003

One copy of the above mentioned documents is kept in CESI files.

Essential Health and Safety Requirements

Compliance with the Health and Safety Requirements has been assured by compliance with the following standards:

EN 50014: 1997 + A1..A2 - General requirements EN 50018: 2000 + A1 - Flameproof enclosures "d"

 $EN~50019\colon~2000-Increased~safety~"e"$

EN50281-1-1: 1998 + A1 — Electrical apparatus for use in the presence of combustible dust. Part 1-1: Electrical apparatus protected by enclosures — Construction and testing.

[&]quot;Attention to electrostatic charges"

[&]quot;Clean only with wet cloth or antistatic product.

EXTENSION n. 03/09



to Type Examination Certificate CESI 00 ATEX 012

Equipment:

Luminaries series LXB for tubular fluorescent lamps with or without emergency pack

Manufacturer: COR.TEM S.p.A.

Address:

Via Aquileia, 6 – 34070 Villesse (GO) - Italy

Admitted variation

Conformity to new edition of the harmonized European standard, new temperature class, new electrical characteristics and constructional modifications.

Conformity to new edition of the harmonized European standard

The components subject of the certificate CESI 00 ATEX 012 and annexed extension are conform to the standards:

EN 60079-0: 2006 EN 60079-7: 2007 EN 60079-1: 2007

EN 61241-0: 2006 EN 61241-1: 2004

The equipment shall be marked as follows:

II 2GD Ex ed IIC T6, T5 Ex tD A21 IP65 T70 °C, T80 °C

This extension and annexed descriptive documents must be annexed to the Type Examination Certificate **CESI 00 ATEX 012.**

This document may only be reproduced in its entirety and without any change.

date

7th May 2009

- translation issued the 7th May 2009

prepared

Damiano Cavanna

verified

Mirko Balaz

approved

Fiorenzo Bregani

Divisione Energia Tecnica Certificazione" Responsable)

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CESI

EXTENSION n. 03/09

to Type Examination Certificate CESI 00 ATEX 012

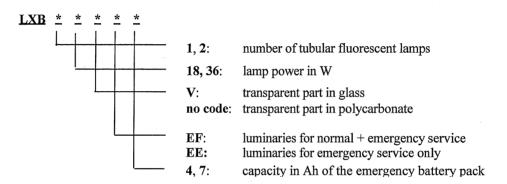
Identification and description of the equipment

The luminaries series LXB for tubular fluorescent lamps with or without emergency pack, have constructional characteristics conform to those indicated in the certificate CESI 00 ATEX 012 and annexed extensions with new temperature class, electrical characteristics and admitted variation as indicated to follow.

Admitted constructional modifications

The luminaries LXB series use electronic inverters series EI-58 and news electronic ballasts type EB4118, EB4218, EB4136 and EB4236, subject of certificate CESI 00 ATEX 031U, realized to assure the conformity at annex H of EN 60079-7: 2007 standard regarding End Of Life lamp protection (EOL).

The various types of luminaries series LXB are identified by a code as follow:



The luminaries LXB series are suitable for use of tubular fluorescent lamps with G13 bi-pin lampholder.

Cable entries

The accessories used for cable entries shall be certified according to EN 60079-0 and EN 60079-7 standards and shall guarantee a minimum degree of protection IP65.

Electrical characteristics

- Rated power lamp:

1x18 W; 2x18 W; 1x36 W; 2x36 W

- Rated voltage:

110/230 V ac-dc;

- Working voltage:

 $100 \div 254 \text{ V}$ ac; $110 \div 254 \text{ V}$ dc;

- Rated frequency:

50/60 Hz

- Battery for emergency pack:

NiCd 6V 4 A/h or 7 A/h

Degree of protection:

IP 65

Temperature class or Temperature class		class for gas	ss for gas Maximum surface temperature	
maximum surface temperature	Т6	Т5	T70 °C	T80 °C
Ambient temperature [°C]	-20 ÷ +40	-20 ÷ +55	-20 ÷ +40/+50	-20 ÷ +55

Warning label (for models with transparent part in polycarbonate)

This document may only be reproduced in its entirety and without any change.

[&]quot;Attention to electrostatic charges! Clean only with wet cloth or antistatic poduct"

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EXTENSION n. 03/09

to Type Examination Certificate CESI 00 ATEX 012

Report n. EX-A9014216

Routine tests

The manufacturer shall carried out the routine tests prescribed at paragraph 27 of EN 60079-0 (2006) standard and paragraph 7 of EN 60079-7 (2007) standard.

Descriptive documents (prot. A9014218)

- Technical note A4-4958 + annex (pg. 4+9)	dated	09.10.2008
- Safety Instruction mod. F-247 rev. 2 (pg. 8)	dated	09.10.2008
- Declaration of Conformity CE N° 0011	dated	09.10.2008

One copy of all documents is kept in CESI files.

Special conditions for safe use (X)

None.

Essential Health and Safety Requirements

The Essential Health and Safety Requirements are assured by compliance to the following standards:

- EN 60079-0: 2006 Electrical apparatus for explosive gas atmosphere General requirements.
- EN 60079-7: 2007 Equipment protection by increased safety "e"
 EN 60079-1: 2007 Equipment protection by flameproof enclosure "d"
- EN 61241-0: 2006 Electrical apparatus for use in the presence of combustible dust General requirements
- EN 61241-1: 2004 Protection by enclosures "tD"