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

CESI ATEX

Schema di certificazione

Il CESI è stato autorizzato dal governo italiano ad operare quale organismo di certificazione di apparecchi e sistemi destinati a essere utilizzati in atmosfera potenzialmente esplosiva con D.M. 1/3/1983, D.M. 19/6/1990, D.M. 20/7/1998 e D.M. 27/9/2000

CERTIFICATE

[1] EC-TYPE EXAMINATION CERTIFICATE

[2] **Equipment or Protective System intended for use in potentially explosive atmospheres Directive 94/9/EC**

[3] EC-Type Examination Certificate number:

CESI 03 ATEX 200

[4] Equipment: Floodlights series SLEE.

[5] Manufacturer: **COR.TEM S.p.A.**

[6] Address: Via Aquileia 10, Villesse (Gorizia), Italy

[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] CESI, notified body n. 0722 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, 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-A3/024592.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 50014: 1997+A1.. A2 EN 50018:2000+A1 EN 50019:2000 EN50281-1-1:1998+A1

[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 EC-TYPE EXAMINATION CERTIFICATE relates only to the design, examination and tests of the specified equipment or protective system in accordance to the Directive 94/9/EC. 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 2 GD EEx de IIB T4, T3, T2 IP 66 T 130 ÷ 210 °C

Date July 27th, 2003 translation issued on July 27th, 2003

Prepared
Mirko Balaz

Approved
Ulisse Colombo

CESI
CENTRO ELETTROTECNICO SPERIMENTALE ITALIANO
Business Unit Certificazione
Il Responsabile

[13] # Schedule

[14] **EC-TYPE EXAMINATION CERTIFICATE n. CESI 03 ATEX 200**

[15] **Identification and description of equipment**

The floodlights series SLEE-25/15, SLEE-25, SLEE-40/25 and SLEE-40 are made with the body in aluminium alloy or stainless steel and the transparent part in glass. On the floodlights different types of lamps can be mounted: incandescent, high pressure sodium or metal halide lamps.
The floodlights series SLEE with the type of protection EEx de IIB are made with two separate compartments, one flameproof enclosure containing lamp holder and lamp and another one containing the terminal block (terminal box in EEx-e execution). In this case the two enclosures are connected through a bushing.
The electrical supply and control apparatus for type SLEE-25 shall be installed in a separate flameproof enclosure, certified according to one of the types of protection mentioned in the EN 50014 standard.
For the type SLEE-40/25 with 250W lamp, the electrical control apparatus can be installed into floodlights flameproof enclosure.
The floodlights type SLEE-40 for 400W lamps are made with the ballast inside floodlights flameproof enclosure and the capacitor and starter in a separate flameproof enclosure mounted on floodlight and connected through a bushing.

Electrical characteristics

Rated voltage	110/230 V
Rated frequency	50 ÷ 60 Hz
Rated power	150 ÷ 400 W (the rated power of each type of lamp is indicated in detail in the following table 1)
Degree of protection (EN 60529)	IP 66
Ambient temperature	- 20 ÷ + 40 °C - 25 ÷ + 50 °C

Temperature class of the floodlights of category II 2 GD: T4 or T3 or T2 (see table 1).
Maximum surface temperature T of the floodlights of category II 2 GD: from T 130°C to T210°C (see table 1).

Cable entries
The accessories used for cable entries and for closing unused apertures in the units of category II 2GD shall be certified according to EN 50014, EN 50019 and EN 50281-1-1 standards. A minimum degree of protection IP 66 shall be guaranteed according to EN 60529 standards.
If cylindrical threads are used, the coupling between the cable entry and the enclosure shall be provided with block to prevent loosening, according to the requirements indicated in the documents annexed to this certificate.

Warning label

"Do not open when energised. Wait 15 minutes before opening."

"Use cables suitable for a minimum temperature of T_c °C." where T_c has the value of:
- 85 °C for the models with max. ambient temperature of +40°C;
- 95 °C for the models with max. ambient temperature of +50°C.

"Use screws of quality A2-70 according UNI 7323 with ultimate tensile strength of at least 700 N/mm^2".

Prot. A3/024596 P: 4
Keywords 13010R 21420O 48010M 54250O 66540E

[13] **Schedule**

[14] **EC-TYPE EXAMINATION CERTIFICATE n. CESI 03 ATEX 200**

[15] **Identification and description of equipment** (follows)

Table 1 – Temperature class and maximum surface temperature T of the enclosure for the different types of floodlights and for the different types of lamps used in ambient temperature up to +40°C (or +50°C)

TYPE	LAMP.	TEMP.CLASS	MAX. SURFACE TEMP. (°C) +40°C (+50°C)
SLEE-25/15	150W Na	T4 (T3)	130 (140)
	200W INC	T4 (T3)	130 (140)
SLEE-25	250W Na	T3	143 (153)
	250W Ha	T3	143 (153)
	300W INC	T3	153 (163)
SLEE-40/25	250W Na	T3	150 (160)
	250W Ha	T3	150 (160)
SLEE-40	400W Na	T3 (T2)	200 (210)
	400W Ha	T3 (T2)	200 (210)

NOTES:

a) The different types of lamps are indicated by the following codes:
Na: high pressure sodium lamp
Ha: metal halide lamp
INC: incandescent lamp

[16] **Report n. EX-A3/024592**

Routine tests

The manufacturer shall carry out the routine tests prescribed at paragraph 24 of the EN 50014 standard, at paragraph 16 of the EN 50018 standard and at paragraph 7 of the EN 50019 standard.

The routine overpressure test shall be carried out with the static method (clause 15.1.3.1 of EN 50018 standard) at the pressure of 14,5 bar on the flameproof enclosure.

The routine dielectric test on the EEx-de floodlights with applied voltage shall be performed at 2U + 1000V with a minimum value of 1500V (U = rated voltage of the lamp)

[13] # Schedule

[14] **EC-TYPE EXAMINATION CERTIFICATE n. CESI 03 ATEX 200**

Descriptive documents (prot. EX-A3/024597)

- n. A4-4467 Rev. 0 (3 p.)	dated 29.05.2003
- n. A1-4466 Rev. 0 (2 sheets)	dated 29.05.2003
- n. A3-4361 Rev. 0	dated 20.02.2003
- Safety instructions F-281 Rev. 1 (10 p.)	dated 15.03.2003
- EC declaration of conformity n. CE/0042	dated 29.05.2003

One copy of all documents is kept in CESI files.

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

None.

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

Covered by standards.

EXTENSION n. 01/06

to EC-Type Examination Certificate CESI 03ATEX200

Equipment: Floodlights series SLEE

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

Address: Via Aquileia 10, Villesse (Gorizia), ITALY

Admitted variation
- Update to EN 60079-0: 2006, EN 60079-1: 2004, EN 60079-7: 2006, EN 61241-0: 2006 ed EN 61241-1: 2004 standards.
- Update to nameplate
- New ambient temperature di +55°C
- New execution IIB+H_2
- New range of voltage di 277 V

Equipment identification

The equipment shall include the following markings:

II 2GD Ex de IIB T4,T3,T2 Ex tD A21 IP 66 T112°C ÷ T215°C

II 2GD Ex de IIB+H_2 T4,T3,T2 Ex tD A21 IP 66 T112°C ÷ T215°C

This extension and annexed descriptive documents must be annexed to the EC-Type Examination Certificate CESI 03ATEX200.

date 18.december.2006 - translation issued the 18.december.2006

prepared Pierluigi Molinari

verified Mirko Balaz

approved Florenzo Bregani

CESI S.p.A.
Divisione Energia
"Area Tecnica Certificazione"
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EXTENSION n. 01/06

to EC-Type Examination Certificate CESI 03ATEX200

Identification and description of equipment

The floodlights series SLEE-25/15, SLEE-25, SLEE-40/25 and SLEE-40 are made, in aluminium alloy with the transparent part in glass. On the floodlights different types of lamps can be mounted: incandescent, high pressure, sodium, blended, mercury vapour lamp and metal halide lamps,
The electrical supply and control apparatus for type SLEE-25 shall be installed in a separate flameproof enclosure, certified according to one of the types of protection mentioned in the EN 60079-0 standard.
For the type SLEE-40/25 with 250W lamp, the electrical control apparatus can be installed into floodlights flameproof enclosure.
The floodlights type SLEE-40 for 400W lamps are made with the ballast inside floodlights flameproof enclosure and the capacitor and starter in a separate flameproof enclosure mounted on floodlight and connected through a bushing.

Electrical characteristics

Rated voltage	110/230/277 V
Rated frequency	50 ÷ 60 Hz
Rated power	150 ÷ 400 W (the rated power of each type of lamp is indicated in detail in the following table 1)
Degree of protection (EN 60529)	IP 66
Ambient temperature	- 20 ÷ + 40 °C - 25 ÷ + 55 °C

Temperature class of the floodlights of category II 2 GD: T4 or T3 or T2 (see table 1).
Maximum surface temperature T of the floodlights of category II 2 GD: from T 112°C to T215°C (see table 1).

Cable entries
The accessories used for cable entries and for closing unused apertures in the units of category II 2GD shall be certified according to EN 60079-0, EN 60079-7 and EN 61241-0 standards. A minimum degree of protection IP 66 shall be guaranteed according to EN 60529 standards.
If cylindrical threads are used, the coupling between the cable entry and the enclosure shall be provided with block to prevent loosening, according to the requirements indicated in the documents annexed to this certificate.

Warning label

"Do not open when energised. Wait 15 minutes before opening."

"Use cables suitable for a minimum temperature of T_c °C." where T_c has the value of:
- 85 °C for the models with max. ambient temperature of +40°C;
- 100 °C for the models with max. ambient temperature of +55°C.

"Use screws of quality A2-70 according UNI 7323 with ultimate tensile strength of at least 700 N/mm^2".

EXTENSION n. 01/06

to EC-Type Examination Certificate CESI 03ATEX200

Identification and description of equipment *follow*

Table 1 – Temperature class and maximum surface temperature T of the enclosure for the different types of floodlights and for the different types of lamps used in ambient temperature up to +40°C (or +50°C)

TYPE	LAMP	TEMP. CLASS		MAX SURFACE TEMP.	
		Ta +40°C	Ta +55°C	Ta +40°C	Ta +55°C
SLEE-25/15	125W Ha	T4	T4	112	127
	125W Hg	T4	T4	112	127
	150W Na	T4	T3	129	144
	150W Mix	T4	T3	129	144
	200W INC.	T4	T3	129	144
SLEE-25	250W Na	T3	T3	143	158
	250W Hg	T3	T3	143	158
	250W Ha	T3	T3	153	168
	300W Mix	T3	T3	153	168
	300W INC	T3	T3	153	168
SLEE-40/25	250W Na	T3	T3	150	165
	250W Hg	T3	T3	150	165
	250W Ha	T3	T3	150	165
SLEE-40	400W Na	T3	T2	190	205
	400W Hg	T3	T2	190	205
	400W Ha	T3	T2	190	205
SLEE-40 (277V)	400W Na	T2	T2	205	220
	400W Hg	T2	T2	205	220
	400W Ha	T2	T2	205	220

NOTES:

a) The different types of lamps are indicated by the following codes:
Na: high pressure sodium lamp
Hg: mercury vapour lamp
Ha: metal halide lamp
INC: incandescent lamp
Mix: blended lamp

EXTENSION n. 01/06

to EC-Type Examination Certificate CESI 03ATEX200

Routine tests

The manufacturer shall carry out the routine tests prescribed at paragraph 27 of the EN 60079-0 standard, at paragraph 16 of the EN 60079-1 standard and at paragraph 7 of the EN 60079-7 standard.

The routine overpressure test shall be carried out with the static method (clause 15.1.3.1 of EN 60079-1 standard) at the pressure of 14,5 bar on the flameproof enclosure.

The routine dielectric test on the Ex-de floodlights with applied voltage shall be performed at 2U + 1000V with a minimum value of 1500V (U = rated voltage of the lamp).

Report n. EX-A6/020916

Descriptive documents (prot. EX-A6/020919)

- Technical note A4-4966 Rev. 0	2 pages	dated	13.10.2006
- Drawing n° A4-4878 Rev. 1	1 sheets	dated	13.10.2006
- Drawing n° A3-5038 Rev. 0	1 sheets	dated	13.10.2006
- Safety instructions F-281 Rev. 2	10 pages	dated	13.10.2006
- EC Declaration of conformity 0042	1 sheets	dated	13.10.2006

One copy of all 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 60079-0: 2006 - Electrical apparatus for explosive gas atmospheres. Part 0: General requirements
EN 60070-1: 2004 - Electrical apparatus for explosive gas atmospheres. Part 1: Flameproof enclosure
EN 60079-7: 2005 - Electrical apparatus for explosive gas atmospheres. Part 7: Increased safety "e"
EN 61241-0: 2006 - Electrical apparatus for use in the presence of combustible dust. Part 0: General requirements
EN 61241-1: 2004 - Electrical apparatus for use in the presence of combustible dust. Part 1: Protection by enclosures "tD"

EXTENSION n. 02/08

to EC-Type Examination Certificate CESI 03ATEX200

Equipment: Floodlights series SLEE

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

Address: Via Aquileia 10, Villesse (Gorizia), ITALY

Admitted variation:
- Constructional modification
- New minimum ambient temperature up to -50°C for the floodlights with type of protection "Ex de IIB".
- New degree of protection IP67 for all models Ex de IIB and Ex de IIB+H2,
- Added new supply rated voltage of 240V and 250V.

Equipment description
The floodlights series SLEE-25/15, SLEE-25, SLEE-40/25 and SLEE-40 with type of protection "Ex de IIB" assembled with terminal box are manufactured by materials, components and accessory suitable to be used at minimum ambient temperature up to –50°C.

Electrical characteristics

Rated voltage	110/230/240/250/277 V
Degree of protection (EN 60529)	IP 66/67
Ambient temperature	-20 ÷ + 40 °C
	-25 ÷ + 55 °C
	-50 ÷ + 40 °C
	-50 ÷ + 55 °C
Other electrical characteristics:	unchanged

This extension and annexed descriptive documents must be annexed to the EC-Type Examination Certificate CESI 03ATEX200.

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

date	7 May 2008 - translation issued the 7th May 2008
prepared	Sergio Mezzetti
verified	Mirko Balaz
approved	Fiorenzo Bregani

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EXTENSION n. 02/08

to EC-Type Examination Certificate CESI 03ATEX200

Installation condition

The characteristics of cables and of the accessories used for cable entries shall be suitable to be used in the range of the ambient temperature of the floodlights series SLEE-25/15, SLEE-25, SLEE-40/25 and SLEE-40.

When the electrical supply and control apparatus is installed in a separate flameproof enclosure this shall be certified according to one of the types of protection mentioned in the EN 60079-0 standard and suitable for the same range of the ambient temperature of the floodlights.

Routine tests

The manufacturer shall carry out the routine tests prescribed at paragraph 27 of the EN 60079-0 standard, at paragraph 16 of the EN 60079-1 standard and at paragraph 7 of the EN 60079-7 standard.

The routine overpressure test shall be carried out with the static method (clause 15.1.3.1 of EN 60079-1 standard) at the following pressures:

- of 14,5 bar on the flameproof enclosure "IIB" for minimum ambient temperature of –25°C.
- of 17,5 bar on the flameproof enclosure "IIB" for minimum ambient temperature of –50°C.

The routine dielectric test on the Ex-de floodlights with applied voltage shall be performed at 2U + 1000V with a minimum value of 1500V (U = rated voltage of the lamp).

Report n. EX-A8/013181

Descriptive documents (prot. EX-A8/013187)

- Technical note A4-5086 Rev. 0 (3 pages)	dated	23.04.2008
- Drawing n° A3-5088 Rev. 0 (1 sheet)	dated	23.04.2008
- Data sheet of MC resin (4 pg.)	dated	23.04.2008
- Data sheet for Euroter 70I gasket (2 pg.)	dated	23.04.2008
- Safety instructions F-281 Rev. 03 (10 pages)	dated	23.04.2008
- EC Declaration of conformity 0042 (1 sheets)	dated	23.04.2008

One copy of all documents is kept in CESI files.