CESI

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iscrizione CCIAA 00793580150

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 04 ATEX 093

[4] Equipment: Floodlights series RLEE-107.

[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-A4/509272.

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

EN 50014: 1997+A1.. A2 EN 50018:2000+A1 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:

Ex II 2 GD EEx d IIB T4, T3, T2 IP 66 T 133°C ÷ T 226 °C

Date July 31st, 2004 translation issued on July 31st, 2004

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 04 ATEX 093**

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

The floodlights series RLEE-107 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, metal halide, mercury vapours or high pressure sodium. The electrical supply and control apparatus shall be installed in a separate flameproof enclosure, certified according to one of the types of protection mentioned in the EN 50014 standard.
The floodlights are made with one single flameproof enclosure including lamp holder, lamp and in alternative terminal block.

Electrical characteristics

Rated voltage	110 V; 230 V; 250 V; 277 V
Rated frequency	50 ÷ 60 Hz
Rated power	400 ÷ 1000 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 ÷ + 50 °C

Temperature class of the floodlights of category II 2 GD: T4, T3 or T2 (see table 1).
Maximum surface temperature T of the floodlights of category II 2 GD: T 133°C ÷ T226°C (see table 1).

Cable entries
The accessories used for cable entries and for closing unused apertures in the units shall be certified according to the standards EN 50014, EN 50018 and EN 50281-1-1 and shall guarantee a degree of protection IP66.

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.

Modello	**Type of lamp And power in W**	**Temperature class** (floodlights II **2GD**)	**Max. surface temperature T in °C** (floodlights II **2GD**)
RLEE-107	400W Hg	T4	133
	400W Na	T4	133
	500W INC	T3	186
RLEE-107	700W Hg	T3	193
	700W Na	T3	193
	700W INC	T3	193
	1000W Hg	T2	226
	1000W Na	T2	226
	1000W Ha	T2	226
	1000W INC	T2	226

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

Prot. A4/509274 P: 3
Keywords 13010R 21420O 48010M 54250O 66540E

[13] **Schedule**

[14] **EC-TYPE EXAMINATION CERTIFICATE n. CESI 04 ATEX 093**

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

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:

- 110 °C for the lamp of 400W,
- 145 °C for the lamp of 500w and 700W,
- 170 °C for the lamp of 1000W .

[16] **Report n. EX-A4/509272**

Routine tests

The manufacturer shall carry out the routine tests prescribed at paragraph 24 of the EN 50014 standard, and at paragraph 16 of the EN 50018 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 12,3 bar on the flameproof enclosure.

Descriptive documents (prot. EX-A4/509275)

- n. A4-4681 Rev. 0 (3 p.)	dated 20.05.2004
- n. A1-4318 Rev. 0	dated 20.05.2004
- Safety instructions F-296 Rev. 0 (5 p.)	dated 20.05.2004
- EC declaration of conformity n. CE/0051	dated 20.05.2004

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. 01/07

to EC-Type Examination Certificate CESI 04 ATEX 093

Equipment: Floodlights series RLEE-107

Manufacturer: **CORTEM S.p.A.**

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

Admitted variation

- Conformity to EN 60079-0 (2006), EN 60079-1 (2004), EN 61241-0 (2006), EN 61241-1 (2004) Standards
- Update of nameplate

Equipment identification and description

The marking of the equipment shall include the following:

II 2GD Ex d IIB T4, T3, T2; Ex tD A21 IP66 T135 °C, T200°C, T300°C

This extension and annexed descriptive documents must be annexed to the EC-Type Examination Certificate CESI 04 ATEX 093.

date 04/07/2007 - translation issued the 04/07/2007

prepared Nicoletta Penati

verified Mirko Balaz

approved Fiorenzo Bregani

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Centro Elettrotecnico Sperimentale Italiano
Giacinto Motta SpA

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EXTENSION n. 01/07

to EC-Type Examination Certificate CESI 04 ATEX 093

Cable entries

The accessories used for cable entries and for unused holes shall be subject of separate certification in compliance to the following standards: EN 60079-0 (2006); EN 60079-1 (2004); EN 61241-0 (2006); EN 61241-1 (2004) and they shall guarantee a minimum degree of protection IP 66 according to EN 60529 (1991) Standard.

Electrical characteristics

Unchanged

Constructive characteristics

Unchanged

Report n. EX-A7018496

Routine tests

The manufacturer shall carry out the routine tests prescribed at par. 27 of the EN 60079-0 (2006) and at par. 24 of the EN 61241-0 (2006) Standards.

The overpressure routine test shall be carried out on the welded parts, with static method, at the pressure of 12,3 bar, in conformity to the par. 15.1.3.1 of the EN 60079-1 Standard

Descriptive documents (prot. EX-A70018498)

- Technical Note n. A4-4992 (1 pag)	dated	03 April 2007
- Drawings A4-4951 e A4-4952	dated	02 April 2007
- EC Declaration of Conformity	dated	03 April 2007
- Safety instructions (5 pag.)	dated	03 April 2007

One copy of all documents is kept in CESI files.

Essential Health and Safety Requirements

The Health and Safety Requirements are assured by compliance with the following Standards:

• EN 60079-0 : 2006:	Electrical apparatus for explosive gas atmospheres. General requirements
• EN 60079-1 : 2004	Flamoproof enclosures "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"

EXTENSION n. 02/08

to EC-Type Examination Certificate CESI 04ATEX093

Equipment: Floodlights series RLEE-107.

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

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

Admitted variation

- New max. ambient temperature of +55°C

Equipment identification

The equipment shall include the following markings:

II 2 GD Ex d IIB T4, T3, T2 Ex tD A21 IP 66 T 133°C ÷ T 231 °C

This extension and annexed descriptive documents must be annexed to the EC-Type Examination Certificate CESI 04ATEX093.

date 26 may 2008 - translation issued the 26 may 2008

prepared Pierluigi Molinari

verified Mirko Balaz

approved Fiorenzo Bregani

CESI S.p.A.
Divisione Energia
"Area Tecnica Certificazione"
Il Responsabile

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EXTENSION n. 02/08

to EC-Type Examination Certificate CESI 04ATEX093

Electrical characteristics

Temperature class and maximum surface temperature of floodlights are indicate in to table 1 e 2 according to the maximum ambient temperature.
Ambient temperature: -20°C +50°C
-20°C +55°C

Other electrical characteristics

Unchanged.

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 with maximum ambient temperature of +50 ° C

Type	Type of lamp And power in W	Temperature class (floodlights II 2GD)	Max. surface temperature T in °C (floodlights II 2GD)
RLEE-107	400W Hg	T4	133
	400W Na	T4	133

Table 2 – Temperature class and maximum surface temperature T of the enclosure for the different types of floodlights and for the different types of lamps used with maximum ambient temperature of +55 ° C

Type	Type of lamp And power in W	Temperature class (floodlights II 2GD)	Max. surface temperature T in °C (floodlights II 2GD)
RLEE-107	400W Hg	T3	138
	400W Na	T3	138
	500W INC	T3	191
RLEE-107	700W Hg	T3	198
	700W Na	T3	198
	700W INC	T3	198
	1000W Hg	T2	231
	1000W Na	T2	231
	1000W Ha	T2	231
	1000W INC	T2	231

NOTES:

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

EXTENSION n. 02/08

to EC-Type Examination Certificate CESI 04ATEX093

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:

- 110 °C for the lamp of 400W,
- 145 °C for the lamp of 500w and 700W,
- 170 °C for the lamp of 1000W .

Report n. EX-A8/015273

Descriptive documents (prot. EX-A8/015275)

- n. A4-5063 Rev. 0 (2 p.)	dated 26.03.2008
- Safety instructions F-293 Rev. 0 (5 p.)	dated 26.03.2008

One copy of all documents is kept in CESI files.