

CESI

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interamente versato
Codice fiscale e numero
iscrizione CCIAA 00793580150

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

Schema di certificazione

CESI-ATEX

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, D.M. 27/9/2000 e D.M. 02/02/2006

ATEX E C3-02 - 1

CERTIFICATE



TYPE EXAMINATION CERTIFICATE

- [1] **Category 3 Equipment intended for use in potentially explosive atmospheres Directive 94/9/EC**
- [2] Type Examination Certificate number:
CESI 06 ATEX 054
- [3] Equipment: Floodlights series TIGER sizes 150, 250, 400
- [4] Manufacturer: **COR.TEM S.p.A.**
- [5] Address: Via Aquileia 10, Villesse (Gorizia)
- [6] This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- [7] CESI certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design of category 3 equipment intended for use in potentially explosive atmospheres given in Annex II to the European Union Directive 94/9/EC of 23 March 1994.
- The examination and test results are recorded in confidential report n. EX-A6021154
- [8] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 60079-0:2006 EN 60079-15:2005 EN 61241-0: 2006 EN 61241-1:2004
- [9] If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.
- [10] This TYPE EXAMINATION CERTIFICATE relates only to the design, examination and tests of the specified equipment in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.
- [11] The marking of the equipment shall include the following:



II 3 G D Ex nR II T3, T2 ; Ex tD A22 IP 66 T 145 + 210°C

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

Date 18/12/2006 - Translation issued the 18/12/2006

Prepared

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Schedule

[14] **TYPE EXAMINATION CERTIFICATE n. CESI 06 ATEX 054**

[15] **Description of equipment**

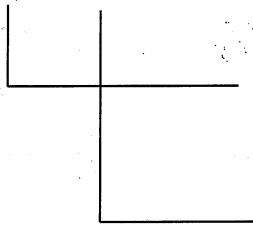
Floodlights series TIGER ... are realized by an aluminium alloy body and a transparent glass cover containing the lamp.

Various types of lamps can be assembled: mercury vapours lamps, high pressure sodium vapours lamps or metal halide lamps.

The floodlights are realized in one housing witch contains : the lampholder, the lamp, the terminal box and other electric components.

The floodlights are identified by the following codes:

TIGER ...



Type of floodlights: TIGER

Size/power: 150, 250, 400

Electrical characteristics

Rated voltage	110 ÷ 240, 250, 277 V
Rated frequency	50 ÷ 60 Hz
Rated power	150 ÷ 400 W
Degree of protection	IP 66
Ambient temperature	- 25 ÷ + 45 °C
	- 25 ÷ + 60 °C
	- 50 ÷ + 45 °C
	- 50 ÷ + 60 °C

The temperature class and the maximum surface temperature T of the floodlights are function of the maximum power dissipated in the inside and of the maximum ambient temperature, as specified in the table 1 and in the documents annexed to this certificate.

cable entries

The accessories used for cable entries guarantee a minimum degree of protection IP 66 in compliance with the EN 60529 Standard and are certified in compliance with the EN 60079-0, EN 60079-15, EN 61241-0 and EN 61241-1 Standards.

The cable glands are realized for

- Ta min. ≥ - 25°C with EPDM gaskets type and class of temperature T3
- Ta min. ≥ - 50°C with SILICONE SI/50 gaskets type and class of temperature T3 or T2

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Schedule

[14] TYPE EXAMINATION CERTIFICATE n. CESI 06 ATEX 054

[15] Description of equipment (follows)

Table 1 –TEMPERATURE CLASSES AND MAX. SURFACE TEMPERATURE OF THE FLOODLIGHTS WITH MAX. AMBIENT TEMPERATURE UP TO +45°C; AND +60°C

Floodlight model	Power in W and type of lamp	Class of temperature			Max surface temperature T in °C		
		Ta +45 °C	Ta +60 °C		Ta +45 °C	Ta +60 °C	
Max. ambiente temperature		Ta +45 °C	Ta +60 °C		Ta +45 °C	Ta +60 °C	
TIGER-150	150W HG	T3	T3		145 °C	154 °C	
	150W NA	T3	T3		145 °C	154 °C	
TIGER-250	250W HG	T3	T3		145 °C	154 °C	
	250W NA	T3	T3		145 °C	154 °C	
	250W HA	T3	T3		145 °C	154 °C	
TIGER-400	400W HG	T3	T3	T2	195 °C	189 °C	210 °C
	400W NA	T3	T3	T2	195 °C	189 °C	210 °C
	400W HA	T3	T3	T2	195 °C	189 °C	210 °C
HG: mercury vapours lamp NA: high pressure sodium vapours lamp HA: metal halide lamp							

NOTES: For the max. ambient temperature Ta + 60 °C, the class of temperature and the max. surface temperature of the floodlights model 400, are function of the installation conditions:

- floodlights installed on vertical position: Class of temperature T3 and max. surface temperature T 189 °C
- floodlights installed on horizontal position and light directed to down: Class of temperature T2 and max. surface temperature T 210 °C

Warning label

“Do not open when energized. Wait 20 minutes before opening.”

“Use cables suitable for a minimum temperature of Tc °C.” where Tc has the value of:

- 90 °C for the models with temperature class T3 (with T.amb. Max. + 45 °C)
- 100 °C for the models with temperature class T3 (with T.amb. Max. + 60 °C)
- 150 °C for the models with temperature class T2

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Schedule

[14] **TYPE EXAMINATION CERTIFICATE n. CESI 06 ATEX 054**

[16] **Report n. EX- A6021154**

Routine tests

The manufacturer shall carry out the routine tests prescribed at par. 27 of the EN 60079-0, at par. 27 of the EN 60079-15 and at par.24 of the EN 61241-0 Standards.

The routine dielectric test with applied voltage shall be carried out at 1500 V.

The restricted breathing routine test shall be carried out, by the manufacturer, in compliance with par. 27.2.3 of the EN 60079-15 standard

Descriptive documents (prot. EX-A6021161)

- Technical Note n° A4-4888 (3 pg.)	Rev. 0	dated	12/12/2006
- Drawing n° A1-4886 (3 sheets)	Rev. 0	dated	12/12/2006
- Drawing n° A3-4887	Rev. 0	dated	12/12/2006
- Safety Instruction F-299 (8 pg.)	Rev. 0	dated	12/12/2006
- CE Declaration of Conformity n° CE-0053		dated	12/12/2006
- Gaskets data sheets (3 pg.)		dated	04/07/2006

One copy of all documents is kept in CESI files.

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

None.

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

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

- EN 60079-0 : 2004 Electrical apparatus for explosive gas atmospheres. General requirements
- EN 60079-15: 2005 Type of protection "n"
- EN 61241-0 : 2006 Electrical apparatus for use in the presence of combustible dust.
- EN 61241-1 : 2004 Protection by enclosures "tD"