[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 01 ATEX 028

[4] Equipment: Luminaires series EV..., EW..., EWA..., EWE...

[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-A1/012160.

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

EN 50014: 1997 + A1...A2 EN 50018: 2000 EN 50281-1-1:1999

[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 d IIC T3 or T4 or T6 IP 65 T85 ÷ 200 °C

II 2 D IP 65 T85 ÷ 200 °C

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

date April 12th, 2001 - translation issued on April 12th, 2001

prepared CERT – M. Balaz

approved CERT – U. Colombo

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[13] **Schedule**

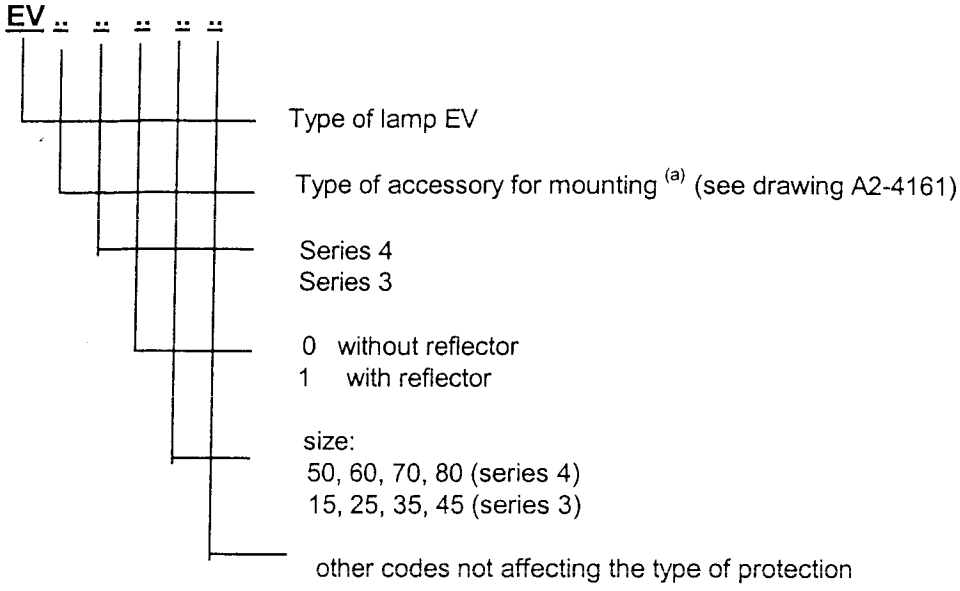
[14] **EC-TYPE EXAMINATION CERTIFICATE N. CESI 01 ATEX 028**

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

The luminaires series EV..., EW..., EWA... and EWE... are made with the body in aluminium alloy or stainless steel and the transparent part in glass.
On the luminaires different types of lamps can be mounted: incandescent, mercury vapours, high pressure sodium, blended, electronic lamps.
The luminaires are made in two models, series 3 and series 4, and in three principal versions:

- with one single flameproof enclosure including lamp holder, lamp, terminal block and the other electrical apparatus.
- with two separate flameproof enclosures: one enclosure containing lamp holder and lamp and another one containing the terminal block and the electrical apparatus. In this case the two enclosures are connected through a bushing sealed by resin.
- with one flameproof enclosure containing only lamp holder and lamp. In this case the terminal block and the other electrical 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 luminaires subject of this certificate are identified by the following codes for the different models:



(a) A: suspension box with one entry
X: suspension box with 4 entries
GC (series 4) or H (series 3): suspension box with eyebolt
IX (series 4) or I (series 3): wall box with 30 ° bracket
IA: wall box with 30° entry
Y: suspension box with two entries

The complete code of all the units of the series EV is reported in the drawing A1-3923 sheet 1/3 annexed to this certificate.

Prot. A1/012168 P: 7
Keywords 13010R 21420O 48010M 54250O 66540E

[13] **Schedule**

[14] **EC-TYPE EXAMINATION CERTIFICATE N. CESI 01 ATEX 028**

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

EWE

EW .. ..

- Type of lamp: EW (series 4) EWE (series 3)
- Type of accessory for mounting (b)
- Series 4 / Series 3
- 0 without reflector / 1 with reflector
- size: 60, 70 (series 4) / 35 (series 3)
- other codes not affecting the type of protection

EWA

EW .. ..

- Type of lamp: EWA (series 4) EW (series 3)
- Type of accessory for mounting (b)
- Series 4 / Series 3
- 0 without reflector / 1 with reflector
- size: 60, 70, 80 (series 4) / 45 (series 3)
- other codes not affecting the type of protection

(b) Types of accessories for mounting (see drawing A2-4161 annexed to this certificate)
X: suspension box with 4 entries
GC (series 4) or H (series 3): suspension box with eyebolt
IX (series 4) or I (series 3): wall box with 30 ° bracket
IA: wall box with 30° entry
Y: suspension box with two entries

[13] # Schedule

[14] **EC-TYPE EXAMINATION CERTIFICATE N. CESI 01 ATEX 028**

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

The complete code of all the units of the series EW, EWE, EWA is reported in the drawing A1-3923 (sheets 2/3 and 3/3) annexed to this certificate.
In the drawing A1-3923 the electrical and constructional characteristics of the different types of luminaires are also reported.

The different types of accessories used for mounting are reported in the drawing A2-4161.

The luminaires of category II 2 GD are conforming to the specifications of the standards EN 50018 and EN 50281-1-1.
The luminaires of category II 2 D are conforming to the specifications of the standard EN 50281-1-1.

Electrical characteristics

Rated voltage	110/240 V
Rated frequency	50 ÷ 60 Hz
Rated power	20 ÷ 300 W (the rated power of each type of lamp is indicated in detail in the following table 1)
Degree of protection	IP 65

Temperature class of the luminaires of category II 2 GD: see table 1.
Maximum surface temperature T of the luminaires of category II 2 GD and II 2 D: see table 1.

The accessories used for cable entry shall be certified according to the standards EN 50014, EN 50018 and EN 50281-1-1 and shall guarantee a degree of protection of at least IP 65.

[13] **Schedule**

[14] **EC-TYPE EXAMINATION CERTIFICATE N. CESI 01 ATEX 028**

Table 1 – Temperature class and maximum surface temperature T of the enclosure for the different types of luminaires and for the different types of lamps used

Model	**Type of lamp and power in W**	**Temperature class** (luminaires II 2GD)	**Max. surface temperature T in °C** (luminaires II 2GD e II 2 D)
EV..50	25/40/60/100 W INC	T4	131
EV..60	50 W Hg	T3	144
	80 W Hg	T3	144
	50/70 W Na	T4	132
	200 W INC	T3	153
	20/23 W EL	T6	85
EV..70	80/125 W Hg	T3	152
	70 W Na	T4	118
	100/150 W Na	T3	200
	70/100/150 W Ha	T3	200
	160 W Mix	T3	157
	200 W INC	T3	143
EV..80	125/250 W Hg	T3	184
	150/250 W Na	T3	146
	100/150/250 W Ha	T3	158
	160/250 W Mix	T3	162
	200/300 W INC	T3	169

(follows at page 6)

NOTES:

a) The models of the enclosures are indicated by the code used for series 4 (see drawing A1-3923 annexed to this certificate).
b) The different types of lamps are indicated with the following codes:
Hg: mercury vapour lamp
Na: high pressure sodium lamp
Ha: metal halide lamp
Mix: blended lamp
INC: incandescent lamp
EL: electronic lamp

[13] **Schedule**

[14] **EC-TYPE EXAMINATION CERTIFICATE N. CESI 01 ATEX 028**

Table 1 – Temperature class and maximum surface temperature T of the enclosure for the different types of luminaires and for the different types of lamps used

Model	Type of lamp and power in W	Temperature class (luminaires II 2GD)	Max. surface temperature T in °C (luminaires II 2GD e II 2 D)
EW..60	50/80 W Hg	T4	132
	50/70 W Na	T4	122
	100 W Mix	T3	200
	200 W INC	T3	148
EW..70	80 W Hg	T4	170
	125 W Hg	T3	170
	70 W Na	T4	114
	100/150 W Na	T3	200
	100/160 W Mix	T3	167
	200 W INC	T3	137
EWA..60	50 W Hg	T3	144
	80 W Hg	T3	144
	50 W Na	T4	132
	70 W Na	T3	200
EWA..70	80/125 W Hg	T3	152
	70 W Na	T4	118
	100 W Na	T3	200
EWA..80	125/250 W Hg	T3	184
	100/150/250 W Na	T3	146
	100/150/250 W Ha	T3	158

Plate warnings

"Do not open when energised. Wait 20 minutes before opening."

"Use cables suitable for a minimum temperature of T_c °C." where T_c has the value of:
- 95 °C for the models EV.4.80; EVIX.4..; EWIX.4..; EV.3..; EWE.3.35; EW.3.45
- 105 °C for the models EWA.4..; EW.4..; EWX.4..; EWGC.4.. with lamps 70 W Na, 50/80/125 W Hg, 200 W INC
- 110 °C for the models EV.4.50/60/70 with lamps 80 W HG e 70 W Na
- 125 °C for the models EW.4..; EWX.4..; EWGC.4.. with lamps 100/150 W Na and 100/160 W Mix
- 140 °C for the other models EV.4..

No warning for the lamps type EL.

[13] # Schedule

[14] **EC-TYPE EXAMINATION CERTIFICATE N. CESI 01 ATEX 028**

[16] **Report n. EX-A1/012160**

Routine tests

The manufacturer shall carry out the routine tests prescribed at clause 24 of the EN 50014 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:

- 15,6 bar for the models EV.4.50/60/70/80
- 21 bar for the models EW.4.60/70
- 23 bar for the models EWA.4.60/70

For the models having two separate compartments, that is for the models EWA.4.80; EW.3.35; EWE.3.35; EV.3.15/25/35/45 the overpressure test shall be carried out at the pressure of:

- 15,6 bar on the lamp compartment
- 12,4 bar on the terminal block or reactor compartment

Descriptive documents (prot. EX-A1/012161)

- n° A4-3924 Rev. 0 (7 p.)	dated	20.01.2001
- n° A1-3923 Rev. 0 (3 p.)	dated	20.01.2001
- n° A2-4161 Rev. 0	dated	20.01.2001
- n° A3-4237 Rev. 0	dated	20.01.2001
- n° A4-1279 Rev. 7 (2 p.)	dated	20.10.1998
- n° A4-4129 Rev. 0	dated	26.06.2000
- Safety instructions mod. F-262 Rev. 0 (9 p.)	dated	20.01.2001
- Instructions for resin application F-267 Rev. 0 (2 p.)	dated	20.01.2001
- EC declaration of conformity n° CE/0027	dated	20.01.2001

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. 01/04

to EC-Type Examination Certificate CESI 01 ATEX 028

Equipment: Luminaires series EV..., EW..., EWA..., EWE...

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

Address: Via Aquileia 10, Villesse (Gorizia) - Italy

Admitted variation

- new model of luminaires series EV... EWA... size 100
- new type of luminaires series HI in execution EEx d and EEx-de
- new execution EEx de for all the luminaires series EV.. EW..
- new range of ambient temperature from -25°C to +50°C

Identification and description of equipment

The new models of luminaires series EV... EWA... size 100 are for the lamps up to 400W (mercury vapours, high pressure sodium and metal halide lamp) or 500W incandescent, in execution EEx-d.
The luminaries are made in two principal versions:

- luminaires series EWA... size 100 with two separate flameproof enclosures: one enclosure containing lamp holder and lamp and another one containing the terminal block and the electrical apparatus. In this case the two enclosures are connected through special bushing.
- luminaires series EV... size 100 with one flameproof enclosure containing only lamp holder and lamp. In this case the terminal block and the other electrical apparatus shall be installed in a separate flameproof enclosure, certified according to one of the types of protection mentioned in the EN 50014 standard.

According to the protection adopted and the model, the luminaires series EV... EWA... size 100 can have the following marking :

II 2 GD EEx d IIC T3 IP 66 T180 °C

This extension and annexed descriptive documents must be annexed to the EC-Type Examination Certificate CESI 01 ATEX 028.

date 22 December 2004 - translation issued the 22nd December 2004

prepared CERT – M. Balaz

approved CERT – U. Colombo

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IPM. 601

EXTENSION n. 01/04

to EC-Type Examination Certificate CESI 01 ATEX 028

Identification and description of the equipment (follows)

The new type of lighting fixture series HI execution EEx d and EEx de with separate housing for connecting terminals (HI-100 for lamps up to 100W inc. HI-200 for lamps up to 200W inc.).
According to the protection adopted and the model, the luminaires series HI... can have the following marking :

⟨Ex⟩ **II 2 GD EEx d IIC T3 or T4 or T6 IP 66 T66 ÷ 172 °C**

⟨Ex⟩ **II 2 GD EEx de IIC T3 or T4 or T6 IP 66 T66 ÷ 172 °C**

The new EEx de execution for all the lighting fixtures series EV.. EW.. with separate EEx-e housing added on top of lighting fixture for connecting terminals. In this case the two enclosures are connected through special bushing.

⟨Ex⟩ **II 2 GD EEx de IIC T3 or T4 or T6 IP 66 T85 ÷ 200 °C**

The new range of ambient temperature from -25°C to +50°Cis only for models EWA.. with two separate flameproof enclosure and for models EV.. . The models EW.. and EWA.. with single flameproof enclosure are foreseen for ambient temperature from –20°C to +50°C.
The complete code and constructional characteristics of the all new luminaires series EV.., EW.. and HI.. is reported in the documentation annexed to this extension. The temperature class and maximum surface temperature T of the units is a function of the enclosure size, of the maximum power dissipated in the inside and of the maximum ambient temperature as specified in the table 1 and in the documentation annexed to this extension.
For the new models of luminaires series EV... EWA... size 100 with the lamps of 400W (mercury vapours, high-pressure sodium and metal halide lamp) or of 500W incandescent shall be applied following conditions: The angle comprised between the symmetry axis of the glass window part and the vertical can not exceed 30 degrees.

Cable entries
The accessories used for cable entries and for closing unused apertures in the units of category II 2GD shall be certified according the following:
- for luminaires in execution EEx d, according to EN 50014, EN 50018 and EN 50281-1-1 standards;
- for luminaires in execution EEx de, according to EN 50014, EN 50019 and EN 50281-1-1 standards;

In both cases 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

Electrical characteristics

Rated voltage	110/230 V
Rated frequency	50 ÷ 60 Hz
Rated power	20 ÷ 500 W (the rated power of each type of lamp is indicated in detail in the following table 1)
Degree of protection	IP 66
Ambient temperature	- 20 ÷ + 40 °C - 20 ÷ + 50 °C - 25 ÷ + 50 °C

Temperature class of the luminaires of category II 2 GD: see table 1.
Maximum surface temperature T of the luminaires of category II 2 GD: see table 1.

The service temperature of the parts sealed with resin shall not exceed 150 °C.

EXTENSION n. 01/04

to EC-Type Examination Certificate CESI 01 ATEX 028

Table 1 – **TEMPERATURE CLASS AND MAX. SURFACE TEMP. FOR LIGHTING FIXTURES IN AMBIENT TEMPERATURE UP TO +40°C (+50°C)**

MOD.	LAMP.	TEMP.CLASS	MAX. SURFACE TEMP. (°C) +40°C (+50°C)
EV...50			
EV...15	25/40/60/100W INC	T4 (T3)	131 (141)
EV...60			
EV...25	50/80W HG	T3	144 (154)
	50/70W NA	T3	132 (142)
	200W INC	T3	153 (163)
	20/23W EL	T6 (T5)	85 (95)
EV...70			
EV...35	80/125W HG	T3	152 (162)
	70W NA	T4	118 (128)
	100/150W NA	T3 (T2)	200 (210)
	70/100/150W HA	T3 (T2)	200 (210)
	160 W MIX	T3	157 (167)
	200W INC	T3	143 (153)
EV...80			
EV...45	125/250W HG	T3	184 (194)
	150/250W NA	T3	146 (156)
	100/150/250W HA	T3	158 (168)
	160/250W MIX	T3	162 (172)
	200/300W INC	T3	169 (179)
EV...100	400W HG	T3	170 (180)
	400W NA	T3	170 (180)
	400W HA	T3	170 (180)
	500W INC	T3	170 (180)
EW...60	50/80W HG	T4 (T3)	132 (142)
	50/70W NA	T4	122 (132)
	100W MIX	T3 (T2)	200 (210)
	200W INC	T3	148 (158)
EW...70			
EWE...35	80W HG	T3	170 (180)
	125W HG	T3	170 (180)
	70W NA	T4	114 (124)
	100/150W NA	T3 (T2)	200 (210)
	100/160W MIX	T3	167 (177)
	200W INC	T3	137 (147)
EWA...60	50/80W HG	T3	144 (154)
	50W NA	T4 (T3)	132 (142)
	70W NA	T3 (T2)	200 (210)

EXTENSION n. 01/04

to EC-Type Examination Certificate CESI 01 ATEX 028

Table 1 (follows) – **TEMPERATURE CLASS AND MAX. SURFACE TEMP. FOR LIGHTING FIXTURES IN AMBIENT TEMPERATURE UP TO +40°C (+50°C)**

MOD.	LAMP.	TEMP.CLASS	MAX. SURFACE TEMP. (°C) +40°C (+50°C)
EWA...70	80/125W HG	T3	152 (162)
	70W NA	T4	118 (128)
	100W NA	T3 (T2)	200 (210)
EWA...80			
EW...45	125/250W HG	T3	184 (194)
	100/150/250W NA	T3	146 (156)
	100/150/250W HA	T3	158 (168)
EWA...100	400W HG	T3	170 (180)
	400W NA	T3	170 (180)
	400W HA	T3	170 (180)
HI...	80W HG	T3	162 (172)
	70W NA	T3	162 (172)
	100W INC	T4	112 (122)
	200W INC	T3	162 (172)
	20/23W EL	T6	66 (76)

NOTES:
The different types of lamps are indicated with the following codes:
HG: mercury vapour lamp
NA: high pressure sodium lamp
HA: metal halide lamp
MIX: blended lamp
INC: incandescent lamp
EL: electronic lamp

Warning label

"Do not open when energized. Wait 20 minutes before opening."

"Use cables suitable for a minimum temperature of T_c °C." where T_c has the value of:
90°C for the models HI 100
130 °C for the models HI 200
150 °C for the models EV..100
90 °C for the models EWA..100

EXTENSION n. 01/04

to EC-Type Examination Certificate CESI 01 ATEX 028

Report n. EX-A4/525293

Routine tests

The manufacturer shall carry out the routine tests prescribed at clause 24 of the EN 50014 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:

- 15,6 bar for the models EV..100
- 12,6 bar for the models HI...
- For the models EWA..100, having two separate compartments, the overpressure test shall be carried out at the pressure of:
  15,6 bar on the lamp compartment
  12,4 bar on the terminal block or reactor compartment

For the lighting fixture having the minimum ambient temperature of –25°C, the overpressure test shall be carried out at the pressure of:

- 20,6 bar for the models EV..
- The models EWA.., having two separate compartments
  20,6 bar on the lamp compartment
  16,4 bar on the terminal block or reactor compartment

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

Descriptive documents (prot. EX-A4/525297)

- n. A4-4465 Rev. 0 (5 p.)	dated	20.04.2004
- n. A1-4462 Rev.0	dated	14.05.2003
- n. A1-4463 Rev.0	dated	14.05.2003
- n. A1-4604 Rev.0	dated	20.04.2004
- n. A3-4361 Rev.0	dated	20.02.2003
- n. A3-4526 Rev.0	dated	20.02.2003
- n. A4-4641 Rev. 0 (2 p.)	dated	20.04.2004
- Safety instructions F-262 Rev. 2 (10 p.)	dated	14.05.2003
- Safety instructions F-278 Rev. 0 (5 p.)	dated	14.05.2003
- Instructions F-279 Rev. 0	dated	14.05.2003
- EC declaration of conformity n. CE 0027	dated	15.03.2003

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 50014: 1997 + A1..A2 – General requirements
EN 50018: 2000 + A1 - Flameproof enclosures "d"
EN 50019: 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.

EXTENSION n. 03/08

to EC-Type Examination Certificate CESI 01ATEX028

Equipment: Luminaries series EV..., EW..., EWA..., EWE...

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

Address: Via Aquileia 10, Villesse (Gorizia) - Italy

Admitted variation

- Updating to new standards EN 60079-0 (2006), EN 60079-1 (2004), EN 60079-7 (2003), EN 61241-0 (2006), EN 61241-1 (2004)
- Updating of nameplate
- New voltage supply of 250V and 277 V
- New maximum ambient temperature of + 55 °C
- Constructional modification, new type of ring for globe locking
- New range of ambient temperature from -50°C to +55°C
- New temperature class T4 for lamps model EWA size 100, with 250W vapours lamps.

Equipment identification

The equipment series EV..., EW..., EWA..., EWE... shall include the following markings. For type of protection "d":

II 2GD Ex d IIC T2 or **T3** or **T4** or **T5** or **T6** **Ex tD A21 IP66 T ... °C**

For type of protection "de":

II 2GD Ex de IIC T2 or **T3** or **T4** or **T5** or **T6** **Ex tD A21 IP66 T ... °C**

According to the protection adopted and the model, the luminaires series HI... can have the following marking :
For type of protection "d":

II 2GD Ex d IIC T3 or **T4** or **T6** **Ex tD A21 IP66 T ... °C**

For type of protection "de":

II 2GD Ex de IIC T3 or **T4** or **T6** **Ex tD A21 IP66 T ... °C**

This extension and annexed descriptive documents must be annexed to the EC-Type Examination Certificate CESI 01ATEX028.

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date 06 May 2008 - translation issued the 6th May 2008

prepared Sergio Mezzetti

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approved Fiorenzo Bregani

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EXTENSION n. 03/08

to EC-Type Examination Certificate CESI 01ATEX028

Equipment identification (follows)

New minimum ambient temperature -50°C
Some types of lighting fixtures can be also used for minimum ambient temperature -50°C.
The sizes suitable for the ambient temperature -50°C are:
model EV... ; sizes 50, 60, 70, 80;
model EW... ; sizes 60, 70;
model EWA... ; sizes 60, 70, 80 with two separate flameproof enclosure (sealed joint between lamp housing and ballast housing).

Electrical characteristics

Rated voltage	110/230/250/277 V
Rated frequency	50 ÷ 60 Hz
Rated power detail in the following table 1)	20 ÷ 500 W (the rated power of each type of lamp is indicated in
Degree of protection (EN 60529)	IP 66
Ambient temperature	- 20 ÷ + 40 °C - 20 ÷ + 55 °C - 25 ÷ + 55 °C - 50 ÷ + 55 °C

The temperature class and maximum surface temperature T of the units is a function of the enclosure size, of the maximum power dissipated in the inside and of the maximum ambient temperature as specified in the table 1 and in the documentation annexed to this extension.

The service temperature of the parts sealed with resin shall not exceed 150 °C.

Cable entries
The accessory used for cable entries and for closing unused aperture in the units of category II 2GD shall be certified according to the following Standards:
- *Luminaries in execution "Ex d" according to:* EN 60079-0, EN 60079-1, EN 61241-0, EN 61241-1.
- *Luminaries in execution "Ex de" according to:* EN 60079-0, EN 60079-7, EN 61241-0, EN 61241-1.

In both cases a minimum degree of protection IP 66 shall be guaranteed according to EN 60529 standards.

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:
150 °C for the models with temperature class T2
145 °C for the models with temperature class T3
105 °C for the models with temperature class T4
95°C for the models with temperature class T5
No warning for the lamps with temperature class T6.
No warning for the lamps type EL.

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to EC-Type Examination Certificate CESI 01ATEX028

Table 1 – **TEMPERATURE CLASS AND MAX. SURFACE TEMP. FOR LIGHTING FIXTURES IN AMBIENT TEMPERATURE UP TO +40°C (+55°C)**

MOD.	LAMP.	TEMP.CLASS	MAX. SURFACE TEMP. (°C) +40°C (+55°C)
EV...50			
EV...15	25/40/60/100W INC	T4 (T3)	131 (146)
EV...60			
EV...25	50/80W HG	T3	144 (159)
	50/70W NA	T3	132 (147)
	200W INC	T3	153 (168)
	20/23W EL	T6 (T5)	85 (95)
EV...70			
EV...35	80/125W HG	T3	152 (167)
	70W NA	T4	118 (133)
	100/150W NA	T3 (T2)	200 (215)
	70/100/150W HA	T3 (T2)	200 (215)
	160 W MIX	T3	157 (172)
	200W INC	T3	143 (158)
EV...80			
EV...45	125/250W HG	T3	184 (199)
	150/250W NA	T3	146 (161)
	100/150/250W HA	T3	158 (173)
	160/250W MIX	T3	162 (177)
	200/300W INC	T3	169 (184)
EV...100	400W HG	T3	170 (185)
	400W NA	T3	170 (185)
	400W HA	T3	170 (185)
	500W INC	T3	170 (185)
EW...60	50/80W HG	T4 (T3)	132 (147)
	50/70W NA	T4 (T3)	122 (137)
	100W MIX	T3 (T2)	200 (215)
	200W INC	T3	148 (163)
EW...70			
EWE...35	80W HG	T3	170 (185)
	125W HG	T3	170 (185)
	70W NA	T4	114 (129)
	100/150W NA	T3 (T2)	200 (215)
	100/160W MIX	T3	167 (182)
	200W INC	T3	137 (152)
EWA...60	50/80W HG	T3	144 (159)
	50W NA	T4 (T3)	132 (147)
	70W NA	T3 (T2)	200 (215)

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Table 1 (follows) – **TEMPERATURE CLASS AND MAX. SURFACE TEMP. FOR LIGHTING FIXTURES IN AMBIENT TEMPERATURE UP TO +40°C (+55°C)**

MOD.	LAMP.	TEMP.CLASS	MAX. SURFACE TEMP. (°C) +40°C (+55°C)
EWA...70	80/125W HG	T3	152 (167)
	70W NA	T4	118 (133)
	100W NA	T3 (T2)	200 (215)
EWA...80			
EW...45	125/250W HG	T3	184 (199)
	100/150/250W NA	T3	146 (161)
	100/150/250W HA	T3	158 (173)
EWA...100	400W HG	T3	170 (185)
	400W NA	T3	170 (185)
	400W HA	T3	170 (185)
	250W HG	T4	110 (125)
	250W NA	T4	110 (125)
	250W HA	T4	110 (125)
HI...	80W HG	T3	162 (177)
	70W NA	T3	162 (177)
	100W INC	T4	112 (127)
	200W INC	T3	162 (177)
	20/23W EL	T6	66 (81)

NOTES:
The different types of lamps are indicated with the following codes:
HG: mercury vapours lamp
NA: high pressure sodium lamp
HA: metal halide lamp
MIX: blended lamp
INC: incandescent lamp
EL: compact electronic lamp

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Routine tests
The manufacturer shall carry out the routine tests prescribed at paragraph 27 of the EN 60079-0 Standard, at par. 24 of the EN 61241-0 Standard, at paragraph 16 of the EN 60079-1 Standard and at paragraph 7 of the EN 60079-7 Standard.

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Routine tests (follows)
The routine overpressure test shall be carried out on the flameproof enclosure with the static method (clause 15.1.3.1 of EN 60079-1 standard) at the pressure indicated in the documents annexed to this certificate.

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

Descriptive documents (prot. EX-A8/013184)

- Technical note A4-4968 Rev. 0 (6 pg.)	dated	12.10.2006
- Dwg. n. A3-5051 Rev. 0	dated	12.10.2006
- Dwg. n. A3-5079 Rev. 0 (2 sheet)	dated	12.10.2006
- Data sheet of MC resin (4 pg.)	dated	12.10.2006
- Data sheet for Euroter 70I gasket (1 pg.)	dated	12.10.2006
- Instructions F-267 Rev. 1 (3 pg.)	dated	12.10.2006
- Safety instructions F-262 Rev. 3 (11 pg.)	dated	12.10.2006
- Safety instructions F-278 Rev. 1 (5 pg.)	dated	12.10.2006
- EC declaration of conformity n. CE 0027	dated	12.10.2006

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 60079-1: 2004 - Electrical apparatus for explosive gas atmospheres. Part 1: Flameproof enclosure
EN 60079-7: 2003 - 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"