

CESI

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Capitale sociale 8 550 000 €
interamente versato
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iscrizione CCIAA 00793580150

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Sezione Ordinaria
N. R.E.A. 429222
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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
e D.M. 27/9/2000

CERTIFICATE

1072



TYPE EXAMINATION CERTIFICATE

[1]

Category 3 Equipment intended for use
in potentially explosive atmospheres
Directive 94/9/EC

[2]

[3] Type Examination Certificate number:

CESI 05 ATEX 018

[4] Equipment: Luminaires series EWN

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

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

[7] This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

[8] 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-A5/005842.

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

EN 60079-0:2004 EN 60079-15:2003 IEC 61241-0: 2004 EN 61241-1:2004

[10] 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.

[11] 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.

[12] The marking of the equipment shall include the following:

II 3 G D Ex nR II T3,T4,T6 tD A22 IP 66 T180 ÷ T85 °C

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

Date February 16th, 2005 translation issued on February 16th, 2005

Prepared
Mirko Balaz

Approved
Ulisse Colombo

CESI

CENTRO Elettrotecnico Sperimentale Italiano
Business Unit Certificazione

31 Responsabile

[13]

Schedule

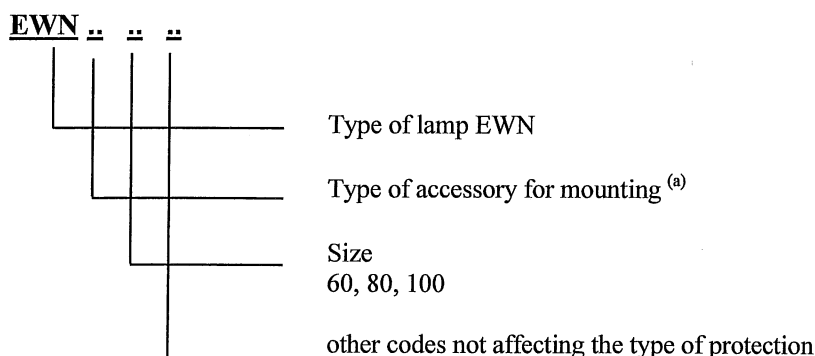
[14] **TYPE EXAMINATION CERTIFICATE n. CESI 05 ATEX 018**

[15] **Description of equipment**

The luminaires series EWN... are made with the body in aluminium alloy and the transparent part in glass.
On the luminaires different types of lamps can be mounted: incandescent, mercury vapours, high pressure sodium, metal halide, blended and electronic lamps.

The luminaires are made with one single enclosure including lamp holder, lamp, terminal block and the other electrical apparatus.

The luminaires subject of this certificate are identified by the following codes for the different models:



- (a) T: suspension box with one entry
 X: suspension box with 4 entries
 GC: suspension box with eyebolt
 IX: wall box with 30 ° bracket
 Y: suspension box with two entries

Electrical characteristics

Rated voltage	110/230/277 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 (EN 60529 – 1991)
Ambient temperature	- 25 ÷ + 50 °C

Temperature class of the luminaires of category II 3 GD: see table 1.

Maximum surface temperature T of the luminaires of category II 3 GD: see table 1.

The accessories used for cable entry shall guarantee a degree of protection at least IP 66 and be certified at least according to the standards EN 60079-0, EN 60079-15, IEC 61241-0 and EN 61241-1.

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

[13]

Schedule

[14] TYPE EXAMINATION CERTIFICATE n. CESI 05 ATEX 018

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

MOD.	LAMP.	TEMP.CLASS	MAX. SURFACE TEMP. (°C)
EWN .. 60			
	50/80W HG	T3	154
	50/70W NA	T3	142
	40/60/100W INC	T4	131
	200W INC	T3	153
	20/23W EL	T6	85
EWN .. 80			
	80W HG	T3	154
	125W HG	T3	162
	250W HG	T3	184
	70W NA	T4	128
	100/150/250W NA	T3	156
	70/100/150/250W HA	T3	168
	160/250W MIX	T3	172
	200W INC	T3	153
	300W INC	T3	179
EWN .. 100			
	250/400W HG	T3	180
	250W NA	T3	156
	400W NA	T3	180
	250W HA	T3	168
	400W HA	T3	180
	250W MIX	T3	172
	300/500W INC	T3	180

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 Tc °C.” where Tc has the value of:

145 °C for the models with temperature class T3

105 °C for the models with temperature class T4

No warning for the lamps type EL with temperature class T6.

[13]

Schedule

[14] TYPE EXAMINATION CERTIFICATE n. CESI 05 ATEX 018

[16] Report n. EX-A5/005842

Routine tests

The manufacturer shall carry out the routine tests prescribed at paragraph 27 of the EN 60079-15 standard and at paragraph 24 of IEC 61241-0.

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

The routine checking of restricted-breathing properties shall be carry out by manufacturer according paragraph 27.2.3 of EN 60079-15.

Descriptive documents (prot. EX-A5/005877)

- n° A4-4648 Rev. 0 (2 p.)	dated	22.06.2004
- n° A1-4647 Rev. 0	dated	22.06.2004
- n° A2-4794 Rev. 0	dated	22.06.2004
- Technical sheet of sealing gasket BlueTech	dated	22.06.2004
- Safety instructions F-292 (6 p.)	dated	22.06.2004
- EC DECLARATION OF CONFORMITY n° 0049	dated	22.06.2004

One copy of all documents is kept in CESI files.

[17] Special conditions for safe use

None.

[18] Essential Health and Safety Requirements

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

EN 60079-0: 2004 - Electrical apparatus for explosive gas atmospheres. Part 0: General requirements

EN 60079-15: 2003 - Electrical apparatus for explosive gas atmospheres. Part 15: Type of protection "n"

EN 61241-1: 2004 - Electrical apparatus for use in the presence of combustible dust. Part 1: Protection by enclosures "tD"

IEC 61241-0: 2004 - Electrical apparatus for use in the presence of combustible dust. Part 0: General requirements

prEN 61241-0:2004/prAA:2005- Electrical apparatus for use in the presence of combustible dust. Part 0: General requirements



EXTENSION n. 01/09

to Type Examination Certificate CESI 05 ATEX 018X

Equipment: Luminaries, series EWN.
Manufacturer: **COR.TEM S.p.A.**
Address: Via Aquileia 10, Villesse, Gorizia (Italy)

Admitted variation

- new models of luminaries series EWN... sizes 60, 70, 80, 100
- new range of ambient temperature from -50°C to +60°C
- new electrical characteristics
- new lighting fixtures with multi-range voltage ballast


The results of verifications and tests are reported in the confidential report EX-A9036887.

Identification and description of the equipment

The new models of luminaires series EWN... sizes 60, 70, 80 and 100 are for the lamps up to 400W (mercury vapours, high pressure sodium, metal halide, blended and electronic lamps) or 500W incandescent.

The luminaires are made with one single enclosure including lamp holder, lamp, terminal block and the other electrical apparatus.

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

 **II 3 GD Ex nR II T3, T4, T5, T6 Ex tD A22 IP 66 T187 ÷ T57 °C**

This extension and annexed descriptive documents must be annexed to the Type Examination Certificate CESI 05 ATEX 018.

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date 30th November 2009 translation issued on 30th November 2009

prepared Mirko Balaz

approved Fiorenzo Bregani

CESI S.p.A.
Energy Division
"Certification Technical Department"
The Manager

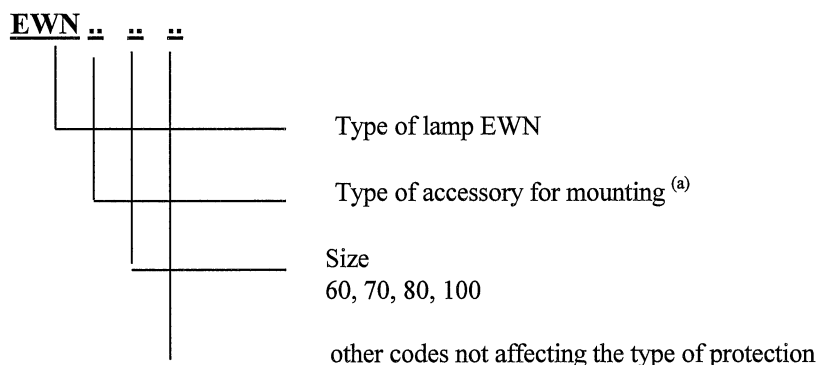
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EXTENSION n. 01/09

to Type Examination Certificate CESI 05 ATEX 018X

Identification and description of the equipment (follow)

The luminaires series EWN are identified by a code as follows for the different models:



(a) IX... - wall box with bracket type or eyebolt type

P... - pole mounting bracket

X... - ceiling mounting bracket

NT... - pendant with cable glands

GC... - suspension with eyebolt

Electrical characteristics

Rated voltage	from 110V up to 277 V
Rated frequency	50 ÷ 60 Hz
Luminaires with multi-range voltage ballast	120/208/240/277V (50 or 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 (EN 60529 – 1991)
Ambient temperature	- 25 ÷ + 40 °C - 25 ÷ + 50 °C - 25 ÷ + 60 °C - 50 ÷ + 40 °C - 50 ÷ + 50 °C - 50 ÷ + 60 °C

Temperature class of the luminaires of category II 3 GD: see table 1.

Maximum surface temperature T of the luminaires of category II 3 GD: see table 1.

Cable entries

The accessories used for cable entry shall guarantee a degree of protection at least IP 66 and be certified at least according to the standards EN 60079-0, EN 60079-15, EN 61241-0 and EN 61241-1.

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EXTENSION n. 01/09

to Type Examination Certificate CESI 05 ATEX 018X

Table 1 – TEMPERATURE CLASS AND MAX. SURFACE TEMP. FOR LIGHTING FIXTURES
IN AMBIENT TEMPERATURE UP TO +40°C; +50°C; +60°C

MOD	LAMP.	+40°C TEMP. CLASS / MAX SURFACE TEMP. (°C)	+50°C TEMP. CLASS / MAX SURFACE TEMP. (°C)	+60°C TEMP. CLASS / MAX SURFACE TEMP. (°C)
EWN-60	50W Hg	T6 / 82	T5 / 92	T4 / 102
	80W Hg	T5 / 98	T4 / 108	T4 / 118
	50W Na	T6 / 82	T5 / 92	T4 / 102
	70W Na	T6 / 82	T5 / 92	T4 / 102
	40W Inc	T6 / 82	T5 / 92	T4 / 102
	60W Inc	T6 / 82	T5 / 92	T4 / 102
	100W Inc	T5 / 98	T4 / 108	T4 / 118
	200W Inc	T5 / 98	T4 / 108	T4 / 118
	20/23W EL	T6 / 57	T6 / 67	T6 / 77
EWN-70	125W Hg	T4 / 106	T4 / 116	T4 / 126
	100W Na	T5 / 99	T4 / 109	T4 / 119
	70W Ha	T6 / 82	T5 / 92	T4 / 102
	100W Ha	T5 / 99	T4 / 109	T4 / 119
EWN-80	125W Hg	T5 / 98	T4 / 108	T4 / 118
	250W Hg	T3 / 167	T3 / 177	T3 / 187
	150W Na	T4 / 104	T4 / 114	T4 / 124
	250W Na	T3 / 167	T3 / 177	T3 / 187
	150W Ha	T4 / 104	T4 / 114	T4 / 124
	250W Ha	T3 / 167	T3 / 177	T3 / 187
	160W Mix	T4 / 104	T4 / 114	T4 / 124
	250W Mix	T3 / 167	T3 / 177	T3 / 187
	300W Inc	T4 / 106	T4 / 116	T4 / 126
EWN-100	250W Hg	T4 / 117	T4 / 127	T3 / 137
	400W Hg	T4 / 131	T3 / 141	T3 / 151
	250W Na	T4 / 117	T4 / 127	T3 / 137
	400W Na	T4 / 131	T3 / 141	T3 / 151
	250W HA	T4 / 117	T4 / 127	T3 / 137
	400W Ha	T4 / 131	T3 / 141	T3 / 151
	250W Mix	T4 / 117	T4 / 127	T3 / 137
	300W Inc	T4 / 106	T4 / 116	T4 / 126
	500W Inc	T4 / 131	T3 / 141	T3 / 151

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

EXTENSION n. 01/09

to Type Examination Certificate CESI 05 ATEX 018X

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:

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.

Report n. EX-A9036887.

Routine tests

The manufacturer shall carry out the routine tests prescribed at paragraph 34 of the EN 60079-15 standard and at paragraph 24 of EN 61241-0.

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

The routine checking of restricted-breathing properties shall be carry out by manufacturer according paragraph 34.2.3 of EN 60079-15.

Descriptive documents (prot. EX-A9036891)

A4- 5029 Rev. 01 (5 pg.)	dated. 19-01-2009
A1- 4647 Rev. 01 (2 sheets)	dated. 26-09-2006
A2-4794 Rev. 01	dated. 26-09-2006
Data sheet for O-Ring gasket Bluetech	
Safety instructions F-292 Rev. 01 (8 pg.)	dated 19.01.2009
EC declaration of conformity n° CE-0049	dated 19.01.2009

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

Special conditions for safe use (X)

With the addition of the new models of luminaries series EWN... sizes 60, 70, 80, 100, the following special condition for safe use is added; moreover the X suffix is added to the CESI 05ATEX018 certificate number, and beginning from this extension it becomes CESI 05ATEX 018X.

The luminaries series EWN have be installed in the way to avoid the high risk of mechanical danger.

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 60079-15 : 2005 Type of protection "n"
- 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. 02/10

to EC-Type Examination Certificate CESI 05ATEX018X



Equipment: Luminaries, series EWN...

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

Address: Via Aquileia 10, Villesse (GO)

Admitted variation

- New rated voltage up to 480 V
- New type of multi-range ballast from 120 to 480 V
-

Equipment identification and description

The luminaries series EWN... are made with the body in aluminium alloy and the transparent part in glass.
On the luminaries different types of ballast and lamps (incandescent, mercury vapours, high pressure sodium, metal halide, blended and electronic lamps) can be mounted with rated voltage up to 480 V
The luminaries are made with one single enclosure including lampholder, lamp, terminal block and the other accessories.

The luminaries series EWN... shall include the following marking:



II 3 GD Ex nR II T3 ÷ T6 Ex tD A22 IP 66 T187 ÷ T57 °C

This extension and annexed descriptive documents must be annexed to the EC-Type Examination Certificate CESI 05ATEX018X

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date 22/12/2010
prepared Sergio Mezzetti
verified Mirko Balaz
approved Fiorenzo Bregani

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Giacinto Motta SpA

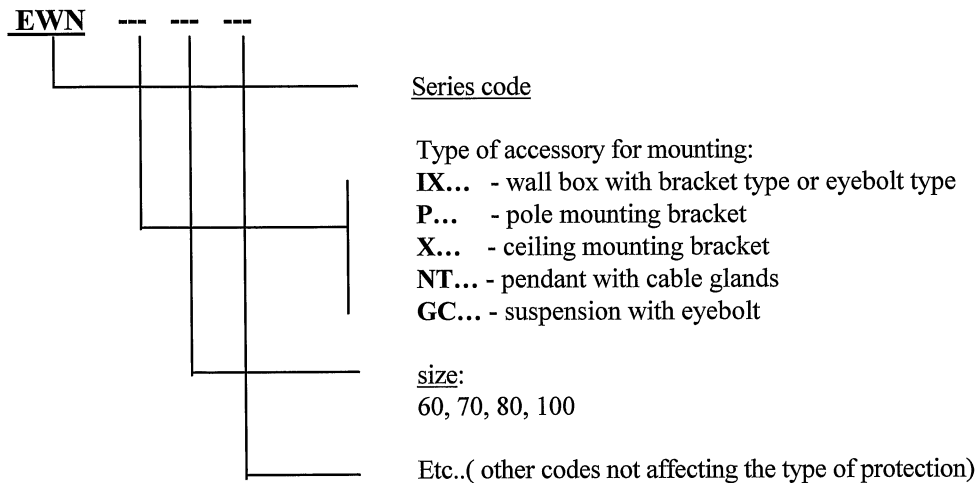
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EXTENSION n. 02/10

to EC-Type Examination Certificate CESI 05ATEX018X

Equipment identification and description (follows)

The luminaries series EWN... are identified by the following codes:



Electrical characteristics

Nominal voltage:

- Luminaries from 110 up to 480 Vac
- Ballast: from 120 up to 480 Vac

Nominal frequency: 50 /60 Hz

Nominal wattage: from 20 up to 500 W

Unchanged the other characteristics

Cable entries

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

Temperature class and maximum surface temperature

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

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EXTENSION n. 02/10

to EC-Type Examination Certificate CESI 05ATEX018X

Equipment identification and description (follows)

Table 1 – Temperature classes and maximum surface temperature of the luminaries with maximum ambient temperature of +40°C , +50°C and +60°C

MOD	LAMP.	+40°C TEMP. CLASS / MAX SURFACE TEMP. (°C)	+50°C TEMP. CLASS / MAX SURFACE TEMP. (°C)	+60°C TEMP. CLASS / MAX SURFACE TEMP. (°C)
EWN-60 For rated voltage up to 480V	50W Hg	T6 / 82	T5 / 92	T4 / 102
	50W Na	T6 / 82	T5 / 92	T4 / 102
	70W Na	T6 / 82	T5 / 92	T4 / 102
	40/60W Inc	T6 / 82	T5 / 92	T4 / 102
	80W Hg	T5 / 98	T4 / 108	T4 / 118
	100/200W Inc	T5 / 98	T4 / 108	T4 / 118
	20/23W EL	T6 / 57	T6 / 67	T6 / 77
EWN-70 For rated voltage up to 480V	70W Ha	T6 / 82	T5 / 92	T4 / 102
	100W Na	T5 / 99	T4 / 109	T4 / 119
	100W Ha	T5 / 99	T4 / 109	T4 / 119
	125W Hg	T4 / 106	T4 / 116	T4 / 126
EWN-80 For rated voltage up to 480V	125W Hg	T5 / 98	T4 / 108	T4 / 118
	150W Na	T4 / 104	T4 / 114	T4 / 124
	150W Ha	T4 / 104	T4 / 114	T4 / 124
	160W Mix	T4 / 104	T4 / 114	T4 / 124
	250W Hg	T3 / 167	T3 / 177	T3 / 187
	250W Na	T3 / 167	T3 / 177	T3 / 187
	250W Ha	T3 / 167	T3 / 177	T3 / 187
	250W Mix	T3 / 167	T3 / 177	T3 / 187
	300W Inc	T4 / 106	T4 / 116	T4 / 126
EWN-100 For rated voltage up to 277V	250W Hg	T4 / 117	T4 / 127	T3 / 137
	250W Na	T4 / 117	T4 / 127	T3 / 137
	250W Ha	T4 / 117	T4 / 127	T3 / 137
	250W Mix	T4 / 117	T4 / 127	T3 / 137
	400W Hg	T4 / 131	T3 / 141	T3 / 151
	400W Na	T4 / 131	T3 / 141	T3 / 151
	400W Ha	T4 / 131	T3 / 141	T3 / 151
	300W Inc	T4 / 106	T4 / 116	T4 / 126
	500W Inc	T4 / 131	T3 / 141	T3 / 151
EWN-100 For rated voltage up to 480V	250/400W Hg	T3 / 151	T3 / 161	T3 / 171
	250/400W Na	T3 / 151	T3 / 161	T3 / 171
	250/400W Ha	T3 / 151	T3 / 161	T3 / 171
	250W Mix	T3 / 151	T3 / 161	T3 / 171

NOTES:

HG mercury vapours lamp
 NA high pressure sodium lamp
 HA metal halide lamp
 MIX blended lamp
 INC incandescent lamp
 EL compact electronic lamp

EXTENSION n. 02/10

to EC-Type Examination Certificate CESI 05ATEX018X

Report n° EX- B0036710

Routine tests

The manufacturer shall carry out the routine tests prescribed at par. 27 of the EN 60079-0, at par. 34 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. 34.2.3 of the EN 60079-15 standard

Descriptive documents (prot. EX- B0036713)

- Technical Note A4-5462 (37 pg.)
- Drawing n° A3-5461

Rev. 00	dated	15/12/2010
Rev. 00	dated	15/12/2010

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 60079-15: 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”