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CESI Centro Elettrotecnico Sperimentale Italiano Giacinto Motta SpA

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Capitale sociale 8 550 000 € interamente versato Codice fiscale e numero iscrizione CCIAA 00793580150

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



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

CERTIFICATE (

EC-TYPE EXAMINATION CERTIFICATE

Equipment or Protective System intended for use in potentially explosive atmospheres

Directive 94/9/EC

[3] EC-Type Examination Certificate number:

CESI 08 ATEX 017X

[4] Equipment: Bulkhead lighting fitting, type 0403.24/...

[5] Manufacturer: TEPEx Ltd.

[6] Address: Medarska 69, Hr-10090 Zagreb, Croatia

[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-A8010147.

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

EN 60079-0:2006 EN 60079-1:2007 EN 60079-7:2007

[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 2G Ex ed IIC T2 or T3



I M2 Ex ed I

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

Date 07 november 2006 - Translation issued the 07 november 2006

Prepared Sergio Mezzetti **Verified** Mirko Balaz **Approved** Fiorenzo Bregani

[13] Schedule

[14] EC-TYPE EXAMINATION CERTIFICATE n. CESI 08 ATEX 017X

[15] **Description of equipment**

The bulkhead lighting fitting, type 0403.24/.. are made with the body in aluminium alloy and the transparent part in high quality borosilicate glass, thermally treated.

The Lampholder (Ex) E27 is installed in enclosure made of aluminum alloy (for II 2G) or in cast iron (for I M2). The enclosure is covered with protective glass, which is protected with steel wire guard. Sealing is achived with silicon gasket between protective glass and enclosure.

Installation of lamp (on wall or ceiling) is done with two steel brackets with M6 screws. Inside the lamp an explosion protected lamp-holder E27 with different incandescent lamps are assembled.

Electrical characteristics

Rated voltage 230 V AC max 24 V DC max.Rated frequency 50 HzRated power $40 \div 100 \text{ W}$ Degree of protection at least IP 54Ambient temperature $-20 \div +40 \text{ °C}$ $-20 \div +50 \text{ °C}$ $-20 \div +60 \text{ °C}$

Temperature class of the bulkhead lighting fitting, type 0403.24/..: see table 1.

Marking of explosion-protection:

- type 0403.24/10

- type 0403.24/11 or 12

- type 0403.24/20

- Ex ed IIC T2

- type 0403.24/20

- Ex ed I

The accessories used for cable entries and for closing unused apertures in the units shall be certified according to EN 60079-0 and EN 60079-7 standards. A minimum degree of protection IP 54 shall be guaranteed according to EN 60529 standards.

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 energized."

"After de-energizing, delay 12 minutes before opening."

For the lamp of 100W:

"Use cable suitable for a temperature of at least 95°C."

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CESI

[13] Schedule

[14] EC-TYPE EXAMINATION CERTIFICATE n. CESI 08 ATEX 017X

Table 1 – MODEL AND TEMPERATURE CLASS FOR LIGHTING FIXTURES IN AMBIENT TEMPERATURE UP TO +40°C (or +50°C, or +60°C)

MODEL CODE

Type 0403.24/11	Ex ed IIC T3 40W DIN 49810 Bl.4 / 230V AC	-30°C < T _a < +50°C without limitations on connecting cable	
Type 0403.24/12	Ex ed IIC T3 60W DIN 49810 Bl.4 / 230V AC	-30°C < T _a < +50°C without limitations on connecting cable	
Type 0403.24/20	Ex ed I 100W max. EN 60064 / 230V, 110V AC	-20°C < T _a < +40°C use cable suitable for a minimum temperature 95°C	
Type 0403.24/10	Ex ed IIC T2 100W max. EN 60064 / 230V, 110V AC	$-30^{\circ}\text{C} < T_a < +40^{\circ}\text{C}$ use cable suitable for a minimum temperature 95°C $-30^{\circ}\text{C} < T_a < +60^{\circ}\text{C}$ use cable suitable for a minimum temperature of 110°C	
	Ex ed IIC T2 60W max. EN 60064 / 230V, 110V AC, 24V AC / DC	-30°C < T _a < +50°C without limitations on connecting cable	

[16] **Report n.** EX-A8010147

Routine tests

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

The routine dielectric test with applied voltage shall be performed at:

- 500V for lamps supplied with rated voltages not exceeding 90 V peak,
- -2U + 1000V with a minimum value of 1500V (U = rated voltage of the lamp) for lamps where rated voltages in excess of 90 V peak are present: .

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[13] Schedule

[14] EC-TYPE EXAMINATION CERTIFICATE n. CESI 08 ATEX 017X

Descriptive documents (prot. EX-A8010150)

- Technical Description (4 pg.)		December 2007
- n. C 48.15.00.00	dated	14.11.2007
- Certified Drawing Description C 48.15.00.00 (3 pg.)	dated	14.11.2007
- User Manual TEPEx.RS.012 Rev. 1 (2 pg.)	dated	28.07.2006
- EC declaration of conformity	dated	14.11.2007

One copy of all documents is kept in CESI files.

[17] Special conditions for safe use

- For all types of lamp, vertical mounting is not allowed with lamp-holder in upper section of lamp.
- In underground mining areas the lamp must be installed in places with low possibility of mechanical impact .

[18] Essential Health and Safety Requirements

Assured by compliance to the Standards.