



[1] **HR – TYPE EXAMINATION CERTIFICATE**

[2] Regulation of Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres, (OJ 34/10)

[3] HR-Type Examination Certificate Number: **HREx T 10.006 U** Issue: **1**

[4] Component: **Electronic ballast**

Type: **SMP 06/1.**

[5] Manufacturer: **TEP Ex d.o.o.**

[6] Address: **Medarska 69; 10090 Zagreb, Croatia**

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

[8] Ex-Agency, authorized body number E-1/08 according to Article 9 of the Regulation (OJ 34/10), certifies that this component has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of component intended for use in potentially explosive atmospheres given in Annex II of the Regulation (OJ 34/10).

The examination and test results are recorded in confidential report number: **09CR027**

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

**HRN EN 60079-0:2009**

**HRN EN 60079-7:2007**

**EN 60079-18:2009**

[10] The sign 'U' is placed after the certificate number. It indicates that this certificate must not be mistaken for a certificate intended for an equipment or protective system. This partial certification may be used as a basis for certification of an equipment or protective system.

[11] This HR-Type Examination Certificate relates only to the design, examination and test of the specified component in accordance to Annex III of the Regulation (OJ 34/10). Further requirements of the Regulation (OJ 34/10) apply to the manufacturing process and supply of this component. These are not covered by this certificate.

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



**II 2G Ex e mb IIC T4 Gb**

Ex-Council reference No.: **76(549) item III 1.2**

PB.09.TC.1415/AH

**Ex-Agency**  
Manager General

Date: 05.07.2010

**Ivan Rendulić, B.Sc. Econ.**





[13]

**SCHEDULE**

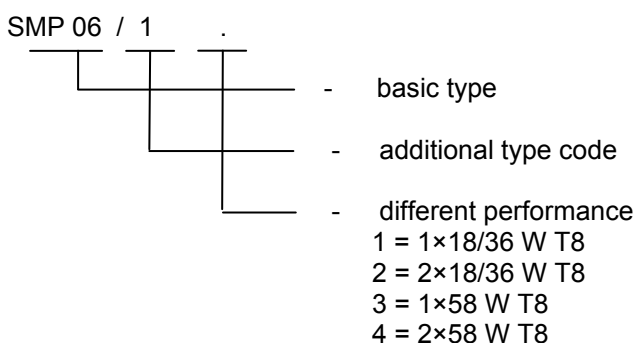
[14] **HR - TYPE EXAMINATION CERTIFICATE No.:** HREx T 10.006 U

[15] **Description of Component**

Electronic ballast is intended for the operation of fluorescent lamps in type of protection increased safety "e". It consists of electronic assembly that is encapsulated in a squared aluminium housing. At both sides the housing is terminated with plastic terminal block holder. The assembly is encapsulated with polyurethane setting compound, type of protection "mb". Connection is made by increased safety "e" terminal blocks.

Electronic ballast is provided with overcurrent, overvoltage, temperature and EOL (end-of-life) protection.

Type code:



Electric ratings:

Voltage: 220-240 Vac

Frequency: 50-60 Hz

Power: .x max. 58 W T8

Ambient temperature (the interior of lamp housing):  $-25^{\circ}\text{C} \leq T_{\text{amb}} \leq +70^{\circ}\text{C}$

[15.1] **Documentation**

Title:	Drawing No.:	Rev. level:	Date:
Technical description of ex protected electronic ballast type: SMP 06/1. (3 pages)	/	0	19.04.2010
Explanation of certification drawing T61.04.01.00 electronic ballast SMP 06/1. (2 pages)	/	0	19.04.2010
Electronic ballast SMP 06/1.	T61.04.01.00-1	0	19.04.2010
Electronic ballast SMP 06/1. Thermal and electrical protective devices	T61.04.01.00-2	0	19.04.2010
Electronic ballast SMP 06/1. Electric circuit diagram	T61.04.01.00-3	0	19.04.2010
Electronic ballast SMP 06/1. PCB assembly	T61.04.01.00-4	0	19.04.2010
Electronic ballast SMP 06/1. List of PCB components (3 pages)	T61.04.01.00-5	0	19.04.2010



[16] Confidential Report No. 09CR027

[16.1] Routine testing

The manufacturer shall carry out the following routine tests:  
dielectric strength in accordance with clause 7.1 of the standard HRN EN 60079-7.

[17] Schedule of Limitations 'U'

1. Electronic ballast SMP 06/1 shall be entirely mounted into the fluorescent lamp type of protection increase safety "e" according to HRN EN 60079-7.
2. Instructions for use of electronic ballast shall be accompanied together with the lamp in which ballast is mounted.

[18] Essential Health and Safety Requirements

Covered by the standards listed at item 9.

**Certification Department**

Certification officer

Head of Department

**Ana Hađak, B.Sc.E.Eng.**

**Stipo Đerek, B.Sc.E.Eng.**