



EC-Type Examination Certificate

(1)

(2)

Equipment or Protective Systems Intended for use
in Potentially Explosive Atmospheres
Directive 94/9/EC

(3) EC-Type Examination Certificate Number:

FTZÚ 10 ATEX 0066X

(4) Equipment or protective system: **Intrinsically safe supply source NSB2/xx**

(5) Manufacturer: **TEVEL TEVE VARNOST Elektronika, d.o.o.**

(6) Address: **Borovniko naselje 7, 1412 Kisovec, Slovenia**

(7) This equipment or protective system and any of acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) The Physical Technical Testing Institute, notified body number 1026 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°

10/0066 dated 13.04.2011

(9) Compliance with Essential Health and safety requirements has been assured by compliance with:

EN 60079-0:2009; EN 60079-1:2007; EN 60079-5:2007;

EN 60079-7:2007; EN 60079-11:2007; EN 50303:2000

(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 testing 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:



I M2(M1) Ex d e ia q [ia] I Mb(Ma)



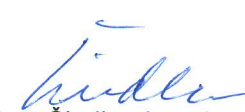
I M1 Ex d/Ex e q [ia] I Ma

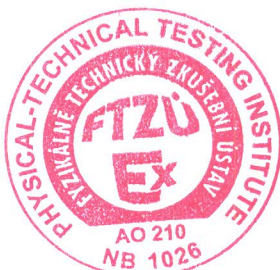
This EC-Type Examination Certificate is valid till:

14. 04. 2016

Responsible person:

Date of issue: 14.04.2011


Dipl. Ing. Šindler Jaroslav
Head of certification body



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Physical Technical Testing Institute Ostrava-Radvanice

(13)

Schedule

(14) **EC-Type Examination Certificate N° FTZÚ 10 ATEX 0066X**

(15) Description of Equipment or Protective System:

The intrinsically safe supply source NSB2/xx consist of explosion-proof housing OV-01/xx approved by certificate FTZÚ 10 ATEX 0065U with type of protection „d“ and „e“. In main compartment with type of protection „d“ is installed electronics protected by powder filling „q“ and connecting terminals with type of protection-increased safety „e“. Output circuit are intrinsically safe circuit level „ia“. So, the equipment has category M1, when the main power supply is switched off.

$U_n = 230 \text{ V AC}; 50 \text{ Hz}$

Maximum output parameters:

Type NSB2/1:

Terminals (1-2, 3-4, 5-6, 7-8, 9-10):

$U_o = 13,65 \text{ V}; I_o = 1,159 \text{ A}; P_o = 3,96 \text{ W}; C_o = 23,5 \mu\text{F}; L_o = 500 \mu\text{H}$

Terminals (11-12): $U_o = 14,8 \text{ V}; I_o = 1,65 \text{ A}; P_o = 6,11 \text{ W}; C_o = 16,6 \mu\text{F}; L_o = 200 \mu\text{H}$

Terminals (13-14): $U_o = 14,8 \text{ V}; I_o = 37 \text{ mA}; P_o = 548 \text{ mW}; C_o = 16,6 \mu\text{F}; L_o = 0,3 \text{ H}$

Terminals (15-16): $U_o = 12,6 \text{ V}; I_o = 0,76 \text{ mA}; P_o = 239 \text{ mW}; C_o = 32 \mu\text{F}; L_o = 95 \text{ mH}$

Type NSB2/2:

Terminals (1-2, 3-4, 5-6, 7-8):

$U_o = 13,65 \text{ V}; I_o = 1,159 \text{ A}; P_o = 3,96 \text{ W}; C_o = 23,5 \mu\text{F}; L_o = 500 \mu\text{H}$

Terminals (9-10, 11-12): $U_o = 14,8 \text{ V}; I_o = 1,65 \text{ A}; P_o = 6,11 \text{ W}; C_o = 16,6 \mu\text{F}; L_o = 200 \mu\text{H}$

Terminals (13-14): $U_o = 14,8 \text{ V}; I_o = 37 \text{ mA}; P_o = 548 \text{ mW}; C_o = 16,6 \mu\text{F}; L_o = 0,3 \text{ H}$

Terminals (15-16): $U_o = 12,6 \text{ V}; I_o = 0,76 \text{ mA}; P_o = 239 \text{ mW}; C_o = 32 \mu\text{F}; L_o = 95 \text{ mH}$

(16) Report No. : 10/0066

(17) Special conditions for safe use:

17.1 $T_{amb} = -20^\circ\text{C}$ to $+50^\circ\text{C}$

17.2 For explosion-proof housing type OV-01/xx must be fulfil all restrictive condition given in point (17) of certificate FTZÚ 10 ATEX 0065U.

(18) Essential Health and Safety Requirements:

Essential health and safety requirements of Directive 94/9/EC are covered by standards mentioned in (9), according which the product was verified and in the manufacturer's instruction for use.

Responsible person:

Dipl. Ing. Šindler Jaroslav
Head of certification body



Date of issue: 14.04.2011

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**Physical Technical Testing Institute
Ostrava-Radvanice**

(13)

Schedule

(14) **EC-Type Examination Certificate N° FTZÚ 10 ATEX 0066X**

(19)

LIST OF DOCUMENTATION

<i>Documentation:</i>	<i>Date:</i>
• Certificate FTZÚ 10 ATEX 0065U (3 pages)	27.08.2010
• Technical documentation list NSB2/xx ID doc.: 346060 (1 sheet)	23.07.2010
• Technical documentation ID doc.: 346000 (8 pages)	11.01.2010
• Drawings No.: ID dok: 346001 (3 sheets)	03.06.2010
ID dok: 346010	08.07.2010
ID dok: 346011	12.02.2010
ID dok: 346012	14.02.2010
ID dok: 346013	08.07.2010
ID dok: 346002	20.01.2010
ID dok: 346014	09.07.2010
ID dok: 346003 (7 pages)	03.02.2010
ID dok: 346015	20.03.2010
ID dok: 346016	08.07.2010
ID dok: 346017 (2 sheets)	20.03.2010
ID dok: 346018	12.02.2010
ID dok: 346004	30.03.2010
ID dok: 346019	07.07.2010
ID dok: 346020	07.07.2010
ID dok: 346005	04.02.2010
ID dok: 346021	16.03.2010
ID dok: 346030	09.07.2010
ID dok: 346031	09.07.2010
ID dok: 346032	09.07.2010
ID dok: 346033	09.07.2010
ID dok: 346034	10.07.2010
ID dok: 346035	10.07.2010
ID dok: 346040	23.07.2010

Responsible person:

Date of issue: 25.03.2010


Dipl. Ing. Šindler Jaroslav
Head of certification body



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