



## 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 07 ATEX 0068**

- (4) Equipment or protective system: **Operating, control and signal equipment type X.SA0, X.SA1, X.SA2**
- (5) Manufacturer: **GENERI, s.r.o.**
- (6) Address: **Uničovská 50, 787 01 ŠUMPERK, Czech Republic**
- (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°  
**07/0068 dated 14 September 2007**

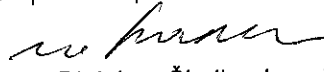
- (9) Compliance with Essential Health and safety requirements has been assured by compliance with:  
**EN 60079-0:2007; EN 60079-1:2004; EN 60079-7:2007; EN 60079-11:2007;  
EN 60079-18:2005; EN 61241-0:2007; EN 61 241-1:2005**
- (10) If the sign „X” is placed after the certificate number, it indicates 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 following:

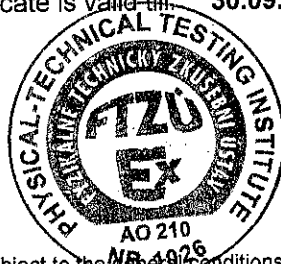
 **II 2GD Ex de, demb tD IIC T6, T5 T85°C, T100°C -55°C ≤ Ta ≤ +80°C**  
**II 2GD Ex e, emb tD II T6, T5 T85°C, T100°C -55°C ≤ Ta ≤ +80°C**

only for type **X.SA2** and **X20SA1**:  **I M2 Ex e, de, emb, demb I**

This EC-Type Examination Certificate is valid till: **30.09.2012**

Responsible person:

  
Dipl. Ing. Šindler Jaroslav  
Head of certification body



Date of issue: 20.09.2007

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Annex: 1 (2 pages)

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**Physical Technical Testing Institute  
Ostrava-Radvanice**

(13)

**Schedule**

(14) **EC-Type Examination Certificate N° FTZÚ 07 ATEX 0068**

(15) Description of Equipment or Protective System:

The device boxes type X.SA0 (KEMA 02 ATEX 2031U, PTB 98 ATEX 3101U, KEMA 02 ATEX 2088U) are made from special Al alloy according to DIN 1725 (AlSi12) and surface treated by powder baked-on coating. The device boxes X.SA1 (FTZÚ 01 ATEX 0075U, KEMA 02 ATEX 2032U, PTB 01 ATEX 1061U, KEMA 03 ATEX 2078U) are made from polyester hardened by glass fibres and with addition of graphite for ensuring of surface resistance of box to level less than  $10^9\Omega$ . The device boxes X.SA2 (FTZÚ 01 ATEX 0074U, PTB 00 ATEX 1101U) are made from stainless steel plate.

The separated device boxes are equipped by certified Ex components suitable for fitting to the increased safety enclosure. The Ex components are placed either in the box or into the cover of box. If the components are placed in the cover they are mutually galvanic connected and together led to the terminals on the box bottom.

The boxes type X.SA0, X.SA1 and X.SA2 can be also used for intrinsically safe circuits (I.S.) and together for non-intrinsically safe circuits.

The terminals and wires of I.S. circuits must be mutually separated from terminals of the others circuits (I.S. and non-I.S.) according EN 60079-11. The application of these device boxes has no influence to intrinsically safe level of circuit, in which are connected.

When selection of device boxes X.SA0, X.SA1 and X.SA2 for hazardous areas is carried out, it is not necessary to take care about parameters if intrinsically safe signals, i.e. categories (Ia, Ib, Ic) or gas subgroup (IIA, IIB, IIC). Marking of such device boxes complies with the point (12) of this certificate, but the cable glands and terminals intended for (I.S.) circuits must be either light blue or marked by other clear and recognizable way. The device boxes type X.SA0, X.SA1, X.SA2 comply to degree of protection minimum IP 65 according to EN 60 529. The ambient temperature range  $-55^{\circ}\text{C} \leq T_a \leq +80^{\circ}\text{C}$  is maximum. The real temperature range  $T_a$  depends on used components and electrical parameters and must be mentioned on device boxes marking if the boxes are determined for application in the other range of ambient temperatures than  $-20^{\circ}\text{C}$  to  $+40^{\circ}\text{C}$ .

The used cable glands must be certified type with the degree of protection minimum IP65.

(16) Report No. : 07/0068

dated 14.09.2007

(17) Special conditions for safe use: none

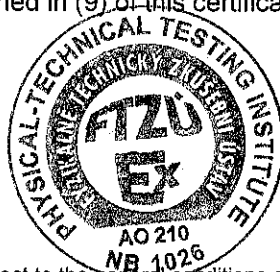
(18) Essential Health and Safety Requirements:

Covered by standards mentioned in (9) of this certificate.

Responsible person:

Dipl. Ing. Šindler Jaroslav

Head of certification body



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(13)

Schedule

(14) **EC-Type Examination Certificate N° FTZÚ 07 ATEX 0068**

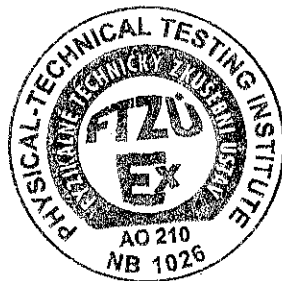
(19)

**LIST OF DOCUMENTATION**

- Drawing of manufacturer's plate No. **G-4-190119/1, 2, 3** ... dated 12.3. 2007
- Approval drawing No. **G-2-900008/3** ... dated 12.3. 2007
- Description for approval drawing No. **2G900008\_3\_XSA\_ATEX & IEC 2007.xls** dated 12.3. 2007
- User instruction No. **N740019/5** ... dated 2.7. 2007
- Tables current loading and of the number of clamps No. **T730011** ... dated 1.7.2007

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**Annex No 1**

**to EC-Type Examination Certificate N° FTZÚ 07 ATEX 0068**

**Tab. 1 – device boxes -  
Al alloy**

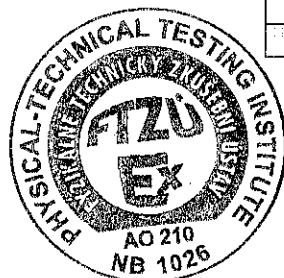
Type	Dimension [mm]
X16SA0	80x75x57
X17SA0	80x125x57
X18SA0	80x175x57
X19SA0	80x250x57
X21SA0	120x122x80
X22SA0	120x220x80
X23SA0	120x220x90
X24SA0	122x360x80
X25SA0	160x160x90
X26SA0	160x260x90
X27SA0	160x360x90
X28SA0	160x560x90
X29SA0	230x200x110
X31SA0	230x280x110
X32SA0	230x330x110
X33SA0	230x400x110
X35SA0	230x600x110
X42SA0	310x400x110
X43SA0	310x600x110
X46SA0	100x100x80
X47SA0	100x160x80
X48SA0	100x200x80
X49SA0	120x122x90
X50SA0	140x140x90
X51SA0	140x200x90
X52SA0	180x180x100
X53SA0	180x280x100
X64SA0	100x230x110
X55SA0	230x200x180
X56SA0	230x330x180
X57SA0	230x400x224
X58SA0	310x400x180
X59SA0	310x400x226
X60SA0	310x600x180
X70SA0	600x600x200

**Tab. 2 – device boxes -  
polyester**

Type	Dimension [mm]
X12SA1	75x80x55
X13SA1	75x110x55
X14SA1	75x160x55
X15SA1	75x190x55
X20SA1	120x122x90
X23SA1	120x220x90
X25SA1	160x160x90
X26SA1	160x260x90
X27SA1	160x360x90
X28SA1	160x560x90
X37SA1	250x255x120
X38SA1	250x255x160
X39SA1	250x400x120
X40SA1	250x400x160
X44SA1	360x360x90
X45SA1	405x400x120
X70SA1	600x600x200
X71SA1	250x600x120
X72SA1	80x75x75
X73SA1	110x75x75
X74SA1	160x75x75
X75SA1	190x75x75
X80SA1	400x405x165
X365SA1	400x600x250

**Tab. 3 – device boxes-steel**

Type	Dimension [mm]	Type	Dimension [mm]
X05SA2	302x402x188	X414SA2	360x200x150
X320SA2	150x150x90	X415SA2	360x300x150
X321SA2	200x150x90	X416SA2	360x200x190
X322SA2	200x200x90	X417SA2	360x300x190
X323SA2	300x150x90	X430SA2	100x100x61
X324SA2	300x200x90	X431SA2	150x100x61
X325SA2	300x300x90	X432SA2	150x150x81
X326SA2	300x400x90	X433SA2	200x100x61
X327SA2	400x200x90	X434SA2	200x200x81
X328SA2	400x400x90	X435SA2	200x200x121
X329SA2	560x400x90	X436SA2	300x150x81
X330SA2	300x200x150	X437SA2	300x200x81
X331SA2	300x300x150	X438SA2	300x200x121
X332SA2	300x400x150	X439SA2	300x300x121
X333SA2	400x200x150	X440SA2	300x300x161
X334SA2	400x400x150	X441SA2	380x380x161
X335SA2	560x400x150	X442SA2	400x150x81
X340SA2	300x400x190	X443SA2	400x200x121
X341SA2	400x400x190	X444SA2	400x300x161
X342SA2	560x400x190	X445SA2	500x300x161
X343SA2	800x400x190	X446SA2	500x400x161
X344SA2	500x300x150	X460SA2	200x250x97
X345SA2	500x400x150	X461SA2	200x250x157
X346SA2	330x200x150	X462SA2	350x250x97
X347SA2	330x300x150	X463SA2	300x300x167
X349SA2	400x300x90	X464SA2	380x380x167
X357SA2	400x300x150	X465SA2	380x380x217
X397SA2	400x560x90	X466SA2	500x300x167
X398SA2	400x560x150	X467SA2	600x300x167
X407SA2	400x300x190	X468SA2	600x380x217
X408SA2	330x200x190		
X409SA2	330x300x190		
X410SA2	400x560x190		
X411SA2	400x800x190		
X412SA2	500x300x190		
X413SA2	500x400x190		





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**Tab. 4 – Used Ex components in boxes- terminal block:**

KEMA 00 ATEX 2052U	LCIE 02 ATEX 0010U	KEMA 98 ATEX 1683U	LCIE 02 ATEX 0006U	FTZÚ 01 ATEX 073U
KEMA 00 ATEX 2129U	LCIE 02 ATEX 0012U	PTB 97 ATEX 4564U	PTB 99 ATEX 2032U	FTZÚ 02 ATEX 0199U
SEE 00 ATEX 2847U	LCIE 02 ATEX 0014U	PTB 98 ATEX 3125U	INERIS 03 ATEX 9015U	FTZÚ 03 ATEX 0237U
KEMA 01 ATEX 2048U	LCIE 02 ATEX 0015U	PTB 98 ATEX 3129U	INERIS 02 ATEX 9007U	FTZÚ 05 ATEX 0034U
KEMA 01 ATEX 2132U	LCIE 02 ATEX 0017U	PTB 98 ATEX 3131U	INERIS 04 ATEX 9003U	FTZÚ 04 ATEX 0347
KEMA 01 ATEX 2133U	LCIE 02 ATEX 0019U	PTB 98 ATEX 3132U	PTB 01 ATEX 1021U	
SNCH 02 ATEX 3401U	LCIE 02 ATEX 0020U	PTB 98 ATEX 3133U	PTB 00 ATEX 1111U	
KEMA 03 ATEX 2082U	LCIE 02 ATEX 0021U	PTB 98 ATEX 3134U	PTB 01 ATEX 1059U	
KEMA 03 ATEX 2380U	LCIE 02 ATEX 0022U	PTB 99 ATEX 3109U	PTB 97 ATEX 1068U	
KEMA 03 ATEX 2552U	LCIE 02 ATEX 0023U	PTB 00 ATEX 3113U		
KEMA 03 ATEX 2557U	LCIE 02 ATEX 0024U	PTB 00 ATEX 3110U		
KEMA 98 ATEX 0545U	LCIE 02 ATEX 0025U	DEMKO03ATEX131845U		
KEMA 99 ATEX 3508U	LCIE 02 ATEX 0026U	PTB 03 ATEX 1162U		
KEMA 00 ATEX 2100U	LCIE 02 ATEX 0027U			
KEMA 01 ATEX 2129U	LCIE 02 ATEX 0028U			
KEMA 03 ATEX 2382U	LCIE 02 ATEX 0029U			
KEMA 04 ATEX 2048U	LCIE 02 ATEX 0031U			
KEMA 05 ATEX 2148U	LCIE 02 ATEX 0032U			
KEMA 06 ATEX 0017U	LCIE 03 ATEX 0034U			
KEMA 96 ATEX 4370U				
KEMA 98 ATEX 1651U				
KEMA 98 ATEX 1786U				
KEMA 99 ATEX 4487U				
KEMA 99 ATEX 8332U				
PTB 06 ATEX 1034U				
PTB 99 ATEX 3132U				

**Tab. 5 – Used Ex components in boxes – enclosures:**

Device boxes- Al alloy	Device boxes - polyester	Device boxes-steel
KEMA 02 ATEX 2031U PTB 98 ATEX 3101U KEMA 02 ATEX 2088U	FTZÚ 01 ATEX 0075U KEMA 02 ATEX 2032U PTB 01 ATEX 1061U KEMA 03 ATEX 2078U	FTZÚ 01 ATEX 0074U PTB 00 ATEX 1101U

