



Physical Technical Testing Institute  
Ostrava-Radvanice



## 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 02 ATEX 0198**

(4) Equipment or protective system: **Explosion proof control and distribution box,  
type X103HM, X103HM/d, X103HM/DA**

(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°

**02/0198 dated 15. September 2002**

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

**EN 50014:1997+A1, A2 EN 50018:2000 EN 50019:2000 EN 50281-1-1:1998**

(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:

(13)



**II 2G/3D EEx de IIB T6 T 63°C**

for type X103HM a X103HM/DA

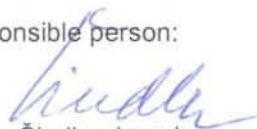


**II 3GD EEx d IIB T6 T 63°C**

for type X103HM/d

This EC-Type Examination Certificate is valid till: **30.09.2007**

Responsible person:

  
Dipl. Ing. Šindler Jaroslav  
Head of certification body



Date of issue: 18.09.2002

Number of pages: 1/3

This certificate is granted subject to the general conditions of the Physical Technical Testing Institute.  
This certificate may only be reproduced in its entirety and without any change, schedule included.



**Physical Technical Testing Institute  
Ostrava-Radvanice**

(13)

**Schedule**

(14) **EC-Type Examination Certificate N° FTZÚ 02 ATEX 0198**

(15) Description of Equipment or Protective System:

Explosion-proof control and distribution boxes of the type X103HM, X103HM/d and X103HM/DA are produced of an Al alloy in accordance with Czech standard ČSN 424331 (as regards their weight they contain less than 6% of magnesium) and their surfaces are finished with a powder coating paint. The instrument part of the box (space "S") is made as flameproof enclosure EEx "d" and the terminal part of the box (space "T") has type of protection increased safety EEx "e" (variant 1).

Spaces EEx "d" and EEx "e" are mutually galvanically interconnected by means of certified flameproof bushings Ex d IIB or IIC. In certain cases it is possible to place the terminal blocks in the part where there are usually the instruments in the flameproof enclosure (space "S") and el. instruments themselves in the part where there are usually terminal blocks – enclosure with type of protection increased safety (space "T") – variant 2.

Of crucial importance is the location of certified increased safety cable entries EEx e II which determines which part of the box is enclosure with type of protection increased safety EEx "e" and which part is the flameproof enclosure EEx "d" without cable entries. It is possible to install any instruments in the box, this is only limited by the power loss of 70 W in the space "S".

The space "S" has volume greater than 2000 cm<sup>3</sup>; the space "T" has volume less than 2000 cm<sup>3</sup>.

Boxes of the type X103HM/DA contain, in addition, switching and regulating thermostats whose capillary tubes pass through the wall of the flameproof enclosure via a special encapsulated bushing.

The control and distribution boxes of the type X103HM/d are designed as equipment with a direct entry into the flameproof enclosure and are installed with certified flameproof cable entries (glands) of min. EEx d IIB.

(16) Report No. : 02/0354 dated

(17) Special conditions for safe use: --

(18) Essential Health and Safety Requirements:

18.1 There are covered by standards see art. (9).

Responsible person:

Dipl. Ing. Šindler Jaroslav  
Head of certification body



Date of issue: 18.09.2002

Number of pages: 2/3

This certificate is granted subject to the general conditions of the Physical Technical Testing Institute.  
This certificate may only be reproduced in its entirety and without any change, schedule included.



**Physical Technical Testing Institute  
Ostrava-Radvanice**

(13)

**Schedule**

(14) **EC-Type Examination Certificate N° FTZÚ 02 ATEX 0198**

(19)

**LIST OF DOCUMENTATION**

- Drawing for certification G-2-902812/2
- Documentation for certification: Description to Drawing for certification G-2-902812/2
- Drawing for certification G-2-902812/3
- Documentation for certification: Description to Drawing for certification G-2-902812/3
- Drawing of type plate G-4-190019/1
- Drawing of type plate G-4-190019/2
- Drawing of type plate G-4-190019/3
- Drawing of capillary case (tube) G-4-210004
- Drawing inspection window G-4-555000
- Drawing inspection window G-4-555005
- User's instruction N740021/1
- User's instruction N740021/2
- User's instruction N740021/3





## Supplement No. 1 to EC-Type Examination Certificate

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

(3) EC-Type Examination Certificate Number:

**FTZÚ 02 ATEX 0198**

(4) Equipment or protective system: **Explosion proof control and distribution box  
of type X103HM resp. X103HM/d.**

(5) Manufacturer: **GENERI, s.r.o.**

(6) Address: **Uničovská 50, 787 01 Šumperk, Czech Republic**

(7) This supplement of certificate is valid for: - modification of certified apparatus  
- prolongation of certificate validity

(8) Modification of certified apparatus (protective system) and any of its approved variants are specified  
in documentation, list of which is mentioned in schedule of this certificate.

(9) This supplement to type examination certificate is valid only for type examination of design and  
construction of product sample in accordance with Annex 3 Paragraph 6) of Directive No. 94/9/EC.  
The Directive contains another requirements, which manufacturer shall fulfil before products are  
place on market or introduce in service.

(10) Safety requirements of modified parts were fulfilled by satisfying the following standards:

**EN 60079-0:2007; EN 60079-1:2004; EN 60079-7:2007;  
EN 61241-0:2007; EN 61241-1:2005**

(11) Marking of equipment shall contain symbols:

X103HM:  **II 2G/3D Ex de tD IIB T6 T78°C**

**-20°C ≤ Ta ≤ +55°C**

X103HM/d:  **II 2G/3D Ex d tD IIB T6 T78°C**

**-20°C ≤ Ta ≤ +55°C**

(12) This type examination certificate is valid till: **28.02.2013**

Responsible person:

Dipl. Ing. Šindler Jaroslav

Head of certification body



Date of issue: 26.02.2008

Number of pages: 2

Page: 1/2

This supplement to certificate is granted subject to the general conditions of the Physical Technical Testing Institute.  
This supplement to certificate may only be reproduced in its entirety and without any change, schedule included.



**Physical Technical Testing Institute  
Ostrava-Radvanice**

(13)

**Schedule**

(14)

**Supplement No. 1 to  
EC-Type Examination Certificate N° FTZÚ 02 ATEX 0198**

(15) Description of Equipment or Protective System:

- a) Explosion proof control and distribution box of type X103HM resp. X103HM/d is recertified according standards EN 60079-0:2007; EN 60079-1:2004; EN 60079-7:2007; EN 61241-0:2007; EN 61241-1:2005.
- b) Modification Ta : -20°C ÷ +55°C.

(16) Report No. : 02/0198-1 dated 25.02.2008

(17) Special conditions for safe use: --

(18) Essential Health and Safety Requirements:

Covered by standards mentioned in (10) of this certificate.

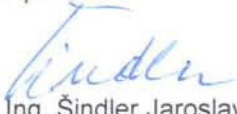
New editions of standards don't require any additional tests.

(19) LIST OF DOCUMENTATION

*Date:*

- |                                     |                       |            |
|-------------------------------------|-----------------------|------------|
| • Certification drawing No.:        | G-2-902812/2          | 06.09.2007 |
| • Drawing manufacturer's label No.: | G-2-902812/2          | 21.08.2007 |
| • User manual No.:                  | 740021/1 for X103HM   | 24.08.2007 |
| • User manual No.:                  | 740021/2 for X103HM/d | 29.08.2007 |

Responsible person:

  
Dipl. Ing. Šindler Jaroslav  
Head of certification body



Date of issue: 26.02.2008

Page: 2/2

This supplement to certificate is granted subject to the general conditions of the Physical Technical Testing Institute.  
This supplement to certificate may only be reproduced in its entirety and without any change, schedule included.





**Supplement No. 2 to  
EC-Type Examination Certificate**

Equipment or Protective Systems Intended for Use  
in Potentially Explosive Atmospheres  
(Directive 94/9/EC)

(3) EC-Type Examination Certificate Number:

**FTZÚ 02 ATEX 0198X**

(4) Equipment or protective system: **Explosion proof control and distribution box of type X103HM X103HM/d.**

(5) Manufacturer: **GENERI, s.r.o.**

(6) Address: **Uničovská 50, 787 01 Šumperk, Czech Republic**

(7) This supplement of certificate is valid for: - modification of certified apparatus  
- prolongation of certificate validity

(8) Modification of certified apparatus (protective system) and any of its approved variants are specified in documentation, a list of which is mentioned in the schedule of this certificate.

(9) This supplement to type examination certificate is valid only for type examination of design and construction of product sample in accordance with Annex 3 Paragraph 6) of Directive No. 94/9/EC. The Directive contains other requirements, which manufacturer shall fulfil before products are placed on the market or introduce in service.

(10) Safety requirements of modified parts were fulfilled by satisfying the following standards:

**EN 60079-0:2012; EN 60079-1:2007; EN 60079-7:2007; EN 60079-31:2009**

(11) Marking of equipment shall contain symbols:

**X103HM: Ex II 2G Ex de IIB T6 Gb**

**-20°C ≤ Ta ≤ +55°C**

**Ex II 3D Ex tc IIB T78°C Dc**

**-20°C ≤ Ta ≤ +55°C**

**X103HM/d: Ex II 2/3G Ex de IIB T6 Gb/Gc**

**-20°C ≤ Ta ≤ +55°C**

**Ex II 3D Ex tc IIB T78°C Dc**

**-20°C ≤ Ta ≤ +55°C**

(12) This type examination certificate is valid till: **31.05.2018**

Responsible person:

*Lukáš Martinák*  
Dipl. Ing. Lukáš Martinák  
Head of Certification Body



Date of issue: 03.05.2013

Page: 1/3

This supplement to certificate is granted subject to the general conditions of the FTZÚ, s.p.  
This supplement to certificate may only be reproduced in its entirety and without any change, schedule included.



Physical Technical Testing Institute  
Ostrava – Radvanice

(13)

Schedule

(14)

Supplement No. 2 to  
EC-Type Examination Certificate N° FTZÚ 02 ATEX 0198X

(15) Description of Equipment or Protective System:

- a) Explosion proof control and distribution box of type X103HM resp. X103HM/d is recertified according to standards EN 60079-0:2012; EN 60079-1:2007; EN 60079-7:2007; EN 60079-0:2009.
- b) New variant of cover with sight glass Ø 100 mm.
- c) After installation of enclosure apparatus at least 20% of each cross-section area remain free.

List of enclosure apparatus is mentioned in Annex No. 1 of documentation of certification No. G-2-902812/2 dated 22.04.2013.

Equipment parameters are without any changes.

(16) Report No.: 02/0198-2

dated 30.04.2013

(17) Special conditions for safe use:

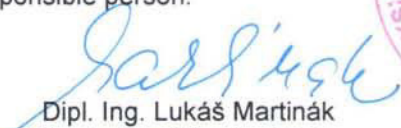
- 17.1 Maximum design gaps of flameproof joints are smaller than maximum permitted gaps according to standard. Verified values of design gaps are mentioned in documentation, a list of which is given in clause (19) of this supplement.
- 17.2 Cable glands have to be certified according to the standards mentioned in EN 60079-0:2012, EN 60079-1:2007 or EN 60079-7:2007.

(18) Essential Health and Safety Requirements:

Covered by standards mentioned in (10) of this certificate.

New editions of standards do not require any additional tests.

Responsible person:

  
Dipl. Ing. Lukáš Martinák  
Head of Certification Body



Date of issue: 03.05.2013

Page: 2/3

This supplement to certificate is granted subject to the general conditions of the FTZÚ, s.p.  
This supplement to certificate may only be reproduced in its entirety and without any change, schedule included.



Physical Technical Testing Institute  
Ostrava – Radvanice

(13)

Schedule

(14)

Supplement No. 2 to  
EC-Type Examination Certificate N° FTZÚ 02 ATEX 0198X

(19) List of Documentation:

Dated

• Certification drawing No.:	G-2-902812/2	22.04.2013
• Certification drawing No.:	G-3-902837/2	04.05.2011
• Certification drawing No.:	G-4-555010/2	19.11.2011
• User manual No.:	N740021/1 rev.5 for X103HM	22.04.2013
• User manual No.:	N740021/2 rev.5 for X103HM/d	22.04.2013

Responsible person:

Dipl. Ing. Lukáš Martinák  
Head of Certification Body



Date of issue: 03.05.2013

Page: 3/3

This supplement to certificate is granted subject to the general conditions of the FTZÚ, s.p.  
This supplement to certificate may only be reproduced in its entirety and without any change, schedule included.





(1) **Supplementary EU - Type Examination Certificate No.3**

(2) **Equipment or Protective Systems Intended for Use  
in Potentially Explosive Atmospheres  
(Directive 2014/34/EU)**

(3) EU - Type Examination Certificate number:

**FTZÚ 02 ATEX 0198X**

(4) Product: **Explosion proof control and distribution box of type X103HM or X103HM/d.**

(5) Manufacturer: **GENERI, s.r.o.**

(6) Address: **Uničovská 50, 787 01 Šumperk, Czech Republic**

(7) This supplementary certificate extends EC - Type Examination Certificate No. FTZÚ 02 ATEX 0198X to apply to products designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

(8) The Physical-Technical Testing Institute, Notified Body number 1026, in accordance with Articles 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26.02.2014, certifies that this product, as modified by this supplementary certificate, has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

(9) In accordance with Article 41 of Directive 2014/34/EU, EC-Type Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20.04.2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Supplementary Certificates to such EC-Type Examination Certificates, and new issues of such certificates, may continue to bear the original certificate number issued prior to 20.04.2016.

(10) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

**EN 60079-0:2012+A11:2013; EN 602079-1:2014; EN 60079-7:2007; EN 60079-31:2014**

(11) The marking of the product shall include the following:

X103HM:		II 2G Ex de IIB T6 Gb	-20°C≤Ta≤+55°C
		II 3D Ex t IIIB T78°C Dc	-20°C≤Ta≤+55°C
X103HM/d:		II 2/3G Ex de IIB T6 Gb/Gc	-20°C≤Ta≤+55°C
		II 3D Ex t IIIB T78°C Dc	-20°C≤Ta≤+55°C

(12) This certificate is valid till: **31.05.2023**

Responsible person:

Dipl. Ing. Lukáš Martinák  
Head of Certification Body



Date of issue: 31.05.2018

Page: 2/2

This certificate is granted subject to the general conditions of the FTZÚ, s.p.  
This certificate may only be reproduced in its entirety and without any change, schedule included.



**Physical-Technical Testing Institute  
Ostrava - Radvanice**

(13)

**Schedule**

(14)

**Supplementary EU - Type Examination Certificate No. 3  
to FTZÚ 02 ATEX 0198X**

(15) Description of the variation to the Product:

- Evaluation according to the newest standards EN 602079-1:2014; EN 60079-31:2014.
- Prolongation of certificate validity.

Technical parameters and construction remain unchanged.

(16) Report Number.: 02/0198/3

(17) Specific Conditions of Use:

1. Verified values of the maximum gaps and minimum constructional length of flameproof joints of this enclosure are different from relevant minimum and maximum values mentioned in standard. To obtain information about joints dimension it is necessary to contact the manufacturer.
2. Fasteners Fasteners with a minimum property class 8.8 shall be used for mounting of the flame proof enclosure parts.
3.  $T_{amb}: -20^{\circ}C \leq T_a \leq +55^{\circ}C$

(18) Essential Health and Safety Requirements:

Compliance with the Essential Health and Safety Requirements is covered by standards mentioned in clause (10) of this supplementary certificate.

(19) Drawings and Documents:

Number:	Sheets:	Revision:	Date:	Description:
N740021/1	3	6	01.04.2018	User's manual (X103HM)
N740021/2	3	6	01.04.2018	User's manual (X103HM/d)
G-2-902812/4	2	--	01.04.2018	Drawing
G-2-902812/4	5	--	01.04.2018	Description for drawing

Responsible person:

Dipl. Ing. Lukáš Martinák  
Head of Certification Body



Date of issue: 31.05.2018

Page: 2/2

This certificate is granted subject to the general conditions of the FTZÚ, s.p.  
This certificate may only be reproduced in its entirety and without any change, schedule included.

Physical-Technical Testing Institute, s.p., Pikartská 1337/7, 716 07 Ostrava - Radvanice, Czech Republic  
tel +420 595 223 111, fax +420 596 232 672, ftzu@ftzu.cz, www.ftzu.cz