



Physical Technical Testing Institute
Ostrava-Radvanice



(1) **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 0356

(4) Equipment or protective system: **In-line straight bi-directional flame arrester for stable
detonation DN 25, type J 131.25/P4AD2**

(5) Manufacturer: **ADAST – SYSTEMS a.s.**

(6) Address: **Mírová 2, 679 04 Adamov, 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°

02/0136 dated 11 October 2002

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

EN 12874:2001

(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 1G IIA**

This EC-Type Examination Certificate is valid till: **31 of December 2007**

Responsible person:

Dipl. Ing. Šindler Jaroslav

Head of certification body



Date of issue: 11 of October 2002

Number of pages: 3

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Physical Technical Testing Institute
Ostrava-Radvanice

(13)

Schedule

(14) **EC-Type Examination Certificate N° FTZÚ 02 ATEX 0356**

(15) Description of Equipment or Protective System:

In-line straight bi-directional flame arrester for stable detonation, type J 131.25/P4AD2 is designed for deflagration. Valve end-of-line flame arrester consists of the following main parts:

- arrester housing;
- tape flame arrester element
- anti-detonation mufflers
- connection flange with internal thread G 1".

Flame arrester element consists of two tape flame arrester elements with gap (high of crimped tape) $\leq 0,4$ mm.

Technical data:

| | |
|---|-----------------------|
| Nominal inside diameter of arrester | DN 25 |
| Nominal pressure | PN 10 |
| Test pressure | 1,5 MPa |
| Explosion group | IIA |
| Constructional gap of joint in arrester element $\leq 0,4$ mm | |
| Service temperature | - 30 °C + 60 °C |
| Service pressure | 0,08 0,11 MPa |
| Mass | 2,2 kg |

(16) Report No. : 02/0356

(17) Special conditions for safe use: -

(18) Essential Health and Safety Requirements:

18.1 Apparatus comply with essential requirement of Directive 94/9/EC, including annex 2, clause 1.0.6.

18.2 Installation and service requirements comply with requirement in accordance with cl. 6.4 of EN 12874:2001 and are given in Instruction for installation, No. OÚ/011/2002/CZ.

Responsible person:

Dipl. Ing. Šindler Jaroslav

Head of certification body



Date of issue: 11 of October 2002

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**Physical Technical Testing Institute
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(14) **EC-Type Examination Certificate N° FTZÚ 02 ATEX 0356**

(19)

LIST OF DOCUMENTATION

- Technical specification ... document No. 1137/2002 ... 27.09.2002

- Instruction for installation, service and maintenance ... No. OÚ/011/2002/CZ/X./2002

- Drawings No:
 - 429 401 172 ... 27.09.2002
 - 425 401 173 ... 27.09.2002
 - 425 401 174 ... 27.09.2002
 - 420 400 480 c ... 27.09.2002
 - 420 400 425 c ... 27.09.2002
 - 420 400 380 d ... 27.09.2002
 - 420 400 379 e ... 27.09.2002
 - 420 400 371 i ... 27.09.2002
 - 420 400 372 i ... 27.09.2002
 - 420 400 375 b ... 27.09.2002
 - 420 400 374 a ... 27.09.2002
 - 420 400 376 ... 27.09.2002
 - 420 400 377 ... 27.09.2002
 - 420 400 373 ... 27.09.2002
 - 420 400 378 a ... 27.09.2002
 - 420 401 118 ... 27.09.2002
 - 420 400 482 a ... 27.09.2002

- Piece list No:
 - 429 401 172 ... 27.09.2002
 - 425 401 173 ... 27.09.2002
 - 425 401 174 ... 27.09.2002



(1) **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 0356

(4) Equipment or protective system: **In-line straight bi-directional flame arrester for stable
detonation DN 25, type J 131.25/P4AD2**

(5) Manufacturer: **ADAMOV – SYSTEMS, a.s.**

(6) Address: **Mírová 2, 679 04 Adamov, Czech Republic**

(7) This supplement of certificate is valid for: - extension 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 fulfil by satisfying of following standards:

EN 12874:2001

(11) Marking of equipment designed according to this supplement shall contain symbols:

 **II 1G IIA**

(12) This type examination certificate is valid till: **31. 12. 2012**

Responsible person:

Dipl. Ing. Šindler Jaroslav
Head of certification body



Date of issue: 18 of December 2007

Number of pages: 2

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**Physical Technical Testing Institute
Ostrava-Radvanice**

(13)

Schedule

(14)

**Supplement No. 1 to
EC-Type Examination Certificate N° FTZÚ 02 ATEX 0356**

(15) Description of Equipment or Protective System:

Design of the flame arrester, type J 131.25/P4AD2, is without modification, the production and approval documentation weren't altered.

The standard EN 12874:2001 is still valid without any modification.

(16) Report No. : 02/0356 – supplement No.1


(17) Special conditions for safe use: -

(18) Essential Health and Safety Requirements:

18.1 The apparatus fulfil the essential health and safety requirement of Directive 94/9/EC, and standard mentioned in (10).

18.2 Installation and service requirements are given in Instruction for installation, service and maintenance No. OÚ/011/2002/CZ.

Responsible person:


Dipl. Ing. Šindler Jaroslav
Head of certification body



Date of issue: 18 of December 2007

Number of pages: 2

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(1) **Supplement No. 2 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 0356

(4) Equipment or protective system: **In-line straight bi-directional flame arrester for stable
detonation DN 25, type J 131.25/P4AD2**

(5) Manufacturer: **Adast Systems, a.s.**

(6) Address: **Mírová 2, 679 04 Adamov, Czech Republic**

(7) This supplement of certificate is valid for: - modification of manufacturer's name
- 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 the manufacturer shall fulfil before products are placed on the market or introduce in service.

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

EN 12 874:2001

(11) Marking of equipment designed according to this supplement shall contain symbols:

Ex II 1G IIA

(12) This type examination certificate is valid till: **30.06.2015**

Responsible person:

Dipl. Ing. Šindler Jaroslav
Head of certification body



Date of issue: 30.06.2010

Number of pages: 2
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**Physical Technical Testing Institute
Ostrava-Radvanice**

(13)

Schedule

(14)

**Supplement No. 2 to
EC-Type Examination Certificate N° FTZÚ 05 ATEX 0356**

(15) Description of Equipment or Protective System:

Design of the flame arrester, type **J 131.25/P4AD2**, is the same.
The standard EN 12874:2001 is still valid without any modification.
Modification of manufacturer's name.

(16) Report No. : 05/0326 + supplement No.1 + supplement No.2

(17) Special conditions for safe use: --

(18) Essential Health and Safety Requirements:

- 18.1 The apparatus fulfil the essential health and safety requirement of Directive 94/9/EC, and standard mentioned in (10).
- 18.2 Installation and service requirements are given in Instruction for installation, service and maintenance No. OÚ/006/2005/CZ.

(19) LIST OF DOCUMENTATION

- Instruction for installation, service and maintenance No. OÚ/011/2002/CZ on 10/2002 was replaced by Instruction for installation, service and maintenance No. OÚ/006/2005/CZ on 5/2010. Further documentation see certificate FTZÚ 05 ATEX 0326.

Responsible person:

Dipl. Ing. Šindler Jaroslav
Head of certification body



Date of issue: 30.06.2010

Number of pages: 2
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Physical Technical Testing Institute
Ostrava-Radvanice



(1) **Supplement No. 3 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 0356X

(4) Equipment or protective system: **Flame arrester for stable detonation,
In-line, straight, bi-directional, DN25,
Type J 131.25/P4AD2**

(5) Manufacturer: **Adast Systems, a.s.**

(6) Address: **Mírová 2, 679 04 Adamov, Czech Republic**

(7) This supplement of certificate is valid for: - verification according to standard listed in (10)
- modification of certified product

(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 other 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:

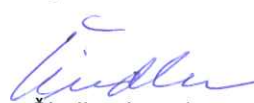
EN ISO 16852:2010

(11) Marking of equipment designed according to this supplement shall contain symbols:



(12) The type examination certificate is valid till: 30. 01. 2017

Responsible person:


Dipl. Ing. Šindler Jaroslav
Head of certification body



Date of issue: 30. 01. 2012

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Physical Technical Testing Institute
Ostrava-Radvanice

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Supplement No. 3 to
EC-Type Examination Certificate N° FTZÚ 02 ATEX 0356X

(15) Description of Equipment or protective system:

The design of the flame arrester type J 131.25/P4AD2 wasn't modified. This flame arrester is in-line, straight, bi-directional, for stable detonation DET 4.

The supplement verifies requirements of new standard mentioned in clause (10).

The marking was modified and the warning labels were added.

| | |
|----------------------|--|
| Size flame arrester: | DN25 |
| Explosion group: | IIA |
| Service temperature: | $-20^{\circ}\text{C} \leq T_o \leq 60^{\circ}\text{C}$ |
| Service pressure: | $p_o \leq 0,11 \text{ MPa}$ |
| Stabilised burning | BC: c (without burning time) |

(16) Report No.: 02/0356-3 on 30.01.2012

The sample of flame arrester for stable detonation was tested for stable detonation without restriction. During the all stable detonation tests and deflagration tests the flame arrester sample prevented flame transmission.

The burning test wasn't carried out.

(17) Special conditions for safe use:

17.1 Instruction for installation of this flame arrester are given in manufacturer's document No. OÚ/006/2005-DET/CZ -VII/2011.

17.2 The flame arrester wasn't verified for application where the burning can occur.

17.3 For safe application of flame arresters must be fulfil requirements according to EN ISO 16852 for installation, limits for use and supplementary protective measures.

(18) Essential Health and Safety Requirements: They are included in standards, which are mentioned in clause (10) of this certificate and manufacturer's documentation.

The other requirements and EC Directives can be valid for the product.

Responsible person:

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Schedule

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Supplement No. 3 to
EC-Type Examination Certificate N° FTZÚ 02 ATEX 0356X

(19) List of documentation:

Updated documentation:

| | | |
|------------------------------|-----------------------------|------------|
| Technical description No. | 1137/2002 | 01.07.2011 |
| Drawings No.: | 429401172, revision b) | 07.02.2011 |
| | 429301816 | 14.11.2011 |
| | 425401173, revision a) | 02.02.2011 |
| | 425401174, revision a) | 02.02.2011 |
| | 420401118, revision d) | 31.01.2011 |
| Instruction for use No. | OÚ/006/2005-DET/CZ VII/2011 | 24.11.2011 |
| Supplement to documentation: | | |
| Drawings No.: | 425401743 | 31.01.2011 |
| | 420301741 | 31.01.2011 |

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