



EC-Type Examination Certificate

- (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 11 ATEX 0151X

- (4) Equipment: **Rotary Valves, Type EA1MRP9, EA1,5MRP9, EA1,75MRP9,
EA2MRP9, EA4MRP9**
- (5) Manufacturer: **CATTIN FILTRATION S.A.S.U.**
- (6) Address: **6 Rue des Bouleaux, 25150 Pont de Roide, France**

- (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°: **11/0151 dated 11.07.2012**

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

EN 15089:2009

EN 13463-1:2009

EN13463-5:2011

- (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:

 **D St1
II 1D/2D c 70°C**

This EC-Type Examination Certificate is valid till:

Responsible person:


Mr Lukáš Martinák
Head of certification body




17.07.2017
Date of issue: 17.07.2012

Number of pages: 4
Page: 1/4

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Physical Technical Testing Institute
Ostrava-Radvanice

(13)

Schedule

(14) **EC-Type Examination Certificate N° FTZÚ 11 ATEX 0151X**

(15) Description of Equipment or Protective System: The rotary valves **EAMRP9** are made explosion pressure shock resistant. They prevent to the transmission of the effect of explosion, pressure wave, flame and sparks until the maximum reduced explosion pressure $p_{red,max}$ in both directions of the divided areas with dangerous atmosphere of the flammable dust (zone 20). The combustible dust is described by the parameter of explosion $Kst_{max} = 20 \text{ MPa.m.s}^{-1}$. The minimal thickness of each rubber blade is **8,5 mm**. Rotary valves fulfill these conditions till the values:

Type	$p_{red,max}$ [kPa]	Rotation speed [RPM]
EA1MRP9	80	20
EA1,5MRP9 - EA4MRP9	60	20

The internal design of rotary valves itself ensures the sufficient level of protection against ignition source even in case of rare malfunction. For surrounding area (**zone 21, 22**) the rotary valves - **without drive** - ensure sufficient level of protection against ignition sources during normal service conditions and in case of expected malfunctions.

(16) Report No. : FTZU 11/0151 – 13 pages

(17) Special conditions for safe use: Equipment for detection of the explosion and devices for automatical and instantaneous stopping of the rotary valve after detection of the explosion is not subject of this certificate. User has to add such equipment that upon detection of an explosion the rotary valve will stop automatically and instantaneously.

(18) Essential Health and Safety Requirements: are satisfied by requirements of standards mentioned in (9) and marking in accordance with clause 1.0.5 Annex 2 of Directive 94/9/EC for protective system, which is specified in (12) of this certificate.

Responsible person:


Mr Lukáš Martinák

Head of certification body



Date of issue: 17.07.2012

Page: 2/4

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Ostrava-Radvanice

(13)

Schedule

(14) **EC-Type Examination Certificate N° FTZÚ 11 ATEX 0151X**

(19)

LIST OF DOCUMENTATION

• drawing N° 6377	16.05.2012
• drawing N° 5861	15.05.2012
• drawing N° 5862	15.05.2012
• drawing N° 5863	15.05.2012
• drawing N° 5859	15.05.2012
• drawing N° 5860	15.05.2012
• drawing N° 6390	15.05.2012
• drawing N° 6395	15.05.2012
• drawing N° 6396	15.05.2012
• drawing N° 5870	15.05.2012
• drawing N° 5866	15.05.2012
• drawing N° 5868	15.05.2012
• drawing N° 5869	15.05.2012
• drawing N° 5867	15.05.2012
• drawing N° 6373	15.05.2012
• drawing N° 6391	15.05.2012
• drawing N° 5871	15.05.2012
• drawing N° 5872	15.05.2012
• drawing N° 5875	15.05.2012
• drawing N° 5876	15.05.2012
• drawing N° 5877	15.05.2012
• drawing N° 5874	16.05.2012
• drawing N° 5873	15.05.2012
• drawing N° 5878	15.05.2012

Responsible person:


Mr Lukáš Martinák

Head of certification body



Date of issue: 17.07.2012

Page: 3/4

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(13)

Schedule

(14) **EC-Type Examination Certificate N° FTZÚ 11 ATEX 0151X**

(19)

LIST OF DOCUMENTATION

• drawing N° 6374	15.05.2012
• drawing N° 5879	15.05.2012
• drawing N° 6392	15.05.2012
• drawing N° 5883	15.05.2012
• drawing N° 5884	15.05.2012
• drawing N° 5881	15.05.2012
• drawing N° 5882	15.05.2012
• drawing N° 5880	15.05.2012
• drawing N° 6393	15.05.2012
• drawing N° 5885	15.05.2012
• drawing N° 6375	15.05.2012
• drawing N° 5886	15.05.2012
• drawing N° 5890	15.05.2012
• drawing N° 5888	15.05.2012
• drawing N° 5889	15.05.2012
• drawing N° 5887	15.05.2012
• drawing N° 5891	15.05.2012
• drawing N° 5892	15.05.2012
• drawing N° 6394	15.05.2012
• drawing N° 6376	15.05.2012
• drawing N° 5864	15.05.2012
• drawing N° 5865	15.05.2012
• D-NT-ECL-003-GB-01	Manual for use

Responsible person:

Date of issue: 17.07.2012


Mr Lukáš Martinák

Head of certification body



Page: 4/4

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(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 11 ATEX 0151X

(4) Equipment/Protective system: **Rotary valve type EA1.5LMRP9**

(5) Manufacturer: **CATTIN FILTRATION S.A.S.U.**

(6) Address: **6 Rue des Bouleaux, 25150 Pont de Roide, France**

(7) This supplement of certificate is valid for: - extension of series

(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 fulfill 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 13463-1:2009 EN 13463-5:2011 EN 15089:2009

(11) Marking of equipment shall contain symbols:

 **D St1
II 1D/2D c 70 °C**

(12) This type examination certificate is valid till: **17.07.2017**

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body



Date of issue: 11.06.2013

Page: 1/3

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Physical Technical Testing Institute
Ostrava – Radvanice

(13)

Schedule

(14)

Supplement No. 1 to
EC-Type Examination Certificate N° FTZÚ 11 ATEX 0151X

(15) Description of Protective System:

The object of this supplement is:

- extension of series

The rotary valves **EA1.5LMRP9** are design as explosion pressure shock resistant. They prevent to the transmission of the effect of explosion, pressure wave, flame and sparks until the maximum reduced explosion pressure $p_{red,max}$ in both directions of the divided areas with dangerous atmosphere of the flammable dust (zone 20). The combustible dust is described by the parameter of explosion Kst_{max} . The minimal thickness of each rubber blade is **8.5 mm**. Rotary valves fulfill these conditions till the values:

Type	$p_{red,max}$ [kPa]	Kst_{max} [MPa.m.s ⁻¹]	Rotation speed [ot.min ⁻¹]
EA1.5LMRP9	60	20	20

The internal design of rotary valves itself ensures the sufficient level of protection against ignition source even in case of rare malfunction. For surrounding area (**zone 21, 22**) the rotary valves - **without drive** - ensure sufficient level of protection against ignition sources during normal service conditions and in case of expected malfunctions.

(16) Report No.: FTZÚ 11/0151/1

FTZÚ 13.0235-88– design verification of the rotary valve EA1.5LMRP9

(17) Special conditions for safe use:

Equipment for detection of the explosion and devices for automatically and instantaneous stopping of the rotary valve after detection of the explosion is not subject of this certificate.

User has to add such equipment that upon detection of an explosion the rotary valve will stop automatically and instantaneously.

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body



Date of issue: 11.06.2013

Page: 2/3

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(13)

Schedule

(14)

Supplement No. 1 to
EC-Type Examination Certificate N° FTZÚ 11 ATEX 0151X

(18) Essential Health and Safety Requirements:

Are satisfied by requirements of standards mentioned in (10) and marking in accordance with clause 1.0.5 Annex 2 of Directive 94/9/EC for protective system, which is specified in (11) of this certificate.

(19) LIST OF DOCUMENTATION

Manual for use for rotary valves EAMRP9

Risk analysis for rotary valves EAMRP9

Drawings No.:	drawing No. 5864	15.05.2012
	drawing No. 5865	15.05.2012
	drawing No. 5868	21.03.2013
	drawing No. 5891	13.09.2012
	drawing No. 6406	21.03.2013
	drawing No. 6407	21.03.2013
	drawing No. 6408	26.11.2012
	drawing No. 6409	26.11.2012
	drawing No. 6410	26.11.2012
	drawing No. 6411	26.11.2012
	drawing No. 6412	26.11.2012

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body



Date of issue: 11.06.2013

Page: 3/3

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(1) **Supplementary EU - Type Examination Certificate No.2**

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

(3) EU - Type Examination Certificate number:

FTZÚ 11 ATEX 0151X

(4) Product: **Rotary valve, type EA1MRP9, EA1,5MRP9, EA1.5LMRP9,
EA1,75MRP9, EA2MRP9, EA4MRP9**

(5) Manufacturer: **CATTIN FILTRATION SAS**

(6) Address: **6 Rue des Bouleaux, 25150 Pont de Roide, France**

(7) This supplementary certificate extends EC - Type Examination Certificate No. FTZÚ 11 ATEX 0151X 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 13463-1:2009, EN 13463-5:2011, EN 15089:2009

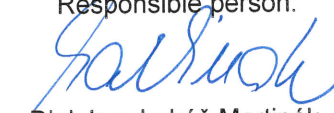
(11) The marking of the product shall include the following:



**D St1
II 1D/2D c 70 °C**

(12) This certificate is valid till: **31.03.2022**

Responsible person:


Dipl. Ing. Lukáš Martinák
Head of Certification Body



Date of issue: 31.03.2017

Page: 1/2

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Physical-Technical Testing Institute
Ostrava - Radvanice

(13)

Schedule

(14) **Supplementary EU - Type Examination Certificate No. 2
to FTZÚ 11 ATEX 0151X**

(15) Description of the variation to the Product:

The subjects of this supplementary certificate are:

- Modification of the product:

The rotary valves, type **EA...MRP9** and **EA...LMRP9** with explosion pressure shock resistant construction can be used for the transport of the flammable industrial dust, except of the metal dust. The combustible dust is described by the parameter of explosion $K_{st_{max}} = 20 \text{ MPa.m.s}^{-1}$ and their parameter **MIE** > 63 mJ.

The other parameters of the rotary valves remain unchanged and which are listed in the original certificate and the supplement No.1.

- Prolongation of certificate validity.

- Change of the manufacturer name.

(16) Report Number.: 11/0151/2

(17) Specific Conditions of Use: None additional to those listed previously.

(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:

Technical documentation remains unchanged and it is included in the original certificate and the supplement No.1.

Number	Sheets	Revision	Date	Title
D-NT-ECL-003-GB-03	15	REV 3	20.03.2017	Manual for use for rotary valves EAMRP9

Responsible person:


Dipl. Ing. Lukáš Martinák
Head of Certification Body



Date of issue: 31.03.2017

Page: 2/2