



Physical Technical Testing Institute
Ostrava-Radvanice



Type Examination Certificate

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

(3) Type Examination Certificate Number:

FTZÚ 06 ATEX 0329X

(4) Equipment: **Centrifugal fan type RQ 22-4D Ex**

(5) Manufacturer: **REMAK a.s.**

(6) Address: **Zuberská 2601, 756 61 Rožnov p. R., 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 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 Category 2 nonelectrical equipment, which is intended for use in potentially explosive atmospheres given in Annex II to the Council Directive 94/9/EC.

The examination and test results are recorded in confidential Report N°

06/0329 dated December 2006

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

EN 13463-1:2001; EN 13463-5:2003

(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 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:

Ex II 2G c T3

This Type Examination Certificate is valid till: **31.12.2011**

Responsible person:

Dipl. Ing. Šindler Jaroslav

Head of certification body



Date of issue: 20.12.2006

Number of pages: 3

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This certificate may only be reproduced in its entirety and without any change, schedule included.



**Physical Technical Testing Institute
Ostrava-Radvanice**

(13)

Schedule

(14)

Type Examination Certificate N° FTZÚ 06 ATEX 0329X

(15) Description of Equipment:

Centrifugal fan RQ 22-4D Ex is low pressure, radial fan with zinc plated impeller, which has forward bent vanes type RE22P-4DK.4Y.1R, event. SL-E 225x92 and it is intended to be assembled in air conditioning pipeline. This fan can be use indoor or outdoor and can convey air without solid, fibre, gluey or aggressive mixture. Parts of enclosure are made from zinc plated steel or stainless steel plate connected by spot welding. Copper intake is connected to enclosure by copper rivet. Engine with impeller is connected to enclosure through bowl with four bolts and fan beds. The bowl is connected to enclosure by other four bolts and fan beds and it is sealed by self-adhesive sealing. The fan has an earthing terminal. Counterweights are fastened to impeller by deformation rim. Clearance between impeller and air intake is minimum 1 % of impeller diameter.

Technical data:

$$V_{\max} = 1836 \text{ m}^3 \text{ hod}^{-1}$$

$$\Delta p_{t \max} = 320 \text{ Pa}$$

$$n = 1420 \text{ min}^{-1}$$

(16) Report No. : 06/0329

11+ 3 pages

(17) Special conditions for safe use:

Direct fan drive shall be provided by relevant certified explosion – proof electric motor with appropriate power and maximum rotation speed 1474 r/min which is selected according to potentially explosive atmospheres (zones in accordance with EN 60 079-10) present inside and outside of fan. Terminal box connected to fan shall be explosion protected type in accordance with potentially explosive atmosphere specification.

(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



Date of issue: 20.12.2006

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**Physical Technical Testing Institute
Ostrava-Radvanice**

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Schedule

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Type Examination Certificate N° FTZÚ 06 ATEX 0329X

(19)

LIST OF DOCUMENTATION

- Drawings No.: 082-VRQ-00-A/2 on 08.08.2001 including piece list (2 pages + 2 pages for stainless steel variant)
082-CRQ-01-A/2 on 06.08.2001 including piece list (2 pages + 1 page for stainless steel variant)
006-CRP-00-A/1 on 25.10.2001
- User's manual
- Test report fy. VG-Ventilorteknik No. 98139 on 10.07.1998





Physical Technical Testing Institute
Ostrava-Radvanice



Supplement No. 1 to Type Examination Certificate

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

(3) Type Examination Certificate Number:

FTZÚ 06 ATEX 0329X

(4) Equipment: **Explosion-proof radial fan type RQ 22-4D Ex**

(5) Manufacturer: **REMAK a.s.**

(6) Address: **Zuberská 2601, 756 61 Rožnov pod Radhoštěm, Czech Republic**

(7) This supplement of certificate is valid for: - 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 into service.

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

EN 13463-1:2009; EN 13463-5:2011; EN 14986:2007

(11) Marking of equipment shall contain symbols:

Ex II 2G c IIB+H₂ TX

(12) This type examination certificate is valid till: **31.12.2016**

Responsible person:

Vz. Šindler
Dipl. Ing. Šindler Jaroslav
Head of certification body



Date of issue: 31.01.2012

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

(13)

Schedule

(14)

**Supplement No. 1 to
Type Examination Certificate N° FTZÚ 06 ATEX 0329X**

(15) Description of Equipment:

See certificate FTZÚ 06 ATEX 0329X. This supplement extends certificate validity and confirms application of requirements for equipment in accordance with valid technical standards mentioned in clause (10) of this supplement.

(16) Report No. : 06/0329 + 06/0329-D1

(17) Special conditions for safe use:

- 17.1 Direct fan drive shall be provided by relevant certified explosion – proof electric motor with appropriate power and maximum rotation speed 1474 r/min which is selected according to potentially explosive atmospheres (zones in accordance with EN 60 079-10) present inside and outside of fan. Terminal box connected to fan shall be explosion protected type in accordance with potentially explosive atmosphere specification.
- 17.2 Temperature class of centrifugal fan is determine according to temperature class of flame proof electromotor.

(18) Essential Health and Safety Requirements:

Covered by standards mentioned in clause (10) of this supplement.

(19) LIST OF DOCUMENTATION

- User's manual on 06.01.2012
- Drawings No.: 082-VRQ-00-A/4 on 06.01.2012 including piece list (2 pages + 2 pages for stainless steel variant)
- 082-CRQ-01-A/3 on 06.01.2012 including piece list (2 pages + 1 page for stainless steel variant)
- 082-CRQ-28-A/2 on 06.01.2012
- 082-CRQ-30-A/1 on 05.01.2012

Responsible person:

Vz. Jaroslav
Dipl. Ing. Šindler Jaroslav
Head of certification body



Date of issue: 31.01.2012

Number of pages: 2
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This supplement to certificate is granted subject to the general conditions of the Physical Technical Testing Institute.
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(1) **Supplementary Type Examination Certificate No. 2**

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

(3) Type Examination Certificate number:

FTZÚ 06 ATEX 0329X

(4) Product: **Explosion-proof radial fan type RQ 22-4D Ex**

(5) Manufacturer: **REMAK a.s.**

(6) Address: **Zuberská 2601, 756 61 Rožnov p. Radhoštěm, Czech Republic**

(7) This supplementary certificate extends Type Examination Certificate No. FTZÚ 06 ATEX 0329X 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 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 2014/34/EU of the European Parliament and of the Council, dated 26.02.2014.

(9) In accordance with Article 41 of Directive 2014/34/EU, 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 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 14986:2007

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



II 2/2G c IIB+H₂ TX

(12) This certificate is valid till: **31.12.2021**

Responsible person:


Dipl. Ing. Lukáš Martinák
Head of Certification Body



Date of issue: 30.09.2016

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Physical-Technical Testing Institute, s.p., Pikartská 1337/7, 716 07 Ostrava - Radvanice, The Czech Republic,
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Physical-Technical Testing Institute
Ostrava - Radvanice

(13)

Schedule

(14)

**Supplementary Type Examination Certificate No. 2
to FTZÚ 06 ATEX 0329X**

(15) Description of the variation to the Product:

The subject of this supplementary certificate is:

- Modification of apparatus marking;
- Prolongation of certificate validity.

This supplementary modifies marking on manufacturer plate and Instruction for use.

(16) Report Number.: 06/0329/2

(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:

Number	Sheets	Date	Description
--	19	26.09.2016	Instruction for use
006-CRP-77-A/2	1	26.09.2016	Manufacturer plate

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body



Date of issue: 30.09.2016

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