

Physical-Technical Testing Institute

Ostrava - Radvanice



Supplementary Type Examination Certificate No. 3 (1)

(2)

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

(3) Type Examination Certificate number:

FTZÚ 06 ATEX 0336X

- (4) Product: Explosion-proof centrifugal fan, type RP * - */* - ** 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 0336X 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 ISO 80079-36:2016, EN ISO 80079-37:2016, EN 14986:2017, EN IEC 60079-0:2018

If the sign "X" is placed after the certificate number, it indicates that the product is subject to Specific Conditions of Use specified in the schedule to this certificate.

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



Dipl. Ing. Lukáš Martinák Head of Certification Body



Page: 1/4

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(13)

Schedule

(14) Supplementary Type Examination Certificate No. 3 to FTZÚ 06 ATEX 0336X

(15) Description of the variation to the Product:

The subject of this supplementary certificate is:

- Change of the product marking.
- Evaluation according to the standards EN ISO 80079-36:2016, EN ISO 80079-37:2016, EN 14986:2017; EN IEC 60079-0:2018.
- Extension of the product series:

This supplementary certificate extends the existing size of the explosion-proof centrifugal fan, type RP 80-50/40-6D Ex to the new sizes RP 40-20/20-4D Ex, RP 50-25/22-4D Ex, RP 60-30/28-4D Ex, RP 60-35/31-4D Ex and RP 70-40/35-6D Ex.

- Extension of certificate validity:

Explosion-proof centrifugal fan type **RP** * - */* - ** **Ex** is low pressure, radial fan with zinc plated impeller, which has forward bent vanes is intended to be assembled in air conditioning pipeline. This fan can be use indoor or outdoor and can convey air without solid, fibrous, 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. Explosion-proof electric motor together with the impeller with type of protection $\langle E_x \rangle$ II 2G h IIB T3 Gb is connected to enclosure through bowl with four bolts and fan beds. The bowl is connected to enclosure by other four (or six) 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. Electrical or non-electrical equipment that may be part of a fan shall not be subject to this certification.

Type of the fan	Q _{vmax} [m ³ /h]	∆p _{max} [Pa]	n _{max} [min ⁻¹]	P _{max} [W]	T _{medium,max} [°C]
RP 40-20/20-4D Ex	1 306	260	1 400	281	
RP 50-25/22-4D Ex	1 813	320	1 430	545	
RP 60-30/28-4D Ex	3 195	480	1 440	1 300	40
RP 60-35/31-4D Ex	3 950	603	1 440	2 044	40
RP 70-40/35-6D Ex	4 108	360	900	1 100	
RP 80-50/40-6D Ex	5 829	496	930	1 950	

Technical parameters of fan RP * - */* - ** Ex:

Responsible person:

Dipl. Ing. Lukáš Martinák Head of Certification Body



Date of issue: 24.03.2022

Page: 2/4

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(13)

Schedule

(14) Supplementary Type Examination Certificate No. 3 to FTZÚ 06 ATEX 0336X

(17) Description of the variation to the Product (continuation):

Type key of the fan RP * - */* - ** Ex:



(16) Report Number: 06/0336/3

(17) Specific Conditions of Use:

- 1. The air conveying shall not contain any flying particles or rusty particles.
- Used drive of the particular centrifugal fan, type RP * */* ** Ex must be used appropriate approved explosion-proof electric motor with proper power rating, maximum speed specified in the table above and with type of protection, appropriate for hazardous area.

Responsible person:

Dipl. Ing. Lukáš Martinák Head of Certification Body



Date of issue: 24.03.2022

Page: 3/4

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(13)

Schedule

(14) Supplementary Type Examination Certificate No. 3 to FTZÚ 06 ATEX 0336X

(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 RPEx-UD-M03-2022-15032022	Sheet 20	Date 15.03.2022	Description Installation and Operating Instructions
RPEx-UD-RV-15032022	4	15.03.2022	Ignition hazard assessment report
006-VRP-00-A/5	1	11.06.2020	Drawing
006-VRP-00-A/5	4	13.12.2021	Drawing
006-VRP-00-A/5	4	13.12.2021	Drawing
006-PRP-01-A/4	1	06.01.2012	Drawing
006-PRP-01/A6	2	14.12.2021	Drawing
006-PRP-01-A/6	2	14.12.2021	Drawing
006-CRP-30-A/1 v.P-02	1	15.01.2021	Drawing
006-CRP-33-A/6	1/2	09.11.2021	Drawing
006-CRP-33-A v.P-01	2/2	09.02.2022	Drawing
006-CRP-50-A/1 v.P-01	1	10.02.2012	Drawing
006-CRP-77-A/3	1	10.12.2021	Drawing
012-PMI-00-A v.K-01	3	22.06.2020	Drawing
012-PMI-00-B v.K-01	3	02.10.2020	Drawing

Drawing documentation of the explosion-proof centrifugal fans type RP 40-20/20-4D Ex, RP 50-25/22-4D Ex, RP 60-30/28-4D Ex, RP 60-35/31-4D Ex and RP 70-40/35-6D Ex are listed in original certificates of individual sizes - FTZÚ 06 ATEX 0331X (for RP 40-20/20-4D Ex), FTZÚ 06 ATEX 0332X (for RP 50-25/22-4D Ex), FTZÚ 06 ATEX 0333X (for RP 60-30/28-4D Ex), FTZÚ 06 ATEX 0334X (for RP 60-35/31-4D Ex), FTZÚ 06 ATEX 0334X (for RP 70-40/35-6D Ex).

Responsible person:

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Date of issue: 24.03.2022

Page: 4/4

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Physical-Technical Testing Institute

Ostrava - Radvanice



(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 0336X

- (4) Product: Explosion-proof radial fan type RP 80-50/40-6D 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 0336X 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 Date of issue; 30.09.2016 Responsible person VA-RAD Dipl. Ing. Lukás Martinák Page: 1/2 Head of Certification Body

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(13)

Schedule

(14) Supplementary Type Examination Certificate No. 2 to FTZÚ 06 ATEX 0336X

(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.: 06/0336/2

(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 persor

Dipl. Ing. Lukáš Martinák Head of Certification Body



Date of issue: 30.09.2016

Page: 2/2

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(1)

(2)

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 0336X

- (4) Equipment: Explosion-proof radial fan type RP 80-50/40-6D 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 fulfil by satisfying of following standards:

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

(11) Marking of equipment shall contain symbols:



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

Responsible person:

Dipl. Ing. Šindler Jaroslav Head of certification body Date of issue: 31.01.2012

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.

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Physical Technical Testing Institute

Ostrava-Radvanice

(13)

Schedule

(14)

Supplement No. 1 to Type Examination Certificate N° FTZÚ 06 ATEX 0336X

(15) Description of Equipment:

See certificate FTZÚ 06 ATEX 0336X. 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. : 06/0336 + 06/0336-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 980 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
٠	Drawings No.:	006-VRP-00-A/4 on 06.01.2012 including piece list (4 pages + 4 for stainless steel variant)	
		006-PRP-01-A/4	on 06.01.2012 including piece list (2 pages + 2 pages for stainless steel variant)
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Responsible person:

Dipl. Ing. Šindler Jaroslav Head of certification body

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Date of issue: 31.01.2012

Number of pages: 2 Page: 2/2

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(1)

(2)

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 0336X

- (4) Equipment: Centrifugal fan type RP 80-50/40-6D 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°

06/0336 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:



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 Page: 1/3

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(13)

Schedule

(14) **Type Examination Certificate N° FTZÚ 06 ATEX 0336X**

(15) Description of Equipment:

Centrifugal fan RP 80-50/40-6D Ex is low pressure, radial fan with zinc plated impeller, which has forward bent vanes type typ RE40P-6DK . 6Y . 1R, event. SL-E 400x163 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:

 $V_{max} = 5829 \text{ m}^3 \text{ hod}^{-1}$ $\Delta p_{t max} = 496 \text{ Pa}$ $n = 930 \text{ min}^{-1}$

(16) Report No. : 06/0336

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 980 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

Page: 2/3

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