



1. **EC-TYPE EXAMINATION CERTIFICATE**

2. **Equipment or Protective System Intended for use
in Potentially explosive atmospheres
Directive 94/9/EC**

3. Reference: **VTT 16 ATEX 017X**

4. Equipment: **Fan**

Certified types: **RKX 500x250 D3
RKX 500x300 B3
RKX 600x300 F3
RKX 600x350 E3
RKX 700x400 B3**

5. Manufactured by: **H. ÖSTBERG AB**

6. Address: **Industrigatan 2
SE-77435 Avesta
SWEDEN**

7. This equipment or protective system and any acceptable variations thereto are specified in the schedule and possible supplement(s) to this Certificate and the documents therein referred to.

8. VTT Expert Services Ltd, notified body number 0537, in accordance with Article 9 of the Council Directive 94/9/EC of 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 system intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential Report No. VTT-S-01135-16.



9. Compliance with the Essential Health and Safety Requirements has been assured by compliance with the standards:

EN 60079-0 + A11: 2013

EN 60079-7: 2007

EN 14986: 2007

EN 13463-1: 2009

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 tests 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. This certificate does not cover these.
12. The marking of the equipment or protective system shall include the following:



II 2 G

Ex e IIB + H2 T3 Gb

Espoo 22.3.2016

VTT Expert Services Ltd



Risto Sulonen
Product Manager



Riku Vuorinen
Product Manager

13.

Schedule

14.

EC-TYPE EXAMINATION CERTIFICATE VTT 16 ATEX 017X

15.

Description

The fans consist of housing, a fan wheel and a certified motor with a permanently connected cable. The material in the enclosure is galvanic sheet-iron and the inlet ring is made of copper. Each type of fan can have two different types of Ex-approved electric motors (Table 1). The fans are designed for installation in duct systems which are intended to fulfil the required degree of ingress protection. The fan motors are equipped with three PTC temperature sensors, which are intended for connection to separate monitoring equipment. The fans may be run at partial voltage by a transformer but not by a frequency converter.

Table 1

Fan	Item no	Motor	Motor+wheel	Motorecertificate	Maintenance motor
RKX500x300B3	133601/3837028	MK106-4DK.14.Y	RE25P-4DK	PTB08ATEX3061	L-BAL-006-GB-10/13 Index 14
RKX500x300B3	3833028	DD106-50-4 AY4	DKE 250-4ST	PTB10ATEX3002X	BA501BB0511A3, STAND 18.05.2011
RKX600x350E3	133603/3837055	MK137-4DK.20.Y	RE31P-4DK	PTB08ATEX3062	L-BAL-006-GB-10/13 Index 14
RKX600x350E3	3833055	DD 137-75-4 BY2	DKE 315-4ST	PTB10ATEX3003X	BA501BB0511AR, STAND 18.05.2011
RKX600x300F3	133602/3837045	MK137-4DK.10.Y	RE28P-4DK	PTB08 ATEX3062	L-BAL-006-GB-10/13 Index 14
RKX600x300F3	3833045	DD 137-50-4 BY1	DKE 280-4ST	PTB10ATEX3003X	BA501BB0511AR, STAND 18.05.2011
RKX500x250D3	133600/3837018	MK106-4DK.07.Y	RE22P-4DK	PTB08ATEX3061	L-BAL-006-GB-10/13 Index 14
RKX500x250D3	3833018	DD 106-35-4 DY3	DKE 225-4ST	PTB10ATEX3002X	BA501BB0511AR, STAND 18.05.2011
RKX700x400B3	133604/3837069	MK137-6DK.20.Y	RE35P-6DK	PTB08ATEX3062	L-BAL-006-GB-10/13 Index 14
RKX700x400B3	3833069	DD137-75-6 BY1	DKE 355-6ST	PTB10ATEX3003X	BA501BB0511AR, STAND 18.05.2011

Document specifying the equipment:

RKX ATEX Assembly drawings:

7730008-000 (2012-06-21)
7730010-000 (2012-06-21)
7730011-000 (2010-02-18)
7730013-000 (2010-02-18)
7730015-000 (2010-02-19)
7730016-000 (2012-06-21)
7730017-000 (2012-06-21)
7730018-000 (2010-02-18)
7730019-000 (2010-02-19)
7730020-000 (2010-02-19)

16. Report No. VTT-S-01135-16.

17. Special conditions for safe use:

The PTC thermal protection circuits of the motors shall be connected to a triggering device certified according to Directive 94/9/EC, which shall immediately disconnect the motor from main supply upon activation of the PTC sensors.

When the fans are installed in a duct system the degree of protection IP 20 at the inlet side and IP 10 at the outlet side shall be fulfilled for the duct system. Parts that contribute to this protection shall have a suitable design with respect to strength and material.

The cable shall be permanently installed, mechanically protected and protected from other environmental stress in order to ensure explosion protection. The connection of the free end of the cable shall be explosion protected according to the valid installation regulations.

The rated current and power on the marking plate of the fan must not be exceeded. However, when fans are run at partial voltage by a transformer, the current may exceed the current on the marking plate according to the table in the certificate as long as the rated power is not exceeded.

18. Essential Health and Safety Requirements

Requirements met by compliance with the standards referred in point 9.

Espoo 22.3.2016

VTT Expert Services Ltd



Risto Sulonen
Product Manager



Riku Vuorinen
Product Manager