



1. **EC-TYPE EXAMINATION CERTIFICATE**

2. **Equipment or Protective System Intended for use
in Potentially explosive atmospheres
Directive 2014/34/EU**

3. Reference: **VTT 16 ATEX 045X**

4. Equipment: **Fan**

Certified types: **RFTX 140 A
RFTX 140 C
RFTX 160 A
RFTX 160 C
RFTX 200 A
RFTX 200 B
RFTX 200 C
RFEX 140 C
RFEX 160 C**

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 21 of the Council Directive 2014/34/EU of February 2014, 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-04957-16.

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

EN 60079-0 + A11: 2013
EN 14986: 2007

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 2014/34/EU. 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 c IIB + H2 T3 Gb

Espoo 16.12.2016

VTT Expert Services Ltd


Risto Sulonen
Product Manager




Riku Vuorinen
Product Manager

13.

Schedule

14.

EC-TYPE EXAMINATION CERTIFICATE VTT 16 ATEX 045X

15.

Description

The fans consist of housing, a fan wheel and a certified motor with a junction box. The material in the enclosure is galvanic sheet-iron and the inlet ring is made of copper. The fan wheels are made of carbon steel. The fans are designed for installation in duct systems which are intended to fulfil the required degree of ingress protection.

The motors are certified according to IBExU02ATEX1109, IBExU02ATEX1110 and TÜV IT 13 ATEX 039 X. The terminal boxes on the VEM motors are supplied with a certified cable gland M25 x 1,5 according to certificate DMT 99 E 016. The terminal boxes on the RAEL motors are supplied with a certified cable gland M20 x 1,5 according to certificate IMQ 13 ATEX 010X.

Data

Type of duty S1 (continuous duty)
Supply voltage RFTX: 400 V AC, 50 Hz
 RFEX: 230 V AC, 50 Hz and 60 Hz

Table

Fan type	Art.no	Motor type	Rated voltage (V)	Speed (rpm)	Rated current (A)	Rated power (W)
RFTX 140 A	7730001	KPR 56 G4	400	1300	0,52	110
RFTX 140 C	7730002	KPR 56 K2	400	2810	0,53	300
RFTX 160 A	7730004	KPR 56 G4	400	1300	0,53	143
RFTX 160 C	7730003	KPR 63 K2	400	2740	0,97	590
RFTX 200 A	7730005	KPR 56 G4	400	1300	0,60	270
RFTX 200 B	7730006	KPR 63 K4	400	1380	0,79	388
RFTX 200 C	7730007	KPR 63 K4	400	1380	0,79	385
RFEX 140 C	7730040	RL M63B4	230	1460 (1740)	1,24 (0,87)	169 (185)
RFEX 160 C	7730041	RL M63B4	230	1440 (1690)	1,31 (1,05)	193 (226)

Document specifying the equipment:

ATEX Assembly drawings:

C-0002211 (2009-05-13 Rev 1)
C-0002210 (2009-05-13 Rev 1)
C-0002218 (2009-05-14 Rev 1)
C-0002217 (2009-05-13 Rev 1)
C-0002973 (2009-05-13 Rev 1)
C-0002969 (2009-05-13 Rev 1)
C-0002959 (2009-05-13 Rev 1)
C-0002279 (2016-12-09 Rev 0)
C-0002197 (2016-12-09)

16. Report No. VTT-S-04957-16.

17. Special conditions for safe use:

External sources of heating or cooling shall be considered so that the ambient temperature is kept in the range -20 ... +40 °C.

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 rated current and power on the marking plate of the fan must not be exceeded.

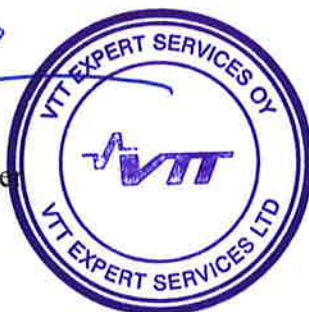
18. Essential Health and Safety Requirements

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

Espoo 16.12.2016

VTT Expert Services Ltd


Risto Sulonen
Product Manager




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