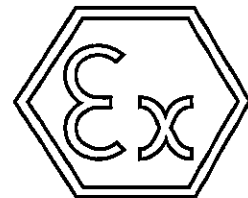




CERTIFIKAT



[1] **EC-TYPE EXAMINATION CERTIFICATE**

[2] **Equipment or Protective Systems intended for use in
Potentially Explosive Atmospheres
Directive 94/9/EC**

[3] Certificate Number:
SP06ATEX3127X

[4] Equipment: Fans of types RKX500x250D3, RKX500x300B3, RKX600x300F3,
RKX600x350E3 and RKX700x400B3

[5] Applicant (manufacturer): AB C.A Östberg

[6] Address: Industrigatan 2, SE-774 35 Avesta, Sweden

[7] This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

[8] SP, Notified Body No. 0402 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 a confidential report No. P602494:A

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

- EN 50014:1997 + A1...A2 (SS-EN 50014 ed 4 + A1...A2)

- EN 50019:2000 (SS-EN 50019 ed 6)

See also item 18 below.

[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 requirements.

[12] The marking of the equipment or protective system shall include the following:

 II 2G EEx e IIB+H₂ T3

Borås 10th May 2007

**SP Technical Research Institute of Sweden
Certification**


Lennart Månsson
Certification Manager

Åke Månsson
Certification Officer

SP internal number: 471001

Certificate issued by Notified Body No. 0402

page 1(3)

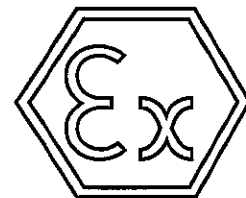
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CERTIFIKAT



[13]

Schedule

[14]

EC-TYPE EXAMINATION CERTIFICATE No. SP06ATEX3127X

[15] Description of equipment

The fans consist of a housing, a fan wheel and a certified induction 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 motors according to the table below. 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 (DIN 44082-M130) 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. The fans marked with index ²⁾ in the table below may be either Y- (400V) or D-connected (230 V).

Data

Type of duty: S1 (continues duty)
 Ambient temperature (T_{amb}): -20 °C to +40 °C
 Supply voltage: 400 V ac, 50 Hz
 230 V ac, 50 Hz (D-connected)

Table, Rated data

Fan type (motor type in paranthesis)	Current (A)	Power (kW)	Speed (rpm)	t_A (s) ¹⁾	I_A/I_N	Operated by transformer	
						Voltage (V ac)	Current (A)
RKX-500x250 D3 (MK106-4DK.07.Y)	0,85	0,49	1285	81	3,4	60-400	0,95
RKX-500x250 D3 (DD 106-35-4 DY3)	0,92	0,53	1285	70	3,2	100-400	0,92
RKX-500x300 B3 (MK106-4DK.14.Y)	1,8	0,92	1354	50	4,1	100-400	1,90
RKX-500x300 B3 (DD 106-50-4 AY4)	1,54	0,77	1239	100	2,8	100-400	1,54
RKX-600x300 F3 (MK137-4DK.10.Y)	2,2/3,8	1,3	1469	85	4,1	60-400/35-230	2,40/4,14
RKX-600x300 F3 (DD 137-50-4 BY1)	3,05/5,28	1,5	1343	57	4,0	100-400/58-230	3,05/5,3
RKX-600x350 E3 (MK137-4DK.20.Y)	3,9/6,75	2,1	1386	60	5,7	60-400/35-230	4,56/7,95
RKX-600x350 E3 (DD 137-75-4 BY2)	4,0/6,93	2,0	1375	36	5,0	100-400/58-230	4,0/6,9
RKX-700x400 B3 (MK137-6DK.20.Y)	3,7/6,4	1,8	865	160	3,2	60-400/35-230	3,7/6,4
RKX-700x400 B3 (DD 137-75-6 BY1)	2,5/4,3	1,4	799	130	3,0	100-400/58-230	2,5/4,3

¹⁾ Based on rated voltage and cold state (+20 °C)

²⁾ The rated data denoted xxx/xxx applies for Y/D connection

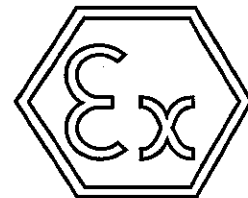
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CERTIFIKAT



[16] **Report No.**

P602494:A

[17] **Special conditions for safe use**

1. 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.
2. 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.
3. 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.
4. 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**

Additional requirements according to the draft standard "Design of fans working in potentially explosive atmospheres" (prEN 14986, October 2006) and EN 13463-1:2001 (SS-EN 13463-1 ed. 1) have been applied.

This certificate is based on the ATEX-certificates for the fan motors. The applicable parts of EN 50019:2000 for the certified motors have been considered to satisfy the essential health and safety requirements according to directive 94/9/EC.

[19] **Drawings and documents**

According to the specification P602494:B dated 2007-05-08.

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