

...ISMES

EXTENSION n. 03/14

IPH V

to Type Examination Certificate CESI 03 ATEX 251 X

FGH

Equipment:

Axial fans series EB

Manufacturer:

O.ERRE. S.p.A.

Address:

Via del Commercio, 1 25039 Travagliato (BS)

Italy

Admitted variation

> Updating to the following reference standards:

EN 13463-1: 2009, EN 13463-5: 2011, EN 14986: 2007.

> Updating of the manufacturer's address:

From:

Via Cagliari, 1

20060 Trezzano Rosa - MI

to:

Via del Commercio, 1 25039 Travagliato - BS

- Usage of new electric motors and possibility of changing them with other ones having the same electromechanic characteristics and the same ATEX marking. According to the temperature class of the new electric motors, class T3 disappears.
- Addition of the special condition for safe use in order to guarantee IP20 protection and hence addition of the character X to the certificate number.
- > Updating of the ATEX marking on the plate:

 $\langle \varepsilon_x \rangle$

II 2G c IIB T6, T5, T4

or

II 2G c IIB+H₂ T6, T5, T4

This extension and annexed descriptive documents must be annexed to the Type Examination Certificate CESI 03 ATEX 251.

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Date 1/12/2014 - translation issued on 1st December 2014

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I Responsabile

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ACCREDIA

TENTE ITALIANO DI ACCEDITAMENTO

PRD N. 018B

Membro degli Accordi di Mutuo
Riconoscimento EA, IAF e ILAC

Signatory of EA, IAF and ILAC

Mutual Recognition Agreements

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EST-CE-ING



EXTENSION n. 03/14

to Type Examination Certificate CESI 03 ATEX 251 X

Description of equipment

Axial fans series EB are assemblies consisting of a helical impeller, nylon base glass fibre reinforced, straight fitted to the electric motor shaft and enclosed in a painted steel housing; the electric motor has an independent ATEX certification for the protection type Ex d.

The fan can be directly fixed to the air duct, able to guarantee protection IP20 for the impeller, or installed in open air with the usage of the optional grid which guarantees the protection required by the standard EN 14986.

Equipment subject of this certificate are identified by the following code:

Cx nnn p f EX-ATEX

- nnn: identifies the model, that is the diameter of the impeller (25, 30, 35, 40, 50);

- p: identifies the number of poles of the motor (4);

- f: type of power supply of the motor (M= single-phase, T= three-phase);

Electrical characteristics

Rated voltage three-p

three-phase: 400V(Y), $230V(\Delta)$

Single-phase: 230V

Rated frequency

50Hz or 60Hz

Rated power

60 W (single-phase motor)

90 W (three-phase motor)

Rotation speed

1200 ÷ 1460 rpm

ATEX marking

II 2G

Protection type

C

(non-electric constructional safety)

Gas group

IIB

(with electric motor suitable for gas group IIB)

IIB+F

(with electric motor suitable for gas group IIC or IIB +H₂)

Temperature class

T4, T5, T6 (coincides with that one of the used motor) $-20^{\circ}\text{C} \le T_{amb} \le 40^{\circ}\text{C}$

Ambient temperature

The following table collects all the models of the fans:

	Voltage [V]	Power [W]	Current [A]		Speed	Pressure	Flow-rate
Model			230 V	400 V	[rpm]	[Pa]	[m³/h]
EB 25 4M	230	120	0.70	-	1460	98	900
EB 30 4M	230	140	0.75	-	1400	90	1500
EB 35 4M	230	160	0.80	-	1350	98	2250
EB 40 4M	230	180	0.85	-	1290	88	2900
EB 50 4M	230	210	1.00	-	1200	137	4500
EB 25 4T	230 / 400	100	0.67	0.39	1460	98	900
EB 30 4T	230 / 400	125	0.69	0.40	1430	90	1500
EB 35 4T	230 / 400	150	0.72	0.42	1400	98	2250
EB 40 4T	230 / 400	180	0.74	0.43	1350	88	2900
EB 50 4T	230 / 400	230	0.78	0.45	1270	137	4500

Cable entries

The electrical connections of the fan shall be carried out according to the instructions of motor manufacturer, they shall be annexed to the instruction manual issued by O.ERRE. The accessories used for cable entries and for closing unused holes of the terminal box shall be certified according to the standards: EN 60079-0, EN 60079-1.

Warning labels

None.

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Report n. EX-B4029112

Routine tests

None.

Descriptive documents (prot. EX-B4029113)

Technical note n. 9350533 rev. 3 (3+1 pages)	dated	2014/11/20		
Safety instructions n. 9319163 (2 pages)	dated	2014/11/20		
Drawing n. 9350521 assembly EB rev. 1 (3 pages)	dated	2014/10/14		
Drawing n. 9350540 assembly EB entire	dated	2014/11/03		
Drawing n. 9341202 grid rev. 2	dated	2010/01/12		
Drawing n. 935000P protection frame rev. P	dated	2014/11/03		
Annex B - EN 14986:2007 axial fans (2 pages)	dated	2014/10/06		
Annex D - EN 14986:2007 axial and centrifugal fans rev. 1 (2 pages) dated				
Facsimile EC declaration of conformity				
EC declaration of conformity of the manufacturer of flameproof motors				
Data sheet of the installed flame proof motors (30 pages)				
Data sheets of the alternative antistatic plastics used for the fans (6 pages)				

One copy of all the descriptive documents mentioned above is kept in CESI files.

Special conditions for safe use "X"

> The air duct connection, which is left to the end user, shall guarantee protection IP20 of the impeller; otherwise the optional protection grid must be installed.

Essential Health and Safety Requirements

Essential health and safety requirements are covered by compliance to the following standards:

1	2000		requirements are covered by compitance to the ronowing standards
	•	EN 13463-1: 2009	Non-electrical equipment for use in potentially explosive atmospheres
			Part 1: Basic method and requirements;
	•	EN 13463-5: 2011	Non-electrical equipment for use in potentially explosive atmospheres
			Part 5: Protection by constructional safety "c";
		EN 14986: 2007	Design of fans working in potentially explosive atmospheres.