

CESI

CERTIFICATE



ISMES



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[1] SUPPLEMENTARY TYPE EXAMINATION CERTIFICATE

[2] **Equipment intended for use
in potentially explosive atmospheres
Directive 2014/34/EU**

[3] Supplementary Type Examination Certificate number:

CESI 03 ATEX 251 X / 04

[4] Product: **Axial fans series EB**

[5] Manufacturer: **EP S.p.A.**

[6] Address: **Via del Commercio, 1
25039 Travagliato (BS)
Italia**

[7] This supplementary certificate extends Type Examination Certificate CESI 03 ATEX 251 X 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] CESI certifies that this equipment 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 European Union Directive 2014/34/EU of the European Parliament and Council of 26 February 2014.

The examination and test results are recorded in confidential report n. EX-B8001883.

[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 April 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 April 2016.

[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 EU-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. These are not covered by this certificate.

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

II 2G c IIB T6, T5, T4
oppure
II 2G c IIB+H₂ T6, T5, T4

This certificate may only be reproduced in its entirety and without any change, schedule included.

Date 2018/01/18 – translation issued the 2018/01/18

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CESI-ATEX

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Schedule

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SUPPLEMENTARY TYPE EXAMINATION CERTIFICATE n. CESI 03 ATEX 251 X / 04

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Description of the variation to the product

With this supplementary certificate it is changed the manufacturer's company name:

from: **O.ERRE SpA**

to: **EP SpA**

On the contrary there is no variation of the address and no variation has been applied to the project. The used standards, as well, have not been updated.

It has been kept the trade mark O.ERRE affixed on the marking plate and on the declaration of conformity close to the new company name of the manufacturer.

Description of the product

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:

EB 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-phase: 400V (Y), 230V (Δ) 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+H ₂ (with electric motor suitable for gas group IIC or IIB +H ₂)
Temperature class	T4, T5, T6 (coincides with that one of the used motor)
Ambient temperature	-20°C ≤ T _{amb} ≤ 40°C

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The following table collects all the model of the fans:

Model	Voltage [V]	Power [W]	Current [A]		Speed [rpm]	Pressure [Pa]	Flow-rate [m³/h]
			230 V	400 V			
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 the motor manufacturer, they shall be annexed to the instruction manual issued by EP. 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 and EN 60079-1.

[16]

Report n. EX-B8001883

Routine tests

None.

[17]

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.

[18]

Essential Health and Safety Requirements

The Essential Health and Safety Requirements (EHSR) are fulfilled by the harmonized 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..

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Descriptive documents prot. EX-B8001884

- Technical note EB doc. J09005000 rev. 00 (2 pages) dated 2018/01/15
- Drawing of the marking plate doc. J08600000 rev. 0 dated 2018/01/15
- Chamber of commerce registration of EP S.p.A. (18 pages) dated 2017/01/26
- Safety instructions doc. P06146000 (2 pages)
- Facsimile EU declaration of conformity

One copy of all documents is kept in CESI files.

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Certificate history

Issue N°	Issue Date	Summary description of variation
04	2018/01/18	issue 4 current: changing of the company name from O.ERRE SpA to EP SpA
03	2014/11/26	Extension 03/14: standards updating, changing of the company name, constructive changes, addition of special condition for safe use (X)
02	2008/08/28	Extension 02/08: Changing of the manufacturer address, standards updating
01	2006/10/04	Extension 01/06: new models of the electric motors
00	2003/11/21	First issue of the certificate

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