

CESI

CERTIFICATE



ISMES



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[1] TYPE EXAMINATION CERTIFICATE

Equipment intended for use
in potentially explosive atmospheres
Directive 2014/34/EU

[3] Type Examination Certificate number:

CESI 18 ATEX 003 X

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

[5] Manufacturer: **DALAP GmbH**

[6] Address: **Topfergasse 72
09526 Olbernhau
Deutschland**

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

[8] CESI certifies that this Product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of Product intended for use in potentially explosive atmospheres given in Annex II of the Directive 2014/34/EU of the European Parliament and Council dated 26th February 2014.

The examination and test results are recorded in confidential report n. EX -B8001147.

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

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

except in respect of those requirements listed at item 18 of the Schedule.

[10] If the sign "X" is placed after the certificate number, it indicates that the Product is subject to special conditions for safe use specified in the schedule to this certificate.

[11] This TYPE EXAMINATION CERTIFICATE relates only to the design, examination and tests of the specified Product in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this Product. These are not covered by this certificate.

[12] The marking of the Product shall include the following:

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

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

Date 2018/01/19 - Translation issued the 2018/01/19

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Schema di certificazione

CESI-ATEX

[13]

Schedule

[14]

TYPE EXAMINATION CERTIFICATE n. CESI 18 ATEX 003 X

[15] **Description of Product**

Axial fans series RAB 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:

EPx (tri) nnn EX ATEX p-poles

(tri): optional field (only with three-phase supply) supply voltage (e.g. /400V);

nnn: identifies the model through the impeller diameter (25, 30, 35, 40, 50);

p: identifies the number of poles of the motor (2, 4).

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 electric motor used)
Ambient temperature	-20°C ≤ T _{amb} ≤ 40°C

The following table collects all the models of the fans:

Model	Voltage [V]	Power [W]	Current [A]		Speed [rpm]	Pressure [Pa]	Flow-rate
			230 V	400 V			
RAB EX ATEX 250 4-poles	230	120	0.70	-	1460	98	900
RAB EX ATEX 300 4-poles	230	140	0.75	-	1400	90	1500
RAB EX ATEX 350 4-poles	230	160	0.80	-	1350	98	2250
RAB EX ATEX 400 4-poles	230	180	0.85	-	1290	88	2900
RAB EX ATEX 500 4-poles	230	210	1.00	-	1200	137	4500
RAB EX ATEX/400V 250 4-poles	230 / 400	100	0.67	0.39	1460	98	900
RAB EX ATEX/400V 300 4-poles	230 / 400	125	0.69	0.40	1430	90	1500
RAB EX ATEX/400V 350 4-poles	230 / 400	150	0.72	0.42	1400	98	2250
RAB EX ATEX/400V 400 4-poles	230 / 400	180	0.74	0.43	1350	88	2900
RAB EX ATEX/400V 500 4-poles	230 / 400	230	0.78	0.45	1270	137	4500

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[13]

Schedule

[14]

TYPE EXAMINATION CERTIFICATE n. CESI 18 ATEX 003 X

Cable entry

The electrical connections of the fan shall be carried out according to the standard EN 60079-14 and to the instructions of the motor manufacturer which shall be annexed to the instruction manual issued by DALAP. 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-B8001147**

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 fan; otherwise the optional protection grid must be installed.

[18] **Essential Health and Safety Requirements**

The Essential Health and Safety Requirements (EHSRs) have been covered by the standards listed at item 9.

[19] **Descriptive documents** (prot. EX-B8001157)

- Technical note doc. J09000000 rev. 02 (3 pages) dated 2018/01/19
- Annex to technical note doc. J09002000 rev. 01 (2 pages) dated 2018/01/19
- Drawing of the marking plate doc. J08548000 rev. 0 dated 2018/01/19
- Safety instructions doc. P06141000
- Facsimile EU declaration of conformity

One copy of all documents is kept in CESI files.