



TYPE EXAMINATION STATEMENT CATEGORY 2 EQUIPMENT

[1]

[2] **Equipment intended for use in potentially explosive atmospheres - ATEX**

[3] Type Examination Statement number: **IMQ 10 ATEX 030 X**

[4] PRODUCT: **Helicoidal Fans**
TYPE/SERIES: **E ***M ATEX, E***T ATEX**

[5] MANUFACTURER: **VORTICE ELETROSOCIALI S.P.A.**

[6] ADDRESS: **Strada Cerca, 2
20067 Tribiano (MI) - Italy**

[7] This equipment and any acceptable variation thereto are specified in the annex to this statement and the documents therein referred to.

[8] IMQ states that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive 2014/34/EU with reference to the requirements covered by the standards below defined.

The examination and test results are recorded in Report No.: **AT17-000014256-01-b**


[9] Compliance with Essential Health and Safety Requirement given in the Directive, except for those listed at item 18 of the annex, has been assured by compliance with the requirements of the following standard:

EN ISO 80079-36:2016; EN 14986:2017

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

[11] This TYPE EXAMINATION STATEMENT relates only to the design and construction of the specified product. Further requirements of the Directive are **not covered** by this statement.

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

 **II 2G Ex h IIB T3 Gb
II 2D Ex h IIIC T125°C Db**

This document is composed of 4 pages including 1 annex

**B.U. PRODUCT CONFORMITY ASSESSMENT
CERTIFICATION SECTOR – MANAGER**

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Stefano Ferrari

This Test is the result of testing a sample of the product submitted, in accordance with the provisions of the specified Technical Specifications/Standards. It is issued according to product certification system of EN ISO/IEC 17067; therefore, it does not imply any judgment on the production and it does not permit the use of a mark of conformity. Only full reproductions of this are allowed without written

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Description of product:

[15] E series HVAC helical fans are suitable for air conditioning and ventilation typically in industrial site, workshop, farms.

Models/Series Identification:

The helicoidal fans series E are identified as follows:

E *** M ATEX

E *** T ATEX

[15.1] The models are identified according the impeller, the number of phases of rotating machine (M for single-phase, T for three-phase), rated voltage.
Balance quality G 6,3 (BV-3 according to the ISO 14964 standard). Fans series C have temperature class and ambient temperature of installed motor.

Ratings:

[15.2] Rated voltage: 230 V \pm 5% single-phase
400 V \pm 5% three-phase

Rated frequency: 50 Hz

[15.3] Safety Ratings: Not applicable

Ambient temperature and temperature classes:

[15.4] Fans series E are suitable for ambient temperature T_{amb} : $-20^{\circ}\text{C} \div +40^{\circ}\text{C}$ according to clause 11.2 of EN ISO 80079-36.

Fans series C are classified with temperature class of drive motors (T3).

[15.5] Degree of protection (IP code): IP20 (guard)

[15.6] Warnings: Warning marking not present.

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[16.1] Routine (factory) tests:

The manufacturer shall carry out the routine test prescribed at clauses 4.6 of the EN 14986.
The rotating assembly shall meet balance quality grade according to ISO 14694:2003.

[16.2] Conformity with the documentation:

The manufacturer shall carry out the verifications or tests necessary to ensure that the product complies with the documentation.

Marking the equipment in accordance with Clause 7.3 of EN 14986, the manufacturer attests on his own responsibility that:

- the equipment has been constructed in accordance with the applicable requirements of the relevant standards in safety matters;
- the routine verifications and routine tests have been successfully completed with positive results.

[16.3] Installation conditions:

Above referred equipment is foreseen to be installed in locations where there are environmental

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conditions, as clearly specified at clause 1.4 of EN 14986 and clause 1, of EN ISO 80079-36.
Installation and use in atmospheric and environmental conditions that are out of above mentioned intervals request special considerations and additional measures by the side of installer or user.

These should be specified to the manufacturer by the user;

It is not a required by applicable standard listed in [9] that the certification body confirm suitability for the adverse conditions.

Installation of equipment has to proceed according to EN 60079-14.

Special Condition of use (X):

[17] A current-dependent device is mandatory to protect against exceeding the limiting temperature, the starting current ratio I_A/I_N and the time t_E is marked on the electric motor nameplate. The values are listed in the Instruction Manual. The current-dependent device shall comply with 2014/34/EU Directive as device clause 1.2, Group II Category (2) G.

It is mandatory to use a safety device for monitoring of vibrations according to ISO 14694.

[18] Essential Health and safety Requirements:

This **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed in [9].

This **does not** cover hazards coming from environmental conditions different from those clearly and precisely indicated and covered in 1.4 of EN 14986 and clause 1, of EN ISO 80079-36.

ESHR 1.2.7 According Annex VIII of the Directive

ESHR 1.4 Not verified.

ESHR 1.5 It shall be applied to the vibration monitoring system by the user.

ESHR 3 Not applied.

In addition to the Essential Health and Safety Requirements (EHSRs) covered by the standards listed at [9], the following are considered relevant to this product, and conformity is demonstrated in the report:

Not applicable

[19] Descriptive documents: see document DL-AT17-0014256-01-b

[20] Certification Validity Conditions:

The use of this is subject to the Certification Scheme and to the Regulation applicable to holders of IMQs.

The validity of this certificate is subject to the condition that the manufacturer complies with the results of the document review and of the pertinent requirement if any included, recorded in the relevant copy of documentation as per 19.

One copy of the mentioned documentation is kept in IMQ file.

[21] In accordance with Article 41 of Directive 2014/34/EU, s referring to 94/9/EC that were in existence prior

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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. New issues of such certificates, may continue to bear the original number issued prior to 20 April 2016.

Variations

October 2011:

First issue.

[22] March 2014:

Editorial change.

October 2018:

Change of temperature classification to T3 (gas) and T125°C (dust).

Update to the standard EN 14986:2017.

Update of marking to clause 11.2 of EN ISO 80079-36.