



Safety Note for centrifugal fans for applications in potentially explosive atmospheres

1. TECHNICAL CHARACTERISTICS

The following safety instructions refer to the installation, use and maintenance of centrifugal fans to be used in classified explosive areas with presence of gases.

The following instructions must be respected in addition to the instruction detailed in the use, instruction and maintenance manual.

Centrifugal fans are suitable for group II installation, to be used in classified zones with the presence of gas (zone 2, group IIB, category 3G). They are designed and constructed in accordance to the General Requirements of Safety and Health of ATEX Directive 94/9/EC, in accordance to norm EN 1127-1, EN 13463-1 and document TC 305/WG 2/SG1 Wi 00305066 Doc N 107-2.

The fan is marked in accordance to the ATEX 94/9/CE Directive.

Electric motors installed on centrifugal fans are subjected to appropriate certification in accordance with ATEX Directive and they are suitable for use in classified zones (zone 2) with presence of gas of group IIB, protection EEx, temperature class T4.

The above technical characteristics (airflow, pressure, rpm, efficiency, etc.) are contained on the catalogue SEAT Ventilation.

Maximum air temperature: +80°C

Motor electric data are written on the motor nameplate.

2. MARKING

Complete fan (sold as fan + motor assembled together) :

CEx © II 2 G IIB/IIC T4, T5, T6 T_{max}= 80°C

air temperature = -20 / 80°C Fan only {without motor}:

© II 2 G TX

II 2	= group II (surface), category 2
G	= explosive atmosphere with presence of gas, vapour or mist
T	= temperature class (independent dal ventilatore)
X	= special conditions for safe use.
bbbb/AAAA	= batch / year of fabrication

Relations among zones, substances and categories

Zone		Category in accordance to Directive 94/9/CE
Gas, vapour or mist	Zone 0	1G
Gas, vapour or mist	Zone 1	2G or 1G
Gas, vapour or mist	Zone 2	3G, 2G or 1G



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3. SAFETY REQUIREMENTS FOR THE INSTALLATION IN DANGEROUS ZONE

General requirements

Before the installation please read carefully the installation and maintenance manual

The installation and maintenance of the centrifugal fans must be realized in accordance to the plant and maintenance norms for classified area with the presence of explosive gases (Le. EN 60079-14, EN 60079-17 or other national norms/standards).

Electric motors to be coupled with the centrifugal fans must have the following requirements:

- 1) subjected to separated ATEX certification,
- 2) suitable to be used in the classified zone and **with** the existing substance (gas group)
- 3) temperature class (gas) suitable with the existing substances and environmental temperature suitable with the installation area.

For the motor safety requirements please refer to the motor maintenance, use, and safety instruction; motors must not be opened when under tension.

Centrifugal fans must be earthed through appropriate connecting element (anti-loosening and anti-rotation device).

All maintenance operations must be performed in accordance to the instructions detailed in the maintenance manual.

Warnings

The fan inlet if not coupled with a duct must be installed with a protection grid IP 20, to protect the impeller against the contact with external bodies and/or dirt. If the fan is duct mounted it is necessary to realize appropriate protection devices in accordance with norm EN 294.

Earthing of the conductive areas of the casing is made through the external earth of the motor (anti-loosening and anti-rotation device).

In accordance to the fan use please check periodically fan cleanliness, wear, correct fan running and presence of vibrations and/or abnormal noises; In this case stop the fan, try to identify the origin of the problem and contact the constructor



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Examples of installation





DECLARATION DE CONFORMITE
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N° 2003-10

18 Rue H Pescarolo
ZI Vaucanson
F-93370 Montfermeil
Tel (33) 01 43 30 28 90
Fax (33) 01 43 30 25 75

Nous déclarons que les appareils mis sur le marché, pour des atmosphères explosibles, désignés ci-après :
We declare that the equipment placed on the market and for use in explosive atmospheres described below :

Ventilateurs Type: Seat, Jet, Storm
Fans type :

Pour Gaz/*For Gas* : CE EX II 3 G c IIB T4

satisfait : - aux dispositions de la directive 94/9 CE / *comply with the provisions of directive 94/9 EC.*
- au décret 96-1010 annexe 8.
- à la série de tests prescrite par la norme EN 13463, effectuée par le laboratoire L.C.I.E.
and passed the tests required by EN 13463 standard, undertaken by the laboratory L.C.I.E.

sous réserve d'une utilisation conforme à leur destination et/ou d'une installation conforme aux normes en vigueur et/ou aux recommandations du constructeur.
Subject to use for the purpose for which they were produced and/or installed in accordance with standards in force and/or with the manufacturer's recommendations.

Le produit désigné a été conçu, fabriqué et contrôlé dans le cadre d'un système d'assurance qualité ISO 9002.
The said product has been designed, manufactured and controlled within the guidelines of a quality insurance system in accordance with ISO 9002.

Montfermeil, le 1er Décembre 2003

Claude BERTAUX
Responsable Technique
Technical Manager

Année d'apposition du marquage CE: 2003
Year of affixing CE marking :

