



(1) EC-TYPE-EXAMINATION CERTIFICATE (Translation)

(2) Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres - **Directive 94/9/EC**



(3) EC-type-examination Certificate Number:

PTB 08 ATEX 3050

(4) Equipment: Three phase geared motors of the types .../D.XE.09...-.../....

(5) Manufacturer: Danfoss Bauer GmbH

(6) Address: Eberhard-Bauer-Str. 36 - 60, 73734 Esslingen, Germany

(7) This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

(8) The Physikalisch-Technische Bundesanstalt, notified body No. 0102 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, 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 Directive.

The examination and test results are recorded in the confidential report PTB Ex 08-38126.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0:2006

EN 60079-7:2007

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

(11) This EC-type-examination Certificate relates only to the design, examination and tests of the specified equipment in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.

(12) The marking of the equipment shall include the following:

II 2 G Ex e II T1 - T4

Zertifizierungsstelle Explosionsschutz

Braunschweig, September 15, 2008

By order:

Dr.-Ing. F. Lienesch
Regierungsdirektor



- (13) **SCHEDULE**
- (14) **EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 3050**
- (15) Description of equipment

The three-phase geared motors of types .../D.XE.09...-.../... are designed to Increased Safety "e" type of protection. Their enclosures are made from aluminium or grey cast iron. They are provided with cooling ribs and permit attachment of terminal boxes. The squirrel cage rotor is made from cast aluminium. The shaft rotates in rolling bearings. An additional back-stop device may be provided on the non-drive end as an alternative feature. Another possible option is a free shaft end at the non-drive end.

Cooling is achieved by heat exchange, using the cooling ribs on the enclosure wall and an external fan made from plastics, which has been separately tested, or from aluminium. The external fan is rotationally locked with two straight pins / a parallel key, while a shaft shoulder and a retaining ring lock the fan axially. An alternative option is a configuration without external fan (non-ventilated design).

Electric connection is made with separately tested (with a separate Test Report) terminal boxes designed to Increased Safety "e" type of protection.

The ambient temperature range is 40 °C down to -20 °C.

The electric motor data, including specifications for compliance with the temperature class, are defined in a data sheet attached for the EC-Type-Examination Certificate.

- (16) Test report PTB Ex 08-38126

- (17) Special conditions for safe use

none

Notes for manufacturing and operation

Due care must be taken that the temperatures accepted for the components used will not be exceeded.

Components attached or installed (terminal compartments, bushings, cable entry fittings, connectors) have to be of a technical standard that complies with the specifications on the cover sheet. They must be suited for the operating conditions, and be covered by a separate examination certificate. The special conditions specified for the components must be complied with and may have to be included in the type test.

(18) Essential health and safety requirements

met by compliance with the aforementioned Standards

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