Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin

(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 3048

(4) Equipment: Three phase geared motors of the types .../D.XE.06...-.../....

(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
By order:

Dr.-Ing. F. Lienesch
Regierungsdirektor

Braunschweig, September 15, 2008

PHYSIKALISCH-TECHNISCHE BUNDESANSTALT

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(13) # SCHEDULE

(14) ## EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 3048

(15) Description of equipment

The three-phase geared motors of types .../D.XE.06...-.../... 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.

Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin

SCHEDULE TO EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 3048

(18) Essential health and safety requirements

met by compliance with the aforementioned Standards

Zertifizierungsstelle Explosionsschutz
By order:

Dr.-Ing. F. Lienesch
Regierungsdirektor

Braunschweig, September 15, 2008

Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin

(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 3049

(4) Equipment: Three phase geared motors of the types .../D.XE.08...-.../....

(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
By order:

Dr.-Ing. F. Lienesch
Regierungsdirektor

Braunschweig, September 15, 2008

PHYSIKALISCH-TECHNISCHE BUNDESANSTALT

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(13) # S C H E D U L E

(14) ## EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 3049

(15) Description of equipment

The three-phase geared motors of types .../D.XE.08...-.../... 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

Zertifizierungsstelle Explosionsschutz
By order:

Dr.-Ing. F. Lienesch
Regierungsdirektor

Braunschweig, September 15, 2008

Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin

(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
By order:

Dr.-Ing. F. Lienesch
Regierungsdirektor

Braunschweig, September 15, 2008

PHYSIKALISCH-TECHNISCHE BUNDESANSTALT

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(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.

Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin

SCHEDULE TO EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 3050

(18) Essential health and safety requirements

met by compliance with the aforementioned Standards

Zertifizierungsstelle Explosionsschutz
By order:

Dr.-Ing. F. Lienesch
Regierungsdirektor

Braunschweig, September 15, 2008

Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin

(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 3051

(4) Equipment: Three phase geared motors of the types .../D.XE.11...-.../....

(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
By order:

Dr.-Ing. F. Lienesch
Regierungsdirektor

Braunschweig, September 11, 2008

PHYSIKALISCH-TECHNISCHE BUNDESANSTALT

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(13) # S C H E D U L E

(14) ## EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 3051

(15) Description of equipment

The three-phase geared motors of types .../D.XE.11...-.../... 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.

Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin

SCHEDULE TO EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 3051

(18) Essential health and safety requirements

met by compliance with the aforementioned Standards

Zertifizierungsstelle Explosionsschutz
By order:

Dr.-Ing. F. Lienesch
Regierungsdirektor

Braunschweig, September 11, 2008

Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin

(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 3052

(4) Equipment: Three phase geared motors of the types .../D.XE.13...-.../....

(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
By order:

Dr.-Ing. F. Lienesch
Regierungsdirektor

Braunschweig, September 11, 2008

PHYSIKALISCH-TECHNISCHE BUNDESANSTALT

ZSEx10100e.dot

(13) # SCHEDULE

(14) ## EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 3052

(15) Description of equipment

The three-phase geared motors of types .../D.XE.13...-.../... 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.

Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin

SCHEDULE TO EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 3052

(18) Essential health and safety requirements

met by compliance with the aforementioned Standards

Zertifizierungsstelle Explosionsschutz
By order:

Braunschweig, September 11, 2008

Dr.-Ing. F. Lienesch
Regierungsdirektor

PHYSIKALISCH-TECHNISCHE BUNDESANSTALT

Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin

(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 3053

(4) Equipment: Three phase geared motors of the types .../D.XE.16...-.../....

(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
By order:

Dr.-Ing. F. Lienesch
Regierungsdirektor

Braunschweig, September 11, 2008

PHYSIKALISCH-TECHNISCHE BUNDESANSTALT

ZSEx10100e.dot

(13) # SCHEDULE

(14) ## EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 3053

(15) Description of equipment

The three-phase geared motors of types .../D.XE.16...-.../... 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

Zertifizierungsstelle Explosionsschutz
By order:

Dr.-Ing. F. Lienesch
Regierungsdirektor

Braunschweig, September 11, 2008

Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin

(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 3057 X

(4) Equipment: Three phase geared motors of the types .../DXEU13LA4-.../...

(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
By order:

Dr.-Ing. F. Lienesch
Regierungsdirektor

Braunschweig, September 19, 2008

PHYSIKALISCH-TECHNISCHE BUNDESANSTALT

ZSEx10100e.dot

(13) # SCHEDULE

(14) ## EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 3057 X

(15) Description of equipment

The three-phase geared motors of types .../DXEU13LA4-.../... 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

The admissible ambient temperature range is limited to 30 °C down to -20 °C.
The admissible ambient temperature range is shown on the rating plate.

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

Zertifizierungsstelle Explosionsschutz
By order:

Dr.-Ing. F. Lienesch
Regierungsdirektor

Braunschweig, September 19, 2008

Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin

1st S U P P L E M E N T

according to Directive 94/9/EC Annex III.6

to EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 3048

(Translation)

Equipment: Three-phase motor, type.../D.X..06...-.../....

Marking: Ⓔx **II 2 G Ex e IIC T1 - T4 Gb /**
II 2 D Ex tb IIIC T160 °C - T 120 °C Db

Manufacturer: Bauer Gear Motor GmbH

Address: Eberhard-Bauer-Straße 36-60, 73734 Esslingen, Germany

Description of supplements and modifications

The .../D.XE.06... series has been modified to meet the requirements of the EN 60079 series of standards and their marking requirements. It comprises the size 63. This motor series can, in addition, be used under dust explosion protection conditions. The letter "C" is added at the 4th digit of the type code.

Except for the external fan in aluminium or grey cast iron, the mechanical and structural design of the motor remains unchanged.

The above motor series can alternatively come without cooling ribs on the enclosure surface.

Since the company name has changed, the certified equipment of

Danfoss Bauer GmbH,
Eberhard-Bauer-Str. 36 - 60
73734 Esslingen, Germany

is marked with the new company name

Bauer Gear Motor GmbH
Eberhard-Bauer-Str. 36 - 60
73734 Esslingen, Germany

The range of ambient temperatures is 40 °C down to -20 °C. This temperature range may be extended to 60 °C down to -20 °C with a special electrical or thermal design in which suitable terminal boxes, materials and attached or installed components are used, or with the data sheet for the electrical ratings.

ZSEx10101e.dotm

Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin

1st SUPPLEMENT TO EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 3048

Notes for manufacturing and operation

Parts that are attached or installed (e.g. bushings, cable glands, connectors) shall be of a technical standard that complies with the specifications on the cover sheet. They must be suited for the operating conditions and come with a separate examination certificate. The special conditions have to be observed and included in the type test, if necessary.

The motors shall be attached to gearbox housings so that enclosure protection IP66 is ensured and the requirements in EN 60079-0:2012 are complied with.

Applied standards

EN 60079-0:2012, EN 60079-7:2007, EN 60079-31:2009

Test report: PTB Ex 13-32081

Zertifizierungssektor Explosionsschutz
On behalf of PTB:

Braunschweig, August 09, 2013

Dr.-Ing. F. Lienesch
Regierungsdirektor

PHYSIKALISCH-TECHNISCHE BUNDESANSTALT

Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin

1st S U P P L E M E N T

according to Directive 94/9/EC Annex III.6

to EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 3049

(Translation)

Equipment: Three-phase motor, type.../D.X..08...-.../....

Marking:  **II 2 G Ex e IIC T1 - T4 Gb /**
II 2 D Ex tb IIIC T160 °C - T 120 °C Db

Manufacturer: Bauer Gear Motor GmbH

Address: Eberhard-Bauer-Straße 36-60, 73734 Esslingen, Germany

Description of supplements and modifications

The .../D.XE.08... series has been modified to meet the requirements of the EN 60079 series of standards and their marking requirements. It comprises the size 80. This motor series can, in addition, be used under dust explosion protection conditions. The letter "C" is added at the 4th digit of the type code.

Except for the external fan in aluminium or grey cast iron, the mechanical and structural design of the motor remains unchanged.

The above motor series can alternatively come without cooling ribs on the enclosure surface.

Since the company name has changed, the certified equipment of

Danfoss Bauer GmbH,
Eberhard-Bauer-Str. 36 - 60
73734 Esslingen, Germany

is marked with the new company name

Bauer Gear Motor GmbH
Eberhard-Bauer-Str. 36 - 60
73734 Esslingen, Germany

The range of ambient temperatures is 40 °C down to -20 °C. This temperature range may be extended to 60 °C down to -20 °C with a special electrical or thermal design in which suitable terminal boxes, materials and attached or installed components are used, or with the data sheet for the electrical ratings.

ZSEx10101e.dotm

Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin

1st SUPPLEMENT TO EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 3049

Notes for manufacturing and operation

Parts that are attached or installed (e.g. bushings, cable glands, connectors) shall be of a technical standard that complies with the specifications on the cover sheet. They must be suited for the operating conditions and come with a separate examination certificate. The special conditions have to be observed and included in the type test, if necessary.

The motors shall be attached to gearbox housings so that enclosure protection IP66 is ensured and the requirements in EN 60079-0:2012 are complied with.

Applied standards

EN 60079-0:2012, EN 60079-7:2007, EN 60079-31:2009

Test report: PTB Ex 13-32081

Zertifizierungssektor Explosionsschutz
On behalf of PTB:

Braunschweig, August 09, 2013

Dr.-Ing. F. Lienesch
Regierungsdirektor

Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin

1st S U P P L E M E N T

according to Directive 94/9/EC Annex III.6

to EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 3050

(Translation)

Equipment: Three-phase motor, type.../D.X..09...-.../....

Marking: Ⓔx **II 2 G Ex e IIC T1 - T4 Gb /**
II 2 D Ex tb IIIC T160 °C - T 120 °C Db

Manufacturer: Bauer Gear Motor GmbH

Address: Eberhard-Bauer-Straße 36-60, 73734 Esslingen, Germany

Description of supplements and modifications

The .../D.XE.09... series has been modified to meet the requirements of the EN 60079 series of standards and their marking requirements. It comprises the size 90. This motor series can, in addition, be used under dust explosion protection conditions. The letter "C" is added at the 4th digit of the type code.

Except for the external fan in aluminium or grey cast iron, the mechanical and structural design of the motor remains unchanged.

The above motor series can alternatively come without cooling ribs on the enclosure surface.

Since the company name has changed, the certified equipment of

Danfoss Bauer GmbH,
Eberhard-Bauer-Str. 36 - 60
73734 Esslingen, Germany

is marked with the new company name

Bauer Gear Motor GmbH
Eberhard-Bauer-Str. 36 - 60
73734 Esslingen, Germany

The range of ambient temperatures is 40 °C down to -20 °C. This temperature range may be extended to 60 °C down to -20 °C with a special electrical or thermal design in which suitable terminal boxes, materials and attached or installed components are used, or with the data sheet for the electrical ratings.

ZSEx10101e.dotm

Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin

1st SUPPLEMENT TO EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 3050

Notes for manufacturing and operation

Parts that are attached or installed (e.g. bushings, cable glands, connectors) shall be of a technical standard that complies with the specifications on the cover sheet. They must be suited for the operating conditions and come with a separate examination certificate. The special conditions have to be observed and included in the type test, if necessary.

The motors shall be attached to gearbox housings so that enclosure protection IP66 is ensured and the requirements in EN 60079-0:2012 are complied with.

Applied standards

EN 60079-0:2012, EN 60079-7:2007, EN 60079-31:2009

Test report: PTB Ex 13-32081

Zertifizierungssektor Explosionsschutz
On behalf of PTB:

Braunschweig, August 09, 2013

Dr.-Ing. F. Lienesch
Regierungsdirektor

PHYSIKALISCH-TECHNISCHE BUNDESANSTALT

Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin

1st S U P P L E M E N T

according to Directive 94/9/EC Annex III.6

to EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 3051

(Translation)

Equipment: Three-phase motor, type.../D.X..11...-.../....

Marking: **II 2 G Ex e IIC T1 - T4 Gb /**
II 2 D Ex tb IIIC T160 °C - T 120 °C Db

Manufacturer: Bauer Gear Motor GmbH

Address: Eberhard-Bauer-Straße 36-60, 73734 Esslingen, Germany

Description of supplements and modifications

The .../D.XE.11... series has been modified to meet the requirements of the EN 60079 series of standards and their marking requirements. It comprises the size 112. This motor series can, in addition, be used under dust explosion protection conditions. The letter "C" is added at the 4th digit of the type code.

Except for the external fan in aluminium or grey cast iron, the mechanical and structural design of the motor remains unchanged.

The above motor series can alternatively come without cooling ribs on the enclosure surface.

Since the company name has changed, the certified equipment of

Danfoss Bauer GmbH,
Eberhard-Bauer-Str. 36 - 60
73734 Esslingen, Germany

is marked with the new company name

Bauer Gear Motor GmbH
Eberhard-Bauer-Str. 36 - 60
73734 Esslingen, Germany

The range of ambient temperatures is 40 °C down to -20 °C. This temperature range may be extended to 60 °C down to -20 °C with a special electrical or thermal design in which suitable terminal boxes, materials and attached or installed components are used, or with the data sheet for the electrical ratings.

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Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin

1st SUPPLEMENT TO EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 3051

Notes for manufacturing and operation

Parts that are attached or installed (e.g. bushings, cable glands, connectors) shall be of a technical standard that complies with the specifications on the cover sheet. They must be suited for the operating conditions and come with a separate examination certificate. The special conditions have to be observed and included in the type test, if necessary.

The motors shall be attached to gearbox housings so that enclosure protection IP66 is ensured and the requirements in EN 60079-0:2012 are complied with.

Applied standards

EN 60079-0:2012, EN 60079-7:2007, EN 60079-31:2009

Test report: PTB Ex 13-32081

Zertifizierungssektor Explosionsschutz
On behalf of PTB:

Braunschweig, August 09, 2013

Dr.-Ing. F. Lienesch
Regierungsdirektor

PHYSIKALISCH-TECHNISCHE BUNDESANSTALT 11

Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin

1st S U P P L E M E N T

according to Directive 94/9/EC Annex III.6

to EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 3053

(Translation)

Equipment: Three-phase motor, type.../D.X..16...-.../....

Marking:  **II 2 G Ex e IIC T1 - T4 Gb /**
II 2 D Ex tb IIIC T160 °C - T 120 °C Db

Manufacturer: Bauer Gear Motor GmbH

Address: Eberhard-Bauer-Straße 36-60, 73734 Esslingen, Germany

Description of supplements and modifications

The .../D.XE.13... series has been modified to meet the requirements of the EN 60079 series of standards and their marking requirements. It comprises the size 160. This motor series can, in addition, be used under dust explosion protection conditions. The letter "C" is added at the 4th digit of the type code.

Except for the external fan in aluminium or grey cast iron, the mechanical and structural design of the motor remains unchanged.

The above motor series can alternatively come without cooling ribs on the enclosure surface.

Since the company name has changed, the certified equipment of

Danfoss Bauer GmbH,
Eberhard-Bauer-Str. 36 - 60
73734 Esslingen, Germany

is marked with the new company name

Bauer Gear Motor GmbH
Eberhard-Bauer-Str. 36 - 60
73734 Esslingen, Germany

The range of ambient temperatures is 40 °C down to -20 °C. This temperature range may be extended to 60 °C down to -20 °C with a special electrical or thermal design in which suitable terminal boxes, materials and attached or installed components are used, or with the data sheet for the electrical ratings.

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Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin

1st SUPPLEMENT TO EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 3053

Notes for manufacturing and operation

Parts that are attached or installed (e.g. bushings, cable glands, connectors) shall be of a technical standard that complies with the specifications on the cover sheet. They must be suited for the operating conditions and come with a separate examination certificate. The special conditions have to be observed and included in the type test, if necessary.

The motors shall be attached to gearbox housings so that enclosure protection IP66 is ensured and the requirements in EN 60079-0:2012 are complied with.

Applied standards

EN 60079-0:2012, EN 60079-7:2007, EN 60079-31:2009

Test report: PTB Ex 13-32081

Zertifizierungssektor Explosionsschutz
On behalf of PTB:

Braunschweig, August 09, 2013

Dr.-Ing. F. Lienesch
Regierungsdirektor

PHYSIKALISCH-TECHNISCHE BUNDESANSTALT

Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin

1st S U P P L E M E N T

according to Directive 94/9/EC Annex III.6

to EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 3057 X

(Translation)

Equipment: Three-phase motor, type.../D.X..13...-.../....

Marking:  **II 2 G Ex e IIC T1 - T4 Gb /**
II 2 D Ex tb IIIC T160 °C - T 120 °C Db

Manufacturer: Bauer Gear Motor GmbH

Address: Eberhard-Bauer-Straße 36-60, 73734 Esslingen, Germany

Description of supplements and modifications

The .../D.XE.13... series has been modified to meet the requirements of the EN 60079 series of standards and their marking requirements. It comprises the size 132. This motor series can, in addition, be used under dust explosion protection conditions. The letter "C" is added at the 4th digit of the type code.

Except for the external fan in aluminium or grey cast iron, the mechanical and structural design of the motor remains unchanged.

The above motor series can alternatively come without cooling ribs on the enclosure surface.

Since the company name has changed, the certified equipment of

Danfoss Bauer GmbH,
Eberhard-Bauer-Str. 36 - 60
73734 Esslingen, Germany

is marked with the new company name

Bauer Gear Motor GmbH
Eberhard-Bauer-Str. 36 - 60
73734 Esslingen, Germany

The range of ambient temperatures is 40 °C down to -20 °C. This temperature range may be extended to 60 °C down to -20 °C with a special electrical or thermal design in which suitable terminal boxes, materials and attached or installed components are used, or with the data sheet for the electrical ratings.

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Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin

1st SUPPLEMENT TO EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 3057 X

Notes for manufacturing and operation

Parts that are attached or installed (e.g. bushings, cable glands, connectors) shall be of a technical standard that complies with the specifications on the cover sheet. They must be suited for the operating conditions and come with a separate examination certificate. The special conditions have to be observed and included in the type test, if necessary.

The motors shall be attached to gearbox housings so that enclosure protection IP66 is ensured and the requirements in EN 60079-0:2012 are complied with.

Applied standards

EN 60079-0:2012, EN 60079-7:2007, EN 60079-31:2009

Test report: PTB Ex 13-32081

Zertifizierungssektor Explosionsschutz
On behalf of PTB:

Braunschweig, August 09, 2013

Dr.-Ing. F. Lienesch
Regierungsdirektor