



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEX BAS 15.0068X** Page 1 of 4 Certificate history:
Status: **Current** Issue No: 2 [Issue 1 \(2020-01-10\)](#)
[Issue 0 \(2016-04-13\)](#)
Date of Issue: 2021-10-20
Applicant: **Elnor Motors**
De Costerstraat 45
3150 Haact
Belgium
Equipment: **BAAP80X DC Motor**
Optional accessory:
Type of Protection: **Flameproof**
Marking: **Ex db IIB T4 Gb -20°C ≤ Ta ≤ +60°C**

Approved for issue on behalf of the IECEx
Certification Body:

R S Sinclair

Position:

Technical Manager

Signature:
(for printed version)

Date:

10/11/2021

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate issued by:

SGS Baseefa Limited
Rockhead Business Park
Staden Lane
Buxton, Derbyshire, SK17 9RZ
United Kingdom





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Manufacturer: **Elnor Motors**
De Costerstraat 45
3150 Haact
Belgium

Additional
manufacturing
locations:

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEX Quality system requirements. This certificate is granted subject to the conditions as set out in IECEX Scheme Rules, IECEX 02 and Operational Documents as amended

STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

IEC 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-1:2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Reports:

[GB/BAS/ExTR15.0163/00](#)

[GB/BAS/ExTR19.0112/00](#)

[GB/BAS/ExTR20.0144/00](#)

Quality Assessment Report:

[FR/LCI/QAR06.0007/14](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The DC Motors model BAAP80X are rated 12V, 24V or 48V DC, 50W (up to 1000W) and 40A. The motor is made up of three parts: a motor housing, drive end cover and non-drive end terminal enclosure with terminal cover. The housing is constructed from E235 tube.

For full details please see Annex.

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. The equipment shall be suitably earth bonded prior to use.
2. The installer and/or the end user shall ensure that only suitably certified, Ex d cable glands are used with the equipment.
3. The selection of the cable and cable gland shall be suitable for the temperature of 80°C.
4. Only suitable, Ex d certified blanking elements shall be used on the equipment.
5. The motor shall be fitted with thermal protection with a switch temperature of 135°C in the drive end stator winding overhang; this is to limit the stator temperature and maintain the temperature class T4. Thermal protection shall guarantee the disconnection of the supply. When this occurs, the equipment shall be manually reset.
6. Hexagon socket set screws shall only be replaced by those which are identical and have a quality grade of at least 12.9.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Variation 2.1

To add additional versions of the DC Motor; BAAP80L and BAAP80SH

Variation 2.2

To add a new design for the end cover

Variation 2.3

To review the product against the requirements of IEC 60079-0:2017 Edition 7

Variation 2.4

To remove unrequired drawings from certification

Variation 2.5

To amend an existing Specific condition of Use.

Variation 2.6

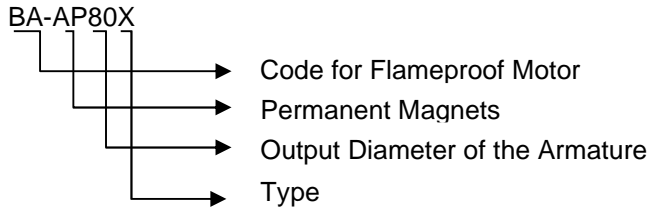
To include optional electrical ratings

ExTR: **GB/BAS/ExTR20.0144/00**

File Reference: **20/0454**

Annex:

[IECEX BAS 15.0068X - 2 Annex_1.pdf](#)



The DC motor model BAAP80X consists of 4 types of motor: S, M, L and SH denoted by X.

The motor is made up of three parts: a motor housing, drive end cover and non-drive end terminal enclosure with terminal cover. The housing is constructed from E235 tube. The male to female mating on the housing and covers make the cylindrical flame paths and the terminal enclosure (and cover on the non-drive end) facilitate a spigot flame path.

The drive end cover and non-drive terminal enclosure facilitate 3 carbon steel rods of quality 8.8. These are secured in place by 3 bolts with a quality grade of 12.9 on the drive end; these are used to supplement the motor's structural integrity.

The power supply and motor accessories for the BAAP80X are supplied through two suitably certified Ex d cable glands. The accessories for the motor include a thermal protector and heater. The motor may be flange or foot mounted in accordance with the manufacturer's instructions.

4 sizes of the motor are manufactured: the BAAP80L and BAAP80SH is 328mm (max) and 223mm (max) respectively; the BAAP80M and BAAP80S is 312mm (max) and 272mm (max) respectively.

Electrical Characteristics

Rated Voltage	12/24/48	Vdc
Rated Power	50 up to 1000	W
Rated Current	40	A
Maximum Speed	Up to 3000 (4000 w/ no load)	RPM
Insulation Class	F	

The motors are supplied with thermal protection or with a thermal protection device. The thermal protection is calibrated for a switching temperature of 135°C. The motors have a rated ambient range of -20°C to +60°C and temperature class of T4. The operation of the thermal protection shall guarantee the disconnection of the supply. Once a disconnection does occur, the equipment shall be manually reset.