

(1) **EC TYPE EXAMINATION CERTIFICATE**

(2) **Equipment or protective system intended for use  
in potentially explosive atmospheres  
Directive 94/9/EC**

(3) EC type examination certificate number: **ISSeP02ATEX036**

(4) Equipment or protective system:  
Motor - Series BA (X) 1xy \* \*

(5) Applicant - Manufacturer :  
ELNOR MOTORS N.V.,

(6) Address: De Costerstraat 45  
3150 Haacht (Wespelaar)

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

(8) ISSeP, notified body n° 492 in accordance with article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system 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 confidential report n 01187.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:  
EN 50014:1997 + A1 et A2: 1999    EN 50018:2000    EN 50281-1-1:1998

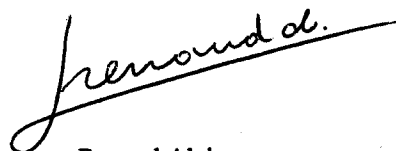
(10) If the symbol "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EC TYPE EXAMINATION CERTIFICATE relates only to the design, examination and tests of the specified equipment or protective system in accordance to the Directive 94/9/EC. Further requirements of this Directive may apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

(12) The marking of the equipment or protective system shall include the following indications:

 II 2 G D	EEx d IIB T6 to T3	IP 64
II 2 G	EEx d IIB T6 to T3	IP 54

Colfontaine, the 24.07.2002



Renaud Alain  
Manager of Colfontaine division

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(13)

## SCHEDULE

(14)

### EC TYPE EXAMINATION CERTIFICATE N<sup>o</sup> ISSeP02ATEX036

(15) Description of the equipment or protective system:

Three-phase asynchronous motor :BA(X) 1\*\*TR

Single-phase asynchronous motor :BA(X) 1\*\*C or E or CP

Direct current motors : BA(X) 1xy DC

The flameproof enclosure of this motor consists of a carcass made of steel and end shields made of cast iron.

The motor may be equipped with:

- a terminal box compartment. In this case an additional marking will indicate that the insulation of the supply cable provided by the user shall be compatible with a temperature of at least 100°C ( for the temperature classes T4 and T3).
- two ends shaft
- an operating rod for push button mounted on the terminal box compartment suitable to reset the manual thermal protection.

#### Temperature classes

The motors on S1 duty service cooled by the process have the temperature class T3. These motors have the temperature classes T6 or T5 or T4 if they are equipped with a thermal protection suitable to the temperature class.

The motors with natural cooling & the motors energised by converters and the motors on S2 to S9 duty service are provided with a thermal protection or a PTC thermistance suitable to the temperature class - to see documents from the manufacturer - Ref. : ES:2010 and ES:2023

#### Electrical characteristics

Power range : from 0.018 kW to 2.2 kW

Voltages supply : up to 660 VAC - 50 / 60 Hz  
from 6 VDC to 150 VDC

Insulation class : F

#### Eventual prescriptions

Ambient temperature range: -40°C up to +70°C

If the motor is IP 64 it shall be provided with a shaft seal

#### Routine test

Each apparatus shall be submitted to the routine verifications and tests necessary to ensure that it complies with the specification submitted to the testing station with the prototype.

(16) Report n<sup>o</sup> 01187 of 23.07.2002 composed in total of 25 pages

The letters from the manufacturer Ref. ES: 2010 and ES:2023 respectively dated of 22.03.2002 (5 pages) and 12.07.2002 (2 pages)

The manual of instructions of the manufacturer signed on 22.03.2002 (4 pages)

The description of the type designations – document signed on 22.03.2002 (1 page)

The technical notes related to the thermal protections (37 pages)

The results of electrical load tests performed on the motors BA175E II AR and BA175TR II AR dated 11.06.1997 and 7.01.1999 signed on 22.03.2002 (2 pages)

The data related to the self-adhesive marking plate - document signed on 22.03.2002 (1 page)

The data sheets related to the material of the marking plate - documents signed on 22.03.2002 (4 pages)

The document Table n<sup>o</sup> MIS / E-4d related to the insulation system of the motor dated October 1994 - Rev May 2001 signed on 22.03.2002 (1 page)

The calculation sheets related to the expansion of the enclosure with regards to the pressure Rev. 1 of 20.03.2002 signed on 22.03.2002 (2 pages).

The data sheets related to the parts of the flameproof enclosure dated 15.03.2002 - signed on 22.03.2002 (3 pages)

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### EC TYPE EXAMINATION CERTIFICATE N° ISSeP02ATEX036

**(16) The drawings:**

10000578A of 15.03.2002 rev.A of 11.07.2002 signed on 12.07.2002  
20000211 of 18.03.2002 signed on 22.03.2002  
22100607 of 15.03.2002 signed on 22.03.2002  
24000408 of 6.02.2002 signed on 22.03.2002  
460100605 of 6.03.2002 signed on 22.03.2002  
50100606 of 11.03.2002 signed on 22.03.2002  
50100609 of 6.02.2002 signed on 22.03.2002  
50100610 of 11.03.2002 signed on 22.03.2002  
505010550 of 11.03.2002 signed on 22.03.2002  
505990125 of 11.03.2002 signed on 22.03.2002  
810100603A of 11.03.2002 Rev.A of 11.07.2002 signed on 12.07.2002  
810100604A of 11.03.2002 Rev.A of 11.07.2002 signed on 12.07.2002  
810100608 of 15.03.2002 signed on 22.03.2002  
21-250B of 22.04.1994 Rev.B of 19.02.1997 signed on 22.03.2002  
23-274B of 2.07.1997 Rev.B of 13.02.1998 signed on 22.03.2002

**(17) Special conditions for safe use: none**

**(18) Essential Health and Safety Requirements: none**