DNV·GL

Certificate No:
TAE0000415

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Electric Motor

with type designation(s)
BD ..., dBD ... and CD (Certified safe Type)*

Issued to
ATB NORDENHAM GmbH
NORDENHAM, Germany

is found to comply with
DNV GL rules for classification – Ships, offshore units, and high speed and light craft

Application :

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

Degree of protection	**IP 56**
Insulation class	**F**
Temp. class (°C)	**155**
Voltage (V)	**200 V up to 690 V**
Power (kW)	**S1: 0.1kW up to 750kW (sizes see page 2)**
Frequency (Hz)	**50 Hz, 60 Hz, 5 Hz up to 87 Hz (Conv. Operation)**
Speed (RPM)	**50 1/min up to 5220 1/min**

Issued at **Hamburg** on **2020-06-21**
This Certificate is valid until **2025-06-20**.
DNV GL local station: **Magdeburg**

Approval Engineer: **Maik Gagern**

for **DNV GL**

Arne Schaarmann
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.

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Job Id: **262.1-033699-1**
Certificate No: **TAE0000415**

Product description

Squirrel Cage Induction Motors

Types BD, CD
Size: 63 up to 450

Type dBD
Size: 500

Application/Limitation

This Certificate is issued based on DNV GL Class Programme DNVGL-CP-0338, Edition 2018-09.

Maker´s instructions are to be observed.
*Note: All details about electrical explosion protection mentioned in this certificate are for information only. For relevant binding information the corresponding Certificate of Conformity with regard to electrical explosion protection, issued by a recognised Authority, shall be observed.

CD *		
Size	Certificate ATEX	Certificate IECEx
63	13 ATEX 1012X	IECEx PTB 12.0036X
71	13 ATEX 1012X	IECEx PTB 12.0036X
80	14 ATEX 1001X	IECEx PTB 14.0001X
90	14 ATEX 1001X	IECEx PTB 14.0001X
100	14 ATEX 1010X	IECEx PTB 14.0014X
112	14 ATEX 1010X	IECEx PTB 14.0014X
132	15 ATEX 1005X	IECEx PTB 15.0011X
160	16 ATEX 1022X	IECEx PTB 16.0040X
180	08 ATEX 1056X	IECEx PTB 06.0022X
200	08 ATEX 1081X	IECEx PTB 06.0023X
225	08 ATEX 1087X	IECEx PTB 06.0009X
250	08 ATEX 1087X	IECEx PTB 06.0009X
280	08 ATEX 1087X	IECEx PTB 06.0009X
315	08 ATEX 1087X	IECEx PTB 06.0009X
355	08 ATEX 1082X	IECEx PTB 06.0024X
400	08 ATEX 1083X	IECEx PTB 06.0036X
450	08 ATEX 1085X	IECEx PTB 06.0037X
Indication	II 2G Ex db IIC T3 - T6 or	Ex d IIC T3 - T6 (Gb) or
	II 2G Ex db eb IIC T3 - T6 or	Ex d e IIC T3 - T6 (Gb) or
	III 2D Ex tb IIIC T85°C - T200 °C	(Ex tb IIIC T85°C - T200 °C Db)

BD / dBD *		
Size	Certificate Type BD	Certificate Type dBD
63	17 ATEX 1007X	--- ---
71	17 ATEX 1007X	--- ---
80	17 ATEX 1008X	--- ---
90	17 ATEX 1008X	--- ---
100	17 ATEX 1009X	--- ---
112	17 ATEX 1009X	--- ---
132	17 ATEX 1010X	--- ---
160	09 ATEX 1011X	--- ---
180	09 ATEX 1012X	--- ---
200	09 ATEX 1013X	--- ---
225	09 ATEX 1011X	--- ---
250	09 ATEX 1011X	--- ---
280	09 ATEX 1011X	--- ---
315	09 ATEX 1011X	--- ---
355	09 ATEX 1014X	--- ---
400	09 ATEX 1015X	--- ---
450	09 ATEX 1006X	--- ---
500	--- ---	09 ATEX 1008X
80**	08 ATEX 1110X	
90**	08 ATEX 1110X	
100**	08 ATEX 1110X	
112**	08 ATEX 1110X	
132**	08 ATEX 1110X	
Indication	II 2G Ex db IIB T3 - T6	Ex d IIB T3 - T6 Gb
	II 2G Ex db eb IIB T3 - T6	Ex d e IIC T3 - T6 Gb
	** II 2G Ex db IIB+H2 T3 - T6	Ex tb IIIC T85°C - T200 ° C Db
	**II 2G Ex db eb IIB+H2 T3 - T6	
	III 2D Ex tb IIIC T85°C - T200 °C	

Type Approval documentation

Tests carried out

IEC 60034-1:2017
DNV GL Class Programme DNVGL-CP-0393, Edition Dec. 2015

Marking of product

Maker
Type
Serial No.
Nominal Voltage / Frequency /Current / Power / Revolutions
Degree of electrical explosion protection*

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the Type approval are complied with and that no alterations are made to the product design or choice of materials.

The main elements of the assessment are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Routine Tests (RT) checked (if not available tests according to RT to be carried out)
- Review of type approval documentation
- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer's product type marking and Type Approval Certificate.

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE