Certificate No: LR2556749TA
Issue Date: 07/05/2025
Expiry Date: 06/05/2030

Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

Manufacturer **Kompressorenbau Bannewitz GmbH**

Address Windbergstrasse 45, Bannewitz, 01728, Germany

Type Exhaust Gas Systems

Description Category C - Turbocharger with Axial Turbine

Types: HSA5 / HSA6

Trade Name Turbocharger Series HSA

Application Marine/Offshore/Industrial

Specified Standard Lloyd's Register Rules and Regulations for the Classification of Ships, 2024
Manufacturer Standard

Ratings

Type	C/W notation	Maximum speed: [rpm]	Max. Engine Power [kW]
HSA5	CDxxA	40.500	2000 to 4500
	CAxxA	34.800	
HSA6	CBxxA	34.800	3000 to 6500
	CDxxA	31.600	

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Torsten Schroeder

Engineering - Piping/ Decarbonisation -
Senior Specialist to Lloyd's Register EMEA
A member of the Lloyd's Register group

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Maximum exhaust gas temperature before turbine: 650°C
Pressure ratio: 3

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

The Design Appraisal Document TSO/25-029087 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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