

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	VEM Motors GmbH
Address	Elektromotorenwerk Wernigerode GmbH, Carl-Friedrich-Gauss-Str. 1, Wernigerode, 38855, Germany
Type	Electric Motors
Description	A.C. polyphase induction motors with squirrel cage
Trade Name	K1xR, K2xR, WExR, W2xR, W4xR, W6xR 112... to 450..., IE*-K1xR, IE*-K2xR, IE*WExR, IE*-W2xR, IE* -W4xR, IE*-W6xR 112... to 450...
Application	Marine, offshore and industrial use
Specified Standard	IEC 60034-1: 2010-02 IEC 60092-301: 1980 + AMD 1: 1994 + AMD 2: 1995
Ratings	See appendix

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 No. HTS/ETS 39740-20/JK and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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Appendix

RATINGS

K1xR, K2xR, WExR, W2xR, W4xR, W6xR, 112... to 450...

IE*-K1xR, IE*-K2xR, IE*-W2xR, IE* -W4xR, IE*-W6xR, 112... to 450...

x= 0, 1, 2, 3, 6, 7, 8: Code for VEM construction type

*= 1, 2, 3 or 4: Efficiency Class acc. To IEC 60034-30

Rated voltage: up to 750 V

Power: 0.5 kW up to 1000 kW

Synchronous speed: 250 1/min. up to 3600 1/min.

Rated frequency: 50 Hz, 60 Hz

Ambient temperature: 45°C

Duty type: S1- S9

Thermal class: 155(F), optional 180(H)

Type of enclosure: IP 55, IP 56, IP 65, IP 66

No. of poles: 2, 4, 6, 8, 10, 12, 16, 24 and combinations

Spec. model: SS (Seewasserschutz), resistant to sea water

Description of type: * = 1, 2, 3, 4 Efficiency class acc. to IEC 60034-30

Type of construction: IM B3/ IM 1002, IM B35/ IM 2002,
IM B34/ M2102, IM B5/ IM3002, IM B14/ IM3602
and derived forms of construction acc. to
IEC 60034-7:1992+A1:2000