



Type Approval Certificate

Germanischer Lloyd

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

Certificate No. 70 072 - 91 HH

Company VEM motors Thurm GmbH
Äußere Dresdener Straße 35
D-08066 Zwickau

Product Description Induction motors

Type KPR 56 up to KPR 100
KPER 63 up to KPER 132

Environmental Category H

Technical Data /
Range of Application
Sizes: 56, 63, 71, 80, 90, 100, 112, 132
KU, KY, GX, GZ, GV, LX, LZ, LV, LW, SX
Rated voltage: up to 690 V
Rated power: 0,105 kW up to 9,0 kW
(max. 11 kW at short time duty)
Synchronous speed: 750 1/min up to 3600 1/min
Rated frequency: 50 Hz, 60 Hz
Ambient temperature: 45° C
Duty type: S1
Insulation class: F, H
Degree of protection: IP 54, IP 55, IP 56, IP 65
No. of poles: 2, 4, 6, 8, 10, 12 and combinations
Spec. model: Marine version

Valid for all variants independent of voltage, power, speed and type of construction

Test Standard EN 60034-1:1998

GL Regulations for the Performance of Type Tests, part 4, ed. 1999

Documents

Drawing 05-0001:04(1) dated 05.01.1995, DSRK-Approval No. 303 54 134
Worksstandard ET-N111 131.01e, 111 131.02d, 111 131.03d, 111751.01
test reports 0312704001301H dated 31.01.2003, IBExU (2. Ergänzung, S.10)
Modification list VEM motors Thurm of 27.07.00

Remarks

None

Valid until

2010-09-25

Page 1 of 1

Type Approval Symbol



File No. I.G.03

Hamburg, 2005-09-26

Germanischer Lloyd

H. Tobaben

H. D. Hespe

This certificate is issued on the basis of "Guidelines for the Performance of Type Approvals Part 1, Procedure".



Type Approval Certificate

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Certificate No. 96 753 - 95 HH

Company VEM motors Thurm GmbH
Äußere Dresdener Straße 35
D-08066 Zwickau

Product Description Induction motors, Ex-protected

Type KPER..56 up to KPER 112 (increased safety)

Environmental Category H

Technical Data /
Range of Application

Sizes:	56, 63, 71, 80, 90, 100, 112
	S, K, G, L, M, MX, LX
Rated voltage:	up to 690 V
Rated power:	0,12 kW up to 4,1 kW
Synchronous speed:	750 1/min up to 3000 1/min
Rated frequency:	50 Hz, 60 Hz
Ambient temperature:	45° C
Duty type:	S1
Insulation class:	F
Degree of protection:	IP 54, IP 55, IP 56
No. of poles:	2, 4, 6, 8 and combinations
Spec. model:	Marine version
Designation:	EEx e II T1, T2 or T3 (increased safety)

Test Standard EN 60034-1:1998
GL Regulations for the Performance of Type Tests, part 4, ed. 1999

Documents Drawing 05-0001:04(1) dated 05.01.1995
Worksstandard ET-N111 131.01e, 111 131.02d, 111 131.03d,
test reports, DSRK-Approval No. 303 54 134
Modification list VEM motors Thurm of 27.07.00

Remarks Conditions and remarks of the certificates of conformity issued by PTB must be observed

Valid until 2010-09-25

Page 1 of 2

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Certificate No. 96 753 - 95 HH

Certificate of Conformity of Physikalisch-Technische Bundesanstalt PTB

Type of motor	PTB Nr.	Type of motor	PTB Nr.
KPER 63 K2	Ex-94.C.3800	KPER 90 S2	Ex-94.C.3689
KPER 63 G2	Ex-94.C.3802	KPER 90 L2	Ex-94.C.3815
KPER 63 K4	Ex-94.C.3826	KPER 90 S4	Ex-94.C.3688
KPER 63 G4	Ex-94.C.3805	KPER 90 L4	Ex-94.C.3454
KPER 71 K2	Ex-94.C.3804	KPER 90 S6	Ex-94.C.3683
KPER 71 G2	Ex-94.C.3825	KPER 90 L6	Ex-94.C.3808
KPER 71 K4	Ex-94.C.3801	KPER 90 L8	Ex-94.C.3806
KPER 71 G4	Ex-94.C.3822	KPER 90 S8	Ex-94.C.3811
KPER 80 K2	Ex-94.C.3816	KPER 100 L2	Ex-94.C.3687
KPER 80 G2	Ex-94.C.3684	KPER 100 L4	Ex-94.C.3803
KPER 80 K4	Ex-94.C.3814	KPER 100 L6	Ex-94.C.3823
KPER 80 G4	Ex-94.C.3813	KPER 100 L8	Ex-94.C.3685
KPER 80 K6	Ex-94.C.3821	KPER 100 LX4	Ex-94.C.3824
KPER 80 G6	Ex-94.C.3810	KPER 100 LX8	Ex-94.C.3817
KPER 80 K8	Ex-94.C.3809	KPER 112 M2	Ex-94.C.3818
KPER 80 G8	Ex-94.C.3820	KPER 112 MX2	Ex-94.C.3812
----	----	KPER 112 M4	Ex-94.C.3819
----	----	KPER 112 M6	Ex-94.C.3807
----	----	KPER 112 M8	Ex-94.C.3686
K.. 56 ...	PTB 99 ATEX 3308	II 2 G EEx e II T1, T2, T3 oder T4	
K.. 63 ...	PTB 99 ATEX 3309	II 2 G EEx e II T1, T2, T3 oder T4	
K.. 71 ...	PTB 99 ATEX 3310	II 2 G EEx e II T1, T2, T3 oder T4	
K.. 80 ...	PTB 99 ATEX 3311	II 2 G EEx e II T1, T2, T3 oder T4	
K.. 90 ...	PTB 99 ATEX 3312	II 2 G EEx e II T1, T2, T3 oder T4	
K.. 100 ...	PTB 99 ATEX 3313	II 2 G EEx e II T1, T2, T3 oder T4	
K.. 112 ...	PTB 99 ATEX 3314	II 2 G EEx e II T1, T2, T3 oder T4	

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Page 2 of 2

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