




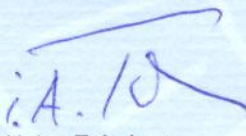
Germanischer Lloyd

# Type Approval Certificate

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.	<b>33 446 - 06 HH</b>
Company	<b>Dutchi Motors B.V. Van Oldenbarneveldstraat 85A 6828 ZN Arnhem, NETHERLANDS</b>
Product Description	<b>Induction motors Cast iron motors</b>
Type	<b>DM IP23 80 up to DM1 400</b>
Environmental Category	<b>H</b>
Technical Data / Range of Application	<b>Place of manufacturing: Wuxi Huada Motors Co. Ltd. 251 Junmin Rd., Huazhuang Town Wuxi, Jiangsu Prov. PR China 214131</b>
	<b>Sizes: K, G, S, L, Lx, Ly, Lz, M, Mx, My</b>
	<b>Rated voltage: 220 V up to 990 V</b>
	<b>Rated power: S1 11 kW up to 850 kW</b>
	<b>Duty Type: S1, S2-10min, S2-30min, S3, S6-20%, S6-40%, S6-60%</b>
	<b>Synchronous speed: 500 1/min up to 3600 1/min + combinations</b>
	<b>Rated frequency: 50 Hz, 60 Hz</b>
	<b>Ambient temperature: 45° C</b>
	<b>Insulation class: F</b>
	<b>Degree of protection: IP 23</b>
	<b>No. of poles: 2, 4, 6, 8 and combinations</b>
	<b>Spec. model: For marine applications / environments</b>
Test Standard	<b>IEC 60034-1, 1999-08 GL Regulations for the Performance of Type Tests, part 4, edition 1999</b>
Documents	<b>Drawing DM-IP23 315S4 160kW 10731501040201 dated 06.10.27 Technical data: Betriebsanleitung DEU000110HvD Test report:2381806001dated 2006.10.27 Catalogue: Dutchi version 2003/2004</b>
Remarks	<b>None</b>
Valid until	<b>2012-03-15</b>
Page 1 of 1	<b>Type Approval Symbol</b> 
File No. I.G.03	
Hamburg, 2007-03-16	

**Germanischer Lloyd**

  
Heinz Tobaben

  
Heinz-Dieter Hespe

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