

# 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. **47 334 - 03 HH**

Company **Eldin**  
**Yaroslavl Electric Machine Building Plant**  
**Oktyabrya ave., 74**  
**150040 Yaroslavl, RUSSIAN FEDERATION**

Product Description **3phase Induction Motors with Squirrel Cage**  
**Cast iron frame**

Type **RA 112... up to RA 315...**  
**BNGA 112... up to BNGA 315...**

Environmental Category **H**

Technical Data /  
Range of Application **Sizes : 112, 132, 160, 180, 200, 225, 250, 280, 315**  
**Rated voltage : 220 V up to 690 V**  
**Rated power : S1, 3,0 kW up to 200 kW**  
**Synchronous speed : 750 1/min up to 3600 1/min**  
**Rated frequency : 50 Hz, 60 Hz**  
**Ambient temperature : 45 °C, acc. to technical catalogue Eldin of 15.8.2002**  
**Insulation class : F, temp. rise acc. to class B**  
**exceptions see technical catalogue dated 15.08.2002**  
**Degree of protection : IP 55, IP 56**  
**No. of poles : 2, 4, 6, 8**  
**Spec. model : For marine applications / environments**  
**according document "Schiffsausführung, Unterschied**  
**von den Standardmotoren" dated 09.07.2003**

Test Standard **GL-Regulations for the Performance of Type Tests, part 4, edition 1999**  
**DIN EN 60034-1(09.2000)**

Documents **Drawings H071.525222.002-04/23.05.03, H132.525722.012-00/23.05.03,**  
**H160.526122.026-14/23.05.03, H250.526522.001-09/23.05.03**  
**Technical catalogue Eldin dated 15.08.2002**  
**Test reports 149-03, 150-03, 151-03, 152-03 dated 01.07.2003**

Remarks **None**

Valid until **2013-07-09**

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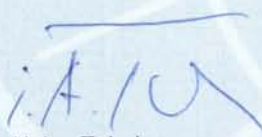
File No. **I.G.03**

**Hamburg, 2008-06-18**

Type Approval Symbol



**Germanischer Lloyd**

  
Heinz Tobaben

  
Heinz-Dieter Hesse

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