



Type Test Report

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Test Details

TR Number: HG600750-1
Test Date: 24-Apr-07
Test Lab: CMG Technology Laboratory

Name Plate Data

Three phase cage induction motor		
Type : HGA160M	Prod.Code: M3600750_HGA	
7.5 kW	970 r/m	Ser.No.: 834076/009-002
Duty: S1	cos fi: 0.80	50 Hz
400/690 V	Conn: Delta/Star	15.4/8.9 A
IP: 55	Ins.Cl: F	Eff. [%] 87.6
Brg.DE: 6309	Brg.NDE: 6309	129 kg

Test Data

	Voltage [V]	Current [A]	Input Power [Watts]	Frequency [Hz]	Speed [r/m]	Torque [Nm]	Output Power [Watts]	Power Factor	Effic. [%]
No Load	381	7.0	356	50	1000	0.0	0	0.08	0.0
No Load	400	7.8	405	50	1000	0.0	0	0.07	0.0
No Load	415	8.5	456	50	1000	0.0	0	0.07	0.0
25% F.L.	401	8.8	2745	50	992	22.0	2285	0.45	83.2
50% F.L.	401	10.0	4178	50	988	35.3	3652	0.60	87.4
75% F.L.	401	12.6	6404	50	982	55.7	5723	0.73	89.4
100% F.L.	400	15.5	8447	50	975	74.0	7557	0.79	89.5
125% F.L.	400	18.8	10639	50	968	93.3	9455	0.82	88.9
Locked Rt.T.	400	98.9	-	50	0	152.6	-	-	-
Break D.T.	400	-	-	50	760	152.6	-	-	-
F.L. at 380V	380	15.8	8457	50	973	74.2	7560	0.81	89.4
F.L. at 415V	415	15.3	8460	50	978	73.8	7553	0.77	89.3

Legend: F.L. = Full Load; Locked Rt.T. = Locked Rotor Torque Test; Break D.T. = Break Down Torque Test

Resistance between terminals [Ohms]	U1 - V1	0.7808	Heat Run Test	Part of motor	Temperature rise in [K] at amb. temp.		
	U1 - W1	0.7810			23	[°C]	measured by:
Insulation resistance to frame	V1 - W1	0.7810	After continuous test at:	Winding	thermometer	resistance	temp.detector
	Conn. @Temp[°C]	Delta 21.0			-	60.3	-
H.V. test winding to frame	Instrument voltage megohms @Temp[°C]	Megger 1000 10500 21.0	400 V 15.3 A 975 r/m	Frame	39.5	-	-
	Result	PASSED			48.9	-	-
Over rate tests	Voltage Minutes Result	2440 1 PASSED	Excess Torque [Nm]	Excess Current [A]	Value	%incr.	Duration
					118	160	15sec.
					23.1	150	2min.
			Excess Current [A]	1200	120	2min.	

Measurement Uncertainty

Measurement uncertainties at the 95% confidence level using a k factor of 2 are:
Current, Voltage, Power: +/-0.5%
Speed, Frequency: +/-0.5%
Resistance: +/-0.2%
Temperature by-thermometer/detector: +/-10°C
resistance: +/- 2°C

Exclusions/Deviations

High Voltage test conducted by the manufacturer

Compliance to Standard

Motors tested in accordance with IEC60034-1 / AS1359.101 Sections 7 & 8 Efficiency as per IEC60034-2 / AS1359 Part 102.1
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Comments

This Test Report is also applicable for M3600750_HLA
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Tested By: P.Wasillewski	Checked By: C Ellis	Printed: 1-Oct-08
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