

Type Test Report

19 Corporate Avenue
Rowville 3178
Victoria Australia

Ph: 61 3 9237 4000
Testing@cmggroup.com.au
www.cmggroup.com.au

Test Details

TR Number: HG200300-1
Test Date: 7-Aug-07
Test Lab: CMG Technology Laboratory

Name Plate Data

Three phase cage induction motor		
Type : HGA100L	Prod.Code: M3200300_HGA	
3 kW	2900 r/m	Ser.No.: 838107-003-23
Duty: S1	cos fi: 0.88	50 Hz
230/400 V	Conn: Delta/Star	9.7/5.6 A
IP: 55	Ins.Cl: F	Eff.[%] 87.9
Brg.DE: 6206	Brg.NDE: 6206	37 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	1.8	134	50	2999	0.0	0	0.11	0.0
No Load	400	2.0	147	50	3000	0.0	0	0.11	0.0
No Load	416	2.2	158	50	3000	0.0	0	0.10	0.0
25% F.L.	400	2.9	1361	50	2964	3.8	1174	0.69	86.2
50% F.L.	400	3.4	1798	50	2954	5.1	1578	0.77	87.7
75% F.L.	399	4.4	2588	50	2927	7.5	2291	0.85	88.5
100% F.L.	401	5.7	3446	50	2903	10.0	3037	0.88	88.1
125% F.L.	401	7.0	4336	50	2875	12.5	3773	0.90	87.0
Locked Rt.T.	400	47.8	-	50	0	29.9	-	-	-
Break D.T.	400	-	-	50	2250	34.6	-	-	-
F.L. at 380V	380	5.8	3414	50	2891	9.9	2994	0.89	87.7
F.L. at 415V	416	5.5	3423	50	2912	9.9	3026	0.87	88.4

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 U1 - W1 V1 - W1 Conn. @Temp[°C]	2.7110 2.7150 2.7100 Star 17.4	Heat Run Test After continuous test at: 401 V 5.7 A 2985 r/m	Part of motor Winding Frame Bearing	Temperature rise in [K] at amb. temp. 20 [°C] measured by:		
					thermometer	resistance	temp.detector
Insulation resistance to frame	Instrument voltage megohms @Temp[°C]	Megger 1000 55000 17.4			-	54.8	-
					29.6	-	-
H.V. test winding to frame	Voltage Minutes Result	2440 1 PASSED	Over rate tests	Excess Torque [Nm]	15.8	160	15sec.
				Excess Current [A]	8.56	153	2min.
				Overspeed [r/m]	3600	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

Comments

This Test Report is also applicable for M3200300_HLA

Tested By: P.Wasillewski

Checked By: C Ellis

Printed: 1-Oct-08