Type Test Report

Date of issue: 1.9.2015

Serial No.:

Customer:

Customer ref.:

Type: M3AA 160MLB 4

Product Code: 3GAA162420-HDG

Rating:

	V		Hz	kW	r/min	A	cos φ	Duty
3~Motor	690	Y	50	15,0	1470	16,5	0,83	S1
Insul.cl.F	400	D	50	15,0	1470	28,5	0,83	S1
IP55	415	D	50	15,0	1473	27,7	0,82	S1
	440	D	60	15,0	1772	25,1	0,85	S1
	460	D	60	15,0	1775	24,6	0,83	S1

Eff class IE2

50Hz : IE2 - 91,4(100%) - 92,3(75%) - 92,2(50%)

60Hz : IE2 - 92,0(100%)

Resistance

Line Ambient: 28,9 °C

U_1 - V_1	0,37050 Ω
U_1 - W_1	0,36710 Ω
V_1 - W_1	0,36870 Ω

Insulation resistance at 28,1 °C

R > 2000 Mohm 1000 V

Overload

Current	150 %	120s
Torque	160 %	15s
Speed	120 %	120s

High-voltage test winding 2400 V 60 s

Test	Torque [Nm]	Line U[V]		f[Hz]	Input I[A]	P1 [kW]	Output P2 [kW]	n[r/min]	cos φ	η [%]
No load test		401	D	50	11,1	0,44		1500	0,06	
Locked rotor test		84	D	50	27,8	1,39		0	0,34	
Thermal test (100% load)	97,4	400	D	50	29,0	16,48	15,00	1470	0,82	91,04
Partial load points:										
~75% load	73,2	400	D	50	22,9	12,35	11,34	1478	0,78	91,75
~50% load	47,7	400	D	50	17,2	8,11	7,42	1486	0,68	91,53
~25% load	24,2	400	D	50	13,0	4,29	3,78	1493	0,48	88,15

Temperature rise at rated load.

	[°C]	[K]	Method
Stator winding :		56,9	1
Frame :		33,6	2
Bearing D-end :		21,9	2
Ambient Temperature :	28		2

Measurement method

1 Resistance

2 Thermometer

3 Thermocouples

These tests have been carried out on motor no. 3GV1010552882, on date 2010-07-14 which is identical in electrical design with the above.

Manufactured and tested in accordance with rules of IEC 60034-1 and IEC 60034-2-1.

PLL determined from residual loss.

On behalf of customer

On behalf of manufacturer Date of test

Tested by ABB AB, LV Motors, 721 70 Västerås, Sweden

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