Type Test Report

Date of issue: 1.9.2015

Serial No.:

Customer:

Customer ref.:

Type: M3AA 160MLC 2

Product Code: 3GAA161430-ADG

Rating:

	V		Hz	kW	r/min	A	cos φ	Duty
3~Motor	690	Y	50	18,5	2932	18,3	0,92	S1
Insul.cl.F	400	D	50	18,5	2932	31,5	0,92	S1
IP55	415	D	50	18,5	2938	30,7	0,90	S1
	440	D	60	18,5	3536	28,6	0,92	S1
	460	D	60	18,5	3543	27,2	0,92	S1

Eff class IE2

50Hz : IE2 - 92,0(100%) - 93,1(75%) - 93,1(50%)

60Hz : IE3 - 92,2(100%)

Resistance

Line Ambient: 21,1 °C

U_1 - V_1	0,25290	Ω
U_1 - W_1	0,25180	Ω
V_1 - W_1	0,25220	Ω

Insulation resistance at 22 °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	7,7	0,44		3000	0,08	
Locked rotor test		60	D	50	30,6	1,26		0	0,39	
Thermal test (100% load)	60,1	400	D	50	31,9	20,07	18,50	2940	0,91	92,16
Partial load points:										
~75% load	44,1	400	D	50	23,9	14,70	13,66	2958	0,89	92,92
~50% load	28,4	400	D	50	16,5	9,53	8,84	2974	0,83	92,74
~25% load	13,9	400	D	50	10,8	4,86	4,35	2987	0,65	89,54

Temperature rise at rated load.

	[°C]	[K]	Method
Stator winding :		55,5	1
Frame :		18,7	2
Bearing D-end :		25,9	2
Ambient Temperature :	22		2

Measurement method
1 Resistance
2 Thermometer
3 Thermocouples

These tests have been carried out on motor no. 3GV1110787161006, on date 2011-11-09 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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