Type Test Report

Date of issue: 1.9.2015

Serial No.:

Customer:

Customer ref.:

Type: M3AA 160MLC 4

Product Code: 3GAA162430-ADG

Rating:

	V		Hz	kW	r/min	A	cos φ	Duty
3~Motor	690	Y	50	18,5	1469	20,1	0,84	S1
Insul.cl.F	400	D	50	18,5	1469	34,7	0,84	S1
IP55	415	D	50	18,5	1472	34,2	0,82	S1
	440	D	60	18,5	1771	30,9	0,85	S1
	460	D	60	18,5	1774	30,2	0,83	S1

Eff class IE2

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

60Hz : IE1 - 92,3(100%)

Resistance

Line — Ambient: 22,5 °C

U_1 - V_1	0,27980 Ω
U_1 - W_1	0,27590 Ω
V_1 - W_1	0,27810 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		399	D	50	13,3	0,55		1500	0,06	
Locked rotor test		79	D	50	34,0	1,52		0	0,33	
Thermal test (100% load)	120,3	400	D	50	35,1	20,28	18,50	1469	0,83	91,24
Partial load points:										
~75% load	90,7	400	D	50	27,7	15,26	14,03	1477	0,79	91,91
~50% load	59,4	400	D	50	20,8	10,08	9,23	1485	0,70	91,63
~25% load	30,8	400	D	50	15,9	5,45	4,82	1493	0,49	88,40

Temperature rise at rated load.

	[°C]	[K]	Method
Stator winding :		63,1	1
Frame :		35,2	2
Bearing D-end :		36	2
Ambient Temperature :	22		2

Measurement method
1 Resistance
2 Thermometer
3 Thermocouples

These tests have been carried out on motor no. 3GV1110794683005, on date 2011-12-21 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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