



Type Test Report				Date of issue: 1.9.2015							
Customer:				Serial No.:							
Customer ref.:				Type: M3AA 160MLB 2 Product Code: 3GAA161420-ADG							
Rating:											
				V	Hz	kW	r/min	A	cos φ	Duty	
3-Motor				690	Y	50	15,0	2934	15,1	0,90	S1
Insul.cl.F				400	D	50	15,0	2934	26,0	0,90	S1
IP55				415	D	50	15,0	2941	25,2	0,90	S1
				440	D	60	15,0	3539	23,5	0,90	S1
				460	D	60	15,0	3545	22,4	0,90	S1
Eff class IE2				50Hz : IE2 - 91,5(100%) - 92,4(75%) - 92,2(50%) 60Hz : IE3 - 91,8(100%)							
Resistance				Insulation resistance at 22 °C				Overload			
Line				R > 2000 Mohm 1000 V				Current 150 % 120s			
U ₁ - V ₁				Ambient: 20,4 °C				Torque 160 % 15s			
U ₁ - W ₁				0,33230 Ω				Speed 120 % 120s			
V ₁ - W ₁				0,33120 Ω							
				0,33150 Ω							
				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	7,2	0,45		3000	0,09			
Locked rotor test		65 D	50	27,5	1,22		0	0,39			
Thermal test (100% load)	48,7	400 D	50	26,2	16,35	15,00	2943	0,90	91,76		
Partial load points:											
~75% load	35,6	400 D	50	19,8	11,94	11,02	2959	0,87	92,27		
~50% load	23,0	400 D	50	14,0	7,81	7,17	2975	0,80	91,71		
~25% load	12,0	400 D	50	9,8	4,25	3,74	2987	0,63	88,10		
Temperature rise at rated load.				°C [K] Method				Measurement method			
Stator winding :				62,8 1				1 Resistance			
Frame :				22,3 2				2 Thermometer			
Bearing D-end :				35,2 2				3 Thermocouples			
Ambient Temperature :				22 2							
These tests have been carried out on motor no. 3GV1110786691008, on date 2011-12-29 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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