



Type Test Report				Date of issue: 1.9.2015					
Customer:				Serial No.:					
Customer ref.:				Type: M3AA 160MLA 2 Product Code: 3GAA161410-ADG					
Rating:									
	V	Hz	kW	r/min	A	cos φ	Duty		
3-Motor	690	Y 50	11,0	2938	11,1	0,90	S1		
Insul.cl.F	400	D 50	11,0	2938	19,2	0,90	S1		
IP55	415	D 50	11,0	2943	18,7	0,90	S1		
	440	D 60	11,0	3541	17,4	0,91	S1		
	460	D 60	11,0	3547	16,7	0,90	S1		
Eff class IE2	50Hz : IE2 - 90,6(100%) - 91,5(75%) - 91,1(50%) 60Hz : IE3 - 91,1(100%)								
Resistance				Insulation resistance at 24,6 °C		Overload			
Line Ambient: 21,4 °C				R > 2000 Mohm 1000 V		Current 150 % 120s Torque 160 % 15s Speed 120 % 120s			
U ₁ - V ₁ 0,4956 Ω									
U ₁ - W ₁ 0,4959 Ω									
V ₁ - W ₁ 0,4954 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		400,1 D	50	5,7	0,41		3000	0,10	0,1031
Locked rotor test		63,4 D	50	19,1	0,84		0	0,40	
Thermal test (100% load)	35,8	400 D	50	19,8	12,15	11,00	2938	0,89	90,50
Partial load points:									
~75% load	26,6	400 D	50	15,2	9,06	8,25	2957	0,86	91,00
~50% load	17,7	400 D	50	11,0	6,08	5,50	2973	0,80	90,40
~25% load	8,8	400 D	50	7,6	3,21	2,75	2987	0,61	85,80
Temperature rise at rated load.				°C	K	Method		Measurement method	
Stator winding :				52,9	1			1 Resistance	
Frame :				22,8	2			2 Thermometer	
Bearing D-end :				26,3	2			3 Thermocouples	
Ambient Temperature :				25	2				
<p>These tests have been carried out on motor no. 3GV1110803634001, on date 2012-03-23 which is identical in electrical design with the above.</p> <p>Manufactured and tested in accordance with rules of IEC 60034-1 and IEC 60034-2-1. PLL determined from residual loss.</p>									
On behalf of customer									
On behalf of manufacturer					Date of test				
Tested by ABB AB, LV Motors, 721 70 Västerås, Sweden					Telephone +46 (0)21 32 90 00 Telefax +46 (0)21 32 90 22				

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