



Type Test Report				Date of issue: 1.9.2015					
Customer:				Serial No.:					
Customer ref.:				Type: M3AA 160MLB 6 Product Code: 3GAA163420-ADG					
Rating:									
	V	Hz	kW	r/min	A	cos φ	Duty		
3-Motor	690	Y 50	11,0	972	13,0	0,79	S1		
Insul.cl.F	400	D 50	11,0	972	22,5	0,79	S1		
IP55	415	D 50	11,0	975	22,1	0,77	S1		
	440	D 60	11,0	1174	20,2	0,79	S1		
	460	D 60	11,0	1177	19,8	0,77	S1		
Eff class IE2	50Hz : IE2 - 89,3(100%) - 90,6(75%) - 90,5(50%) 60Hz : IE1 - 90,1(100%)								
Resistance				Insulation resistance at 22,1 °C		Overload			
Line Ambient: 20,9 °C				R > 2000 Mohm 1000 V		Current 150 % 120s Torque 160 % 15s Speed 120 % 120s			
U ₁ - V ₁ 0,5426 Ω									
U ₁ - W ₁ 0,5417 Ω									
V ₁ - W ₁ 0,5428 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 D	50	11,7	0,43		1000	0,05	
Locked rotor test		83 D	50	22,1	0,95			0,3	
Thermal test (100% load)	107,5	400 D	50	23,2	12,25	11,00	977	0,76	89,77
Partial load points:									
~75% load	81,9	400 D	50	19,2	9,33	8,43	983	0,70	90,33
~50% load	55,2	400 D	50	15,7	6,36	5,71	989	0,58	89,83
~25% load	27,6	400 D	50	13,0	3,36	2,88	995	0,37	85,47
Temperature rise at rated load.				°C	[K]	Method		Measurement method	
Stator winding :				52,4	1			1 Resistance	
Frame :				28,2	2			2 Thermometer	
Bearing D-end :				27,6	2			3 Thermocouples	
Ambient Temperature :				22	2				
<p>These tests have been carried out on motor no. 3GV1110803663010, on date 2011-12-14 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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