



Type Test Report				Date of issue: 2012.02.29							
Customer:				Serial No.: CSN 12-381257							
				Customer ref.:				Type: M3AA 180MLA 4			Product Code: 3GAA182031-ADG
Rating:				V	Hz	kW	r/min	A	cos φ	Duty	
3~Motor				400	D 50	18,5	1477	34,5	0,84	S1	
Insul.cl.F				690	Y 50	18,5	1477	20,0	0,84	S1	
IP55				415	D 50	18,5	1479	34,0	0,82	S1	
Eff class IE2				460	D 60	18,5	1781	30,2	0,83	S1	
50Hz : IE2 - 91,9(100%) - 92,8(75%) - 92,4(50%)											
60Hz : IE2 - 92,6(100%) - 92,9(75%) - 92,0(50%)											
Resistance				Ambient: 19,9 °C				Insulation resistance at 21,5 °C		Overload	
Line				R > 2000 Mohm				1000 V		Current 150 % 120s	
U ₁ - V ₁				0,28940 Ω						Torque 160 % 15s	
U ₁ - W ₁				0,28600 Ω						Speed 120 % 120s	
V ₁ - W ₁				0,28710 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	12,5	0,54		1500	0,06			
Locked rotor test		78 D	50	33,2	1,46		0	0,33			
Thermal test (100% load)	119,4	400 D	50	35,0	20,20	18,50	1479	0,83	91,58		
Partial load points:											
~75% load	89,9	400 D	50	27,4	15,17	13,98	1485	0,80	92,17		
~50% load	59,7	400 D	50	20,6	10,14	9,31	1490	0,71	91,83		
~25% load	30,6	400 D	50	15,3	5,41	4,79	1495	0,51	88,49		
Temperature rise at rated load.				°C	K	Method		Measurement method			
Stator winding :				61,9	1			1 Resistance			
Frame :				26,4	2			2 Thermometer			
Bearing D-end :				27,6	2			3 Thermocouples			
Ambient Temperature :				22	2						
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			13.2.2012					
Tested by ABB AB, LV Motors, 721 70 Västerås, Sweden											

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