



Type Test Report				Date of issue: 2011.12.02							
Customer:				Serial No.: 3GV1110779725005							
				Type: M3AA 280SMA 2 Product Code: 3GAA281031-ADG							
Customer ref.:											
Rating:				V	Hz	kW	r/min	A	cos φ	Duty	
3~Motor				400	D 50	75,0	2968	128,0	0,89	S1	
Insul.cl.F				690	Y 50	75,0	2968	74,6	0,89	S1	
IP55				415	D 50	75,0	2971	125,0	0,88	S1	
Eff class IE2				460	D 60	75,0	3568	112,0	0,89	S1	
50Hz : IE2 - 94,5(100%) - 94,8(75%) - 94,3(50%)											
60Hz : IE3 - 94,4(100%) - 94,3(75%) - 93,1(50%)											
Resistance				Insulation resistance at 23,5 °C				Overload			
Line				R > 2000 Mohm 1000 V				Current 150 % 120s			
U ₁ - V ₁				Ambient: 22,4 °C				Torque 160 % 15s			
U ₁ - W ₁				0,03709 Ω				Speed 120 % 120s			
V ₁ - W ₁				0,03692 Ω							
				0,03698 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		400,5 D	50	29,1	1,12		3000	0,06			
Locked rotor test		70,7 D	50	126,8	5,65		0	0,36			
Thermal test (100% load)	241,2	400 D	50	127,3	78,80	75,00	2969	0,89	95,18		
Partial load points:											
~75% load	182,0	400 D	50	97,7	59,37	56,75	2978	0,88	95,58		
~50% load	122,7	400 D	50	69,7	40,19	38,37	2987	0,83	95,49		
~25% load	61,6	400 D	50	44,4	20,65	19,33	2995	0,67	93,60		
Temperature rise at rated load.				°C	K	Method		Measurement method			
Stator winding :				75,2	1			1 Resistance			
Frame :				28,4	2			2 Thermometer			
Bearing D-end :				44,3	2			3 Thermocouples			
Ambient Temperature :				24	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			30.11.2011					
Tested by ABB AB, LV Motors, 721 70 Västerås, Sweden							Telephone		+46 (0)21 32 90 00		
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