



Type Test Report				Date of issue: 2014-10-14																																		
Customer:				Serial No.: 3G1S14461451946001																																		
				Type: M3AA 280SMB 2 Product Code: 3GAA281052-ADK																																		
Customer ref.:																																						
Rating:		<table border="1"><thead><tr><th>V</th><th>Hz</th><th>kW</th><th>r/min</th><th>A</th><th>cos φ</th><th>Duty</th></tr></thead><tbody><tr><td>400</td><td>D</td><td>50</td><td>90,0</td><td>2968</td><td>151,0</td><td>0,90</td><td>S1</td></tr><tr><td>690</td><td>Y</td><td>50</td><td>90,0</td><td>2968</td><td>88,0</td><td>0,90</td><td>S1</td></tr><tr><td>415</td><td>D</td><td>50</td><td>90,0</td><td>2971</td><td>148,0</td><td>0,89</td><td>S1</td></tr></tbody></table>						V	Hz	kW	r/min	A	cos φ	Duty	400	D	50	90,0	2968	151,0	0,90	S1	690	Y	50	90,0	2968	88,0	0,90	S1	415	D	50	90,0	2971	148,0	0,89	S1
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3~Motor																																						
Insul.cl.F																																						
IP55																																						
Eff class IE3		50Hz : IE3 - 95,0(100%) - 95,3(75%) - 94,8(50%)																																				
Resistance Line				Ambient: 23,7 °C		Insulation resistance at 24 °C R > 2000 Mohm 1000 V		Overload Current 150% 120s Torque 160% 15s Speed 120% 120s																														
U ₁ - V ₁ U ₁ - W ₁ V ₁ - W ₁				0,02648 Ω 0,02644 Ω 0,02643 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			401,7 D	50	35,6	1,59		3000	0,06																													
Locked rotor test			60,2 D	50	156,2	5,30			0,33																													
Thermal test (100% load)		289,4	400 D	50	152,1	94,42	90,00	2970	0,90	95,3																												
Partial load points:																																						
~75% load		216,4	400 D	50	116,0	70,64	67,50	2979	0,88	95,6																												
~50% load		143,9	400 D	50	82,3	47,26	45,00	2986	0,83	95,2																												
~25% load		71,8	400 D	50	53,0	24,25	22,50	2994	0,66	92,8																												
Temperature rise at rated load.				[°C]	[K]	Method		Measurement method																														
Stator winding :					77,7	1		1 Resistance																														
Frame :					46,3	2		2 Thermometer																														
Bearing D-end :					50,3	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 2014-09-02																																						
Tested by ABB AB, LV Motors, 721 70 Västerås, Sweden																																						
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