



Type Test Report				Date of issue: 2014-09-22																																		
Customer:				Serial No.: 3G1S15021421414001																																		
				Type: M3AA 280SMA 2 Product Code: 3GAA281051-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>75,0</td><td>2971</td><td>127,0</td><td>0,90</td><td>S1</td></tr><tr><td>690</td><td>Y</td><td>50</td><td>75,0</td><td>2971</td><td>73,6</td><td>0,90</td><td>S1</td></tr><tr><td>415</td><td>D</td><td>50</td><td>75,0</td><td>2973</td><td>122,0</td><td>0,90</td><td>S1</td></tr></tbody></table>						V	Hz	kW	r/min	A	cos φ	Duty	400	D	50	75,0	2971	127,0	0,90	S1	690	Y	50	75,0	2971	73,6	0,90	S1	415	D	50	75,0	2973	122,0	0,90	S1
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3~Motor																																						
Insul.cl.F																																						
IP55																																						
Eff class IE3		50Hz : IE3 - 94,7(100%) - 95,0(75%) - 94,6(50%)																																				
Resistance Line				Ambient: 24,1 °C		Insulation resistance at 26 °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				0,03793 Ω 0,03782 Ω 0,03788 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			401,5 D	50	27,8	1,33		3000	0,07																													
Locked rotor test			68,3 D	50	144,0	5,70			0,33																													
Thermal test (100% load)		241,1	400 D	50	126,2	78,82	75,00	2970	0,90	95,2																												
Partial load points:																																						
~75% load		180,4	400 D	50	95,9	58,96	56,25	2978	0,89	95,4																												
~50% load		119,9	400 D	50	67,7	39,43	37,50	2987	0,84	95,1																												
~25% load		59,8	400 D	50	43,0	20,24	18,75	2994	0,68	92,6																												
Temperature rise at rated load.				[°C]	[K]	Method		Measurement method																														
Stator winding :					67,6	1		1 Resistance																														
Frame :					39,3	2		2 Thermometer																														
Bearing D-end :					46,5	2		3 Thermocouples																														
Ambient Temperature :				26		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				Telephone +46 (0)21 32 90 00 Telefax +46 (0)21 32 90 22																																		

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