



Type Test Report				Date of issue: 1.9.2015																																																						
Customer:				Serial No.:																																																						
Customer ref.:				Type: M3AA 225SMA 6 Product Code: 3GAA223210-ADK																																																						
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>690</td> <td>Y 50</td> <td>30,0</td> <td>989</td> <td>32,9</td> <td>0,81</td> <td>S1</td> </tr> <tr> <td>400</td> <td>D 50</td> <td>30,0</td> <td>989</td> <td>56,8</td> <td>0,81</td> <td>S1</td> </tr> <tr> <td>660</td> <td>Y 50</td> <td>30,0</td> <td>987</td> <td>33,7</td> <td>0,83</td> <td>S1</td> </tr> <tr> <td>380</td> <td>D 50</td> <td>30,0</td> <td>987</td> <td>58,5</td> <td>0,83</td> <td>S1</td> </tr> <tr> <td>415</td> <td>D 50</td> <td>30,0</td> <td>990</td> <td>56,0</td> <td>0,79</td> <td>S1</td> </tr> <tr> <td>460</td> <td>D 60</td> <td>30,0</td> <td>1191</td> <td>49,9</td> <td>0,80</td> <td>S1</td> </tr> </tbody> </table>						V	Hz	kW	r/min	A	cos φ	Duty	690	Y 50	30,0	989	32,9	0,81	S1	400	D 50	30,0	989	56,8	0,81	S1	660	Y 50	30,0	987	33,7	0,83	S1	380	D 50	30,0	987	58,5	0,83	S1	415	D 50	30,0	990	56,0	0,79	S1	460	D 60	30,0	1191	49,9	0,80	S1
V	Hz	kW	r/min	A	cos φ	Duty																																																				
690	Y 50	30,0	989	32,9	0,81	S1																																																				
400	D 50	30,0	989	56,8	0,81	S1																																																				
660	Y 50	30,0	987	33,7	0,83	S1																																																				
380	D 50	30,0	987	58,5	0,83	S1																																																				
415	D 50	30,0	990	56,0	0,79	S1																																																				
460	D 60	30,0	1191	49,9	0,80	S1																																																				
3-Motor Insul.cl.F IP55 Eff class IE3				50Hz : IE3 - 94,1(100%) - 94,6(75%) - 94,4(50%) 60Hz : IE3 - 94,2(100%)																																																						
Resistance Line				Ambient: 22,6 °C			Insulation resistance at R > 2000 Mohm 1000 V			Overload																																																
U <sub>1</sub> - V <sub>1</sub>				0,1247 Ω						Volt. 130 % 60s																																																
U <sub>1</sub> - W <sub>1</sub>				0,1248 Ω						Curr. 160 % 120s																																																
V <sub>1</sub> - W <sub>1</sub>				0,1247 Ω						Speed 120 % 120s																																																
				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		399,1 D	50	24,2	0,60		1000	0,04																																																		
Locked rotor test		78 D	50	57,8	2,20			0,29																																																		
Thermal test ( 100% load )	289,7	400 D	50	57,4	31,80	30,00	989	0,80	94,40																																																	
Partial load points:																																																										
~75% load	216,6	400 D	50	46,0	23,70	22,50	992	0,74	94,70																																																	
~50% load	144,0	400 D	50	36,0	15,90	15,00	995	0,64	94,40																																																	
~25% load	71,8	400 D	50	28,2	8,20	7,50	998	0,42	91,70																																																	
Temperature rise at rated load.				[°C]	[K]	Method		Measurement method																																																		
Stator winding :				47,4	47,4	1		1 Resistance																																																		
Frame :				52		2		2 Thermometer																																																		
Bearing D-end :				54		2		3 Thermocouples																																																		
Ambient Temperature :				24		2																																																				
<p>These tests have been carried out on motor no. 3GV13 11256190 001 , on date 2013-10-29 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																																																				

Computer print-out valid without signature.