



Type Test Report				Date of issue: 1.9.2015																																																						
Customer:				Serial No.:																																																						
Customer ref.:				Type: M3AA 160MLA 6 Product Code: 3GAA163410-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>7,5</td> <td>980</td> <td>8,8</td> <td>0,78</td> <td>S1</td> </tr> <tr> <td>400</td> <td>D 50</td> <td>7,5</td> <td>980</td> <td>15,2</td> <td>0,78</td> <td>S1</td> </tr> <tr> <td>660</td> <td>Y 50</td> <td>7,5</td> <td>977</td> <td>9,1</td> <td>0,80</td> <td>S1</td> </tr> <tr> <td>380</td> <td>D 50</td> <td>7,5</td> <td>977</td> <td>15,7</td> <td>0,80</td> <td>S1</td> </tr> <tr> <td>415</td> <td>D 50</td> <td>7,5</td> <td>981</td> <td>14,8</td> <td>0,77</td> <td>S1</td> </tr> <tr> <td>460</td> <td>D 60</td> <td>7,5</td> <td>1182</td> <td>13,5</td> <td>0,76</td> <td>S1</td> </tr> </tbody> </table>						V	Hz	kW	r/min	A	cos φ	Duty	690	Y 50	7,5	980	8,8	0,78	S1	400	D 50	7,5	980	15,2	0,78	S1	660	Y 50	7,5	977	9,1	0,80	S1	380	D 50	7,5	977	15,7	0,80	S1	415	D 50	7,5	981	14,8	0,77	S1	460	D 60	7,5	1182	13,5	0,76	S1
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Eff class IE3				50Hz : IE3 - 90,8(100%) - 91,5(75%) - 91,0(50%) 60Hz : IE3 - 91,4(100%)																																																						
Resistance				Insulation resistance at				Overload																																																		
Line				Ambient: 22,7 °C				R > 2000 Mohm 1000 V																																																		
U ₁ - V ₁				0,7159 Ω				Volt. 130 % 60s																																																		
U ₁ - W ₁				0,7147 Ω				Curr. 160 % 120s																																																		
V ₁ - W ₁				0,7153 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		401,1 D	50	7,4	0,28		1000	0,05																																																		
Locked rotor test		92,9 D	50	15,6	0,67			0,27																																																		
Thermal test (100% load)	73,0	400 D	50	15,5	8,25	7,50	981	0,77	90,87																																																	
Partial load points:																																																										
~75% load	54,4	400 D	50	12,6	6,16	5,63	987	0,71	91,30																																																	
~50% load	36,1	400 D	50	10,1	4,14	3,75	992	0,59	90,55																																																	
~25% load																																																										
Temperature rise at rated load.				[°C]	[K]	Method		Measurement method																																																		
Stator winding :					30,2	1		1 Resistance																																																		
Frame :				40		2		2 Thermometer																																																		
Bearing D-end :				39		2		3 Thermocouples																																																		
Ambient Temperature :				22		2																																																				
These tests have been carried out on motor no. 3GV13 11256324 001 , on date 2013-10-15 which is identical in electrical design with the above.																																																										
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																																																					
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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