



Type Test Report				Date of issue: 1.9.2015																																																						
Customer:				Serial No.:																																																						
Customer ref.:				Type: M3AA 200MLA 6 Product Code: 3GAA203410-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>18,5</td> <td>990</td> <td>21,6</td> <td>0,77</td> <td>S1</td> </tr> <tr> <td>400</td> <td>D 50</td> <td>18,5</td> <td>990</td> <td>37,3</td> <td>0,77</td> <td>S1</td> </tr> <tr> <td>660</td> <td>Y 50</td> <td>18,5</td> <td>989</td> <td>21,8</td> <td>0,80</td> <td>S1</td> </tr> <tr> <td>380</td> <td>D 50</td> <td>18,5</td> <td>989</td> <td>37,8</td> <td>0,80</td> <td>S1</td> </tr> <tr> <td>415</td> <td>D 50</td> <td>18,5</td> <td>991</td> <td>37,4</td> <td>0,74</td> <td>S1</td> </tr> <tr> <td>460</td> <td>D 60</td> <td>18,5</td> <td>1191</td> <td>32,3</td> <td>0,77</td> <td>S1</td> </tr> </tbody> </table>						V	Hz	kW	r/min	A	cos φ	Duty	690	Y 50	18,5	990	21,6	0,77	S1	400	D 50	18,5	990	37,3	0,77	S1	660	Y 50	18,5	989	21,8	0,80	S1	380	D 50	18,5	989	37,8	0,80	S1	415	D 50	18,5	991	37,4	0,74	S1	460	D 60	18,5	1191	32,3	0,77	S1
V	Hz	kW	r/min	A	cos φ	Duty																																																				
690	Y 50	18,5	990	21,6	0,77	S1																																																				
400	D 50	18,5	990	37,3	0,77	S1																																																				
660	Y 50	18,5	989	21,8	0,80	S1																																																				
380	D 50	18,5	989	37,8	0,80	S1																																																				
415	D 50	18,5	991	37,4	0,74	S1																																																				
460	D 60	18,5	1191	32,3	0,77	S1																																																				
Eff class IE3				50Hz : IE3 - 92,8(100%) - 93,2(75%) - 92,6(50%) 60Hz : IE3 - 93,3(100%)																																																						
Resistance				Insulation resistance at				Overload																																																		
Line				R > 2000 Mohm 1000 V				Volt. 130 % 60s																																																		
U <sub>1</sub> - V <sub>1</sub>				Ambient: 23,3 °C				Curr. 160 % 120s																																																		
U <sub>1</sub> - W <sub>1</sub>				0,2704 Ω				Speed 120 % 120s																																																		
V <sub>1</sub> - W <sub>1</sub>				0,2705 Ω																																																						
				0,2703 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		399,8 D	50	17,7	0,50		1000	0,04																																																		
Locked rotor test		78,7 D	50	38,9	1,70			0,33																																																		
Thermal test ( 100% load )	178,5	400 D	50	37,0	19,80	18,50	990	0,77	93,30																																																	
Partial load points:																																																										
~75% load	133,5	400 D	50	30,1	14,80	13,88	993	0,71	93,50																																																	
~50% load	88,8	400 D	50	24,3	10,00	9,25	995	0,59	92,90																																																	
~25% load	44,3	400 D	50	19,9	5,20	4,63	998	0,38	89,30																																																	
Temperature rise at rated load.			[°C]	[K]	Method		Measurement method																																																			
Stator winding :			47,6	47,6	1		1 Resistance																																																			
Frame :			48		2		2 Thermometer																																																			
Bearing D-end :			52		2		3 Thermocouples																																																			
Ambient Temperature :			24		2																																																					
<p>These tests have been carried out on motor no. 3GV13 11256185 001 , on date 2013-10-02 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.