



Type Test Report				Date of issue: 1.9.2015																																																						
Customer:				Serial No.:																																																						
Customer ref.:				Type: M3AA 180MLA 6 Product Code: 3GAA183410-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</td> <td>50</td> <td>15,0</td> <td>987</td> <td>17,6</td> <td>S1</td> </tr> <tr> <td>400</td> <td>D</td> <td>50</td> <td>15,0</td> <td>987</td> <td>30,4</td> <td>S1</td> </tr> <tr> <td>660</td> <td>Y</td> <td>50</td> <td>15,0</td> <td>985</td> <td>18,1</td> <td>S1</td> </tr> <tr> <td>380</td> <td>D</td> <td>50</td> <td>15,0</td> <td>985</td> <td>31,3</td> <td>S1</td> </tr> <tr> <td>415</td> <td>D</td> <td>50</td> <td>15,0</td> <td>988</td> <td>30,1</td> <td>S1</td> </tr> <tr> <td>460</td> <td>D</td> <td>60</td> <td>15,0</td> <td>1189</td> <td>27,1</td> <td>S1</td> </tr> </tbody> </table>						V	Hz	kW	r/min	A	cos φ	Duty	690	Y	50	15,0	987	17,6	S1	400	D	50	15,0	987	30,4	S1	660	Y	50	15,0	985	18,1	S1	380	D	50	15,0	985	31,3	S1	415	D	50	15,0	988	30,1	S1	460	D	60	15,0	1189	27,1	S1
V	Hz	kW	r/min	A	cos φ	Duty																																																				
690	Y	50	15,0	987	17,6	S1																																																				
400	D	50	15,0	987	30,4	S1																																																				
660	Y	50	15,0	985	18,1	S1																																																				
380	D	50	15,0	985	31,3	S1																																																				
415	D	50	15,0	988	30,1	S1																																																				
460	D	60	15,0	1189	27,1	S1																																																				
Eff class IE3				50Hz : IE3 - 92,2(100%) - 92,4(75%) - 91,5(50%) 60Hz : IE3 - 92,3(100%)																																																						
Resistance				Insulation resistance at				Overload																																																		
Line				R > 2000 Mohm 1000 V				Volt. 130 % 60s																																																		
U <sub>1</sub> - V <sub>1</sub>				Ambient: 22,4 °C				Curr. 160 % 120s																																																		
U <sub>1</sub> - W <sub>1</sub>				0,3765 Ω				Speed 120 % 120s																																																		
V <sub>1</sub> - W <sub>1</sub>				0,3755 Ω																																																						
				0,3751 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 D	50	12,2	0,40		1000	0,05																																																		
Locked rotor test		101,4 D	50	30,7	1,60			0,29																																																		
Thermal test ( 100% load )	146,4	400 D	50	29,7	16,40	15,00	978	0,80	91,50																																																	
Partial load points:																																																										
~75% load	109,1	400 D	50	23,4	12,20	11,25	985	0,75	92,30																																																	
~50% load	72,3	400 D	50	18,0	8,10	7,50	991	0,65	92,40																																																	
~25% load	35,9	400 D	50	13,9	4,20	3,75	996	0,43	89,40																																																	
Temperature rise at rated load.			[°C]	[K]	Method		Measurement method																																																			
Stator winding :			44,8	44,8	1		1 Resistance																																																			
Frame :			48		2		2 Thermometer																																																			
Bearing D-end :			50		2		3 Thermocouples																																																			
Ambient Temperature :			22		2																																																					
<p>These tests have been carried out on motor no. 3GV13 11256353 001 , on date 2013-10-19 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.