



Type Test Report				Date of issue: 4.11.2015																																					
Customer ref.:				Serial No.:																																					
				Motor Type: M3AA 112 MB 4																																					
				Product Code: 3GAA112320-ADE																																					
Rating:		<table border="1"> <thead> <tr> <th>V</th> <th>Hz</th> <th>kW</th> <th>r/min</th> <th>A</th> <th><math>\eta</math> [%]</th> <th>Duty</th> </tr> </thead> <tbody> <tr> <td>690</td> <td>Y</td> <td>50</td> <td>4,00</td> <td>1445</td> <td>5,00</td> <td>0,75</td> <td>S1</td> </tr> <tr> <td>400</td> <td>D</td> <td>50</td> <td>4,00</td> <td>1445</td> <td>8,80</td> <td>0,75</td> <td>S1</td> </tr> <tr> <td>460</td> <td>D</td> <td>60</td> <td>4,00</td> <td>1745</td> <td>7,40</td> <td>0,77</td> <td>S1</td> </tr> </tbody> </table>									V	Hz	kW	r/min	A	$\eta$ [%]	Duty	690	Y	50	4,00	1445	5,00	0,75	S1	400	D	50	4,00	1445	8,80	0,75	S1	460	D	60	4,00	1745	7,40	0,77	S1
V	Hz	kW	r/min	A	$\eta$ [%]	Duty																																			
690	Y	50	4,00	1445	5,00	0,75	S1																																		
400	D	50	4,00	1445	8,80	0,75	S1																																		
460	D	60	4,00	1745	7,40	0,77	S1																																		
3~Motor		50Hz : IE2 - 86,7%(100%) - 86,5%(75%) - 85,2%(50%)																																							
Insul.cl.F		60Hz : IE2 - 87,6%(100%)																																							
IP55																																									
Eff class IE2																																									
Resistance				Isulation resistans at 26 °C			Overload																																		
Line Ambient: 20,0 °C				R>2000Mohm 1000V			Current 150 % 120s																																		
U <sub>1</sub> - V <sub>1</sub> 2,0577 Ω							Torque 160 % 15s																																		
U <sub>1</sub> - W <sub>1</sub> 2,0567 Ω							Speed 120 % 120s																																		
V <sub>1</sub> - W <sub>1</sub> 2,0567 Ω				High-voltage test winding 2400V 60s																																					
Test	Torque [Nm]	Line U[V]	f[Hz]	Input I[A]	P1[kW]	Output P2[kW]	n[r/min]	cos ρ	$\eta$ [%]																																
No load test		400 D	50	4,8	0,27		1445	0,08																																	
Locked rotor test		74 D	50	8,8	0,63		0	0,56																																	
Thermal test (100% load)	27,1	400 D	50	8,7	4,79	4,09	1440	0,80	85,40																																
Partial load points:																																									
~75% load	20,4	400 D	50	7,3	3,64	3,12	1456	0,73	85,70																																
~50% load	13,3	400 D	50	5,9	2,43	2,04	1472	0,60	84,20																																
~25% load	6,0	400 D	50	5,0	1,24	0,94	1487	0,36	75,30																																
Temperature rise at rated load.				°C	[K]	Method	Measurement method																																		
Stator winding <sup>+</sup> :				65,5	3	1 Resistance																																			
Frame :				39,1	3	2 Thermometer																																			
Bearing D-end :				34,1	3	3 Thermocouples																																			
Ambient Temperature :				25	3																																				
<p>These tests have been carried out on motor no. 3GE12801016664, on date 2013-09-26 which is identical in electrical design with the above.</p> <p>Manufactured in accordance with rules of IEC 60034-1 and IEC 60034-2-1. PLL determined from residual loss.</p> <p>On behalf of customer</p> <p>On behalf of manufacturer Date of test</p> <p>Tested by ABB AB, LV Motors, 721 70 Västerås, Sweden</p> <p>Telephone +46 (0)21 32 90 00 Telefax +46 (0)21 32 90 22</p>																																									

Computer print-out valid without signature.