



Type Test Report				Date of issue: 2016.05.30																																															
				Type: M3AA 180MLB 4 Product Code: 3GAA182420-ADG																																															
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>22,0</td> <td>1475</td> <td>23,7</td> <td>0,84</td> <td>S1</td> </tr> <tr> <td>400</td> <td>D 50</td> <td>22,0</td> <td>1475</td> <td>40,9</td> <td>0,84</td> <td>S1</td> </tr> <tr> <td>415</td> <td>D 50</td> <td>22,0</td> <td>1477</td> <td>39,8</td> <td>0,83</td> <td>S1</td> </tr> <tr> <td>440</td> <td>D 60</td> <td>22,0</td> <td>1777</td> <td>36,9</td> <td>0,84</td> <td>S1</td> </tr> <tr> <td>460</td> <td>D 60</td> <td>22,0</td> <td>1780</td> <td>35,7</td> <td>0,83</td> <td>S1</td> </tr> </tbody> </table> 50Hz : IE2 - 92,3%(100%) - 93,3%(75%) - 93,2%(50%) 60Hz : IE2 - 92,8%(100%)						V	Hz	kW	r/min	A	cos φ	Duty	690	Y 50	22,0	1475	23,7	0,84	S1	400	D 50	22,0	1475	40,9	0,84	S1	415	D 50	22,0	1477	39,8	0,83	S1	440	D 60	22,0	1777	36,9	0,84	S1	460	D 60	22,0	1780	35,7	0,83	S1
V	Hz	kW	r/min	A	cos φ	Duty																																													
690	Y 50	22,0	1475	23,7	0,84	S1																																													
400	D 50	22,0	1475	40,9	0,84	S1																																													
415	D 50	22,0	1477	39,8	0,83	S1																																													
440	D 60	22,0	1777	36,9	0,84	S1																																													
460	D 60	22,0	1780	35,7	0,83	S1																																													
Resistance Line U ₁ - V ₁ U ₁ - W ₁ V ₁ - W ₁				Ambient: 24,1 °C 0,21600 Ω 0,21360 Ω 0,21400 Ω				Insulation resistance at 21,4 °C R > 2000 Mohm 1000 V		Overload Current 150 % 120s Torque 160 % 15s 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		400 D	50	14,4	0,52		1500	0,05																																											
Locked rotor test		87 D	50	39,6	2,02		0	0,34																																											
Thermal test (100% load)	142,2	400 D	50	41,4	23,83	22,00	1478	0,83	92,33																																										
Partial load points:																																																			
~75% load	105,9	400 D	50	32,0	17,70	16,46	1484	0,80	93,03																																										
~50% load	70,4	400 D	50	23,8	11,83	10,99	1490	0,72	92,90																																										
~25% load	35,6	400 D	50	17,4	6,18	5,57	1495	0,51	90,16																																										
Temperature rise at rated load.				°C	K	Method		Measurement method																																											
Stator winding :				56,4	1			1 Resistance																																											
Frame :				32,4	2			2 Thermometer																																											
Bearing D-end :				31,4	2			3 Thermocouples																																											
Ambient Temperature :				21	2																																														
These tests have been carried out on motor no. 3GV1010531610001, on date 2010-07-22 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																																																			
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.