



Type Test Report				Date of issue: 2015-03-16																															
Customer:				Serial No.: 3G1T12110000011996																															
Customer ref.:				Type: M1AA 160 MLB 4 Product Code: 3GAA162062-_DA																															
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>15</td> <td>1455</td> <td>16.7</td> <td>0,84</td> <td>S1</td> </tr> <tr> <td>400</td> <td>D 50</td> <td>15</td> <td>1455</td> <td>29.0</td> <td>0,84</td> <td>S1</td> </tr> <tr> <td>460</td> <td>D 60</td> <td>15</td> <td>1755</td> <td>25.2</td> <td>0,83</td> <td>S1</td> </tr> </tbody> </table>						V	Hz	kW	r/min	A	cos φ	Duty	690	Y 50	15	1455	16.7	0,84	S1	400	D 50	15	1455	29.0	0,84	S1	460	D 60	15	1755	25.2	0,83	S1
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3~Motor																																			
Insul.cl.F																																			
IP55																																			
Eff class IE1		50Hz : IE1-88.7(100%)-88.9(75%)-88.5(50%) 60Hz : IE1-90.1(100%)-90.4(75%)-89.9(50%)																																	
Resistance		Ambient: 25 °C Line U ₁ - V ₁ 0,77000 Ω U ₁ - W ₁ 0,77200 Ω V ₁ - W ₁ 0,77000 Ω				Insulation resistance at 25 °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]	η[r/min]	cos φ	η [%]																										
No load test		400 D	50	12,24	0,60		1500	0,07																											
Locked rotor test		65 D	50	29,1	1,57		0	0,48																											
Thermal test (100% load)	98,5	400 D	50	29,30	16,91	15,01	1455	0,84	88,55																										
Partial load points:																																			
~75% load	73,9	400 D	50	23,4	12,69	11,30	1467	0,79	88,79																										
~50% load	49,3	400 D	50	17,87	8,44	7,56	1477	0,69	88,50																										
~25% load	24,6	400 D	50	13,86	4,45	3,83	1487	0,46	86,03																										
Temperature rise at rated load.		<table border="1"> <thead> <tr> <th></th> <th>[°C]</th> <th>[K]</th> <th>Method</th> </tr> </thead> <tbody> <tr> <td>Stator winding :</td> <td></td> <td>84,7</td> <td>3</td> </tr> <tr> <td>Frame :</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Bearing D-end :</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Ambient Temperature :</td> <td>25</td> <td></td> <td>3</td> </tr> </tbody> </table>					[°C]	[K]	Method	Stator winding :		84,7	3	Frame :				Bearing D-end :				Ambient Temperature :	25		3	Measurement method 1 Resistance 2 Thermometer 3 Thermocouples									
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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		2012-03-15																															

Computer print-out valid without signature.