



Type Test Report					Date of issue: 2015-03-16																																
Customer:					Serial No.: 3G1T12320000011128																																
Customer ref.:					Type: M1AA 160 MLC 2 Product Code: 3GAA161064-_SA																																
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>230</td> <td>D 50</td> <td>22,00</td> <td>2920</td> <td>67,50</td> <td>0,91</td> <td>S1</td> </tr> <tr> <td>400</td> <td>Y 50</td> <td>22,00</td> <td>2920</td> <td>39,00</td> <td>0,91</td> <td>S1</td> </tr> <tr> <td>460</td> <td>Y 60</td> <td>22,00</td> <td>3525</td> <td>33,70</td> <td>0,91</td> <td>S1</td> </tr> </tbody> </table>					V	Hz	kW	r/min	A	cos φ	Duty	230	D 50	22,00	2920	67,50	0,91	S1	400	Y 50	22,00	2920	39,00	0,91	S1	460	Y 60	22,00	3525	33,70	0,91	S1
V	Hz	kW	r/min	A	cos φ	Duty																															
230	D 50	22,00	2920	67,50	0,91	S1																															
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3~Motor Insul.cl.F IP55 Eff class IE1					50Hz : IE1-89.9(100%)-89.9(75%)-88.8(50%) 60Hz : IE1-89.8(100%)-89.8(75%)-88.7(50%)																																
Resistance Line					Ambient: 25 °C U ₁ - V ₁ 0,41200 Ω U ₁ - W ₁ 0,41200 Ω V ₁ - W ₁ 0,41100 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]	n[r/min]	cos φ	η [%]																												
No load test		400 Y 50		8,31	1,11		3000	0,19																													
Locked rotor test		48 Y 50		38,4	1,34		0	0,42																													
Thermal test (100% load)	71,7	400 Y 50		38,20	24,13	22,05	2935	0,91	91,56																												
Partial load points:																																					
~75% load	53,8	400 Y 50		29,2	18,17	16,60	2959	0,90	91,48																												
~50% load	35,9	400 Y 50		20,30	12,18	11,02	2973	0,86	91,11																												
~25% load	17,9	400 Y 50		13,14	6,72	5,66	2986	0,73	85,21																												
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>86,1</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 :		86,1	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 2010-08-09																																					

Computer print-out valid without signature.