



Type Test Report				Date of issue: 2015-03-16																															
Customer:				Serial No.: 3G1T10050000010930																															
Customer ref.:				Type: M1AA 160 MLC 4 Product Code: 3GAA162063-_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>18.5</td> <td>1445</td> <td>21.5</td> <td>0.81</td> <td>S1</td> </tr> <tr> <td>400</td> <td>D 50</td> <td>18.5</td> <td>1445</td> <td>37.4</td> <td>0.81</td> <td>S1</td> </tr> <tr> <td>460</td> <td>D 60</td> <td>18.5</td> <td>1750</td> <td>32.5</td> <td>0.80</td> <td>S1</td> </tr> </tbody> </table>						V	Hz	kW	r/min	A	cos φ	Duty	690	Y 50	18.5	1445	21.5	0.81	S1	400	D 50	18.5	1445	37.4	0.81	S1	460	D 60	18.5	1750	32.5	0.80	S1
V	Hz	kW	r/min	A	cos φ	Duty																													
690	Y 50	18.5	1445	21.5	0.81	S1																													
400	D 50	18.5	1445	37.4	0.81	S1																													
460	D 60	18.5	1750	32.5	0.80	S1																													
3-Motor																																			
Insul.cl.F																																			
IP55																																			
Eff class IE1		50Hz : IE1-89.3(100%)-89.9(75%)-89.5(50%) 60Hz :																																	
Resistance		Ambient: 25 °C Line U ₁ - V ₁ 0,61200 Ω U ₁ - W ₁ 0,61200 Ω V ₁ - W ₁ 0,61000 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	15,85	0,70		1500	0,06																											
Locked rotor test		68 D	50	36,6	1,98		0	0,46																											
Thermal test (100% load)	121,4	400 D	50	36,50	20,77	18,42	1449	0,81	89,48																										
Partial load points:																																			
~75% load	91,0	400 D	50	28,7	15,55	13,96	1464	0,78	90,08																										
~50% load	60,7	400 D	50	22,03	10,36	9,38	1476	0,68	90,39																										
~25% load	30,3	400 D	50	17,34	5,42	4,69	1487	0,45	86,54																										
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>93,0</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 :		93,0	3	Frame :				Bearing D-end :				Ambient Temperature :	25		3	Measurement method 1 Resistance 2 Thermometer 3 Thermocouples									
	[°C]	[K]	Method																																
Stator winding :		93,0	3																																
Frame :																																			
Bearing D-end :																																			
Ambient Temperature :	25		3																																
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		2010-01-29																															

Computer print-out valid without signature.