



Type Test Report				Date of issue: 1.9.2015																																																						
Customer:				Serial No.:																																																						
Customer ref.:				Type: M3AA 180MLA 4 Product Code: 3GAA182410-ADK																																																						
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>1481</td> <td>20,2</td> <td>0,82</td> <td>S1</td> </tr> <tr> <td>400</td> <td>D 50</td> <td>18,5</td> <td>1481</td> <td>34,9</td> <td>0,82</td> <td>S1</td> </tr> <tr> <td>660</td> <td>Y 50</td> <td>18,5</td> <td>1478</td> <td>21,1</td> <td>0,83</td> <td>S1</td> </tr> <tr> <td>380</td> <td>D 50</td> <td>18,5</td> <td>1478</td> <td>36,4</td> <td>0,83</td> <td>S1</td> </tr> <tr> <td>415</td> <td>D 50</td> <td>18,5</td> <td>1482</td> <td>34,0</td> <td>0,81</td> <td>S1</td> </tr> <tr> <td>460</td> <td>D 60</td> <td>18,5</td> <td>1782</td> <td>30,6</td> <td>0,81</td> <td>S1</td> </tr> </tbody> </table>						V	Hz	kW	r/min	A	cos φ	Duty	690	Y 50	18,5	1481	20,2	0,82	S1	400	D 50	18,5	1481	34,9	0,82	S1	660	Y 50	18,5	1478	21,1	0,83	S1	380	D 50	18,5	1478	36,4	0,83	S1	415	D 50	18,5	1482	34,0	0,81	S1	460	D 60	18,5	1782	30,6	0,81	S1
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Eff class IE3				50Hz : IE3 - 93,3(100%) - 94,0(75%) - 93,8(50%) 60Hz : IE3 - 93,6(100%)																																																						
Resistance				Insulation resistance at				Overload																																																		
Line				R > 2000 Mohm 1000 V				Volt. 130 % 60s																																																		
U <sub>1</sub> - V <sub>1</sub>				Ambient: 22,6 °C				Curr. 160 % 120s																																																		
U <sub>1</sub> - W <sub>1</sub>				0,2190 Ω				Speed 120 % 120s																																																		
V <sub>1</sub> - W <sub>1</sub>				0,2178 Ω																																																						
				0,2176 Ω																																																						
				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		401,2 D	50	13,2	0,48		1500	0,05																																																		
Locked rotor test		79,8 D	50	35,7	1,49			0,30																																																		
Thermal test ( 100% load )	119,0	400 D	50	34,8	19,88	18,50	1485	0,83	93,05																																																	
Partial load points:																																																										
~75% load	88,9	400 D	50	27,4	14,85	13,88	1490	0,78	93,47																																																	
~50% load	59,1	400 D	50	20,8	9,94	9,25	1495	0,69	93,09																																																	
~25% load	29,5	400 D	50	15,6	5,15	4,63	1499	0,48	89,77																																																	
Temperature rise at rated load.			[°C]	[K]	Method		Measurement method																																																			
Stator winding :				52,9	1		1 Resistance																																																			
Frame :			54		2		2 Thermometer																																																			
Bearing D-end :			57		2		3 Thermocouples																																																			
Ambient Temperature :			22		2																																																					
<p>These tests have been carried out on motor no. 3GV13 11256352 001 , on date 2013-10-18 which is identical in electrical design with the above.</p> <p>Manufactured and tested in accordance with rules of IEC 60034-1 and IEC 60034-2-1. PLL determined from residual loss.</p>																																																										
On behalf of customer																																																										
On behalf of manufacturer					Date of test																																																					
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