



Type Test Report				Date of issue: 4.11.2015																																
Customer:				Serial No.:																																
Customer ref.:				Type: M3AA 90 LD 6 Product Code: 3GAA093540-DE																																
Rating:		<table border="1"> <thead> <tr> <th>V</th> <th>Hz</th> <th>kW</th> <th>r/min</th> <th>A</th> <th>η [%]</th> <th>Duty</th> </tr> </thead> <tbody> <tr> <td>3-Motor</td> <td>690 Y 50</td> <td>1,10</td> <td>935</td> <td>1,78</td> <td>0,66</td> <td>S1</td> </tr> <tr> <td>Insul.cl.F</td> <td>400 D 50</td> <td>1,10</td> <td>935</td> <td>2,94</td> <td>0,66</td> <td>S1</td> </tr> <tr> <td>IP55</td> <td>460 D 60</td> <td>1,10</td> <td>1141</td> <td>2,60</td> <td>0,64</td> <td>S1</td> </tr> </tbody> </table>							V	Hz	kW	r/min	A	η [%]	Duty	3-Motor	690 Y 50	1,10	935	1,78	0,66	S1	Insul.cl.F	400 D 50	1,10	935	2,94	0,66	S1	IP55	460 D 60	1,10	1141	2,60	0,64	S1
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Eff class IE2		50Hz : IE2 - 78,2%(100%) - 79,2%(75%) - 77,5%(50%) 60Hz : IE1 - 80,3%(100%)																																		
Resistance Line		Ambient: 20,9 °C		Insulation resistance at 24,5 °C		Overload																														
U ₁ - V ₁		10,70000 Ω		R > 2000 Mohm		Current 150 % 120s																														
U ₁ - W ₁		10,70000 Ω		1000 V		Torque 160 % 15s																														
V ₁ - W ₁		10,71000 Ω		High-voltage test winding		Speed 120 % 120s																														
				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	2,09	0,14		1000	0,10																												
Locked rotor test		115,2 D	50	3,0	0,37		0	0,62																												
Thermal test (100% load)	11,2	400 D	50	2,9	1,40	1,10	937	0,69	78,30																											
Partial load points:																																				
~75% load	8,3	400 D	50	2,5	1,06	0,83	954	0,59	78,60																											
~50% load	5,4	400 D	50	2,2	0,73	0,55	970	0,46	75,80																											
~25% load	2,7	400 D	50	2,1	0,43	0,28	984	0,29	64,90																											
Temperature rise at rated load.		[°C]		[K]	Method		Measurement method																													
Stator winding :				44,5	3		1 Resistance																													
Frame :				26,5	3		2 Thermometer																													
Bearing D-end :				29,7	3		3 Thermocouples																													
Ambient Temperature :		25			3																															
<p>These tests have been carried out on motor no. 3GE112909P4627, on date 2011-11-18 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																															
Tested by Asea Brown Boveri, S.A., Fabrica Motores , 08192 Sant Quirze del Valles , Spain						Telephone +34 93 728 85 00 Telefax +34 93 728 85 33																														

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