



Type Test Report					Date of issue: 2011.12.28						
Customer:					Serial No.: 3GE072909T1502						
					Type: M3AA 90L 2					Product Code: 3GAA091312-_DE	
Customer ref.:											
Rating:					V	Hz	kW	r/min	A	cos φ	Duty
3~Motor					690	Y 50	1,5	2900	1,67	0,86	S1
Insul.cl.F					400	D 50	1,5	2900	2,90	0,86	S1
IP55					460	D 60	1,5	3510	2,60	0,84	S1
Eff class IE2					50Hz : IE2 - 84,1(100%) - 85(75%) - 83,5(50%)						
					60Hz : IE2 - 85,4(100%)						
Resistance					Insulation resistance at 30 °C					Overload	
Line					R > 2000 Mohm 1000 V					Current 150 % 120s	
U ₁ - V ₁					Ambient: 31,0 °C					Torque 160 % 15s	
U ₁ - W ₁					7,18000 Ω					Speed 120 % 120s	
V ₁ - W ₁					7,20000 Ω						
					7,21000 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		400 D	50	1,32	0,10		3000	0,11			
Locked rotor test		68,4 D	50	3,1	0,20		0	0,55			
Thermal test (100% load)	4,9	400 D	50	2,9	1,78	1,50	2900	0,86	84,20		
Partial load points:											
~75% load	3,7	400 D	50	2,3	1,32	1,13	2930	0,81	85,00		
~50% load	2,4	400 D	50	1,91	0,90	0,75	2955	0,68	83,50		
~25% load	1,2	400 D	50	1,38	0,48	0,38	2977	0,50	77,60		
Temperature rise at rated load.					°C	K	Method		Measurement method		
Stator winding :					42,2	3			1 Resistance		
Frame :					12,0	3			2 Thermometer		
Bearing D-end :					13,0	3			3 Thermocouples		
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			20.7.2007					
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		

Computer print-out valid without signature.