



Type Test Report					Date of issue: 2011.12.28						
Customer:					Serial No.: 3GE160511T4004						
					Type: M3AA 112MB 4					Product Code: 3GAA112312-DE	
Customer ref.:											
Rating:					V	Hz	kW	r/min	A	cos φ	Duty
3~Motor					690	Y 50	4,0	1445	5,00	0,75	S1
Insul.cl.F					400	D 50	4,0	1445	8,80	0,75	S1
IP55					460	D 60	4,0	1745	7,40	0,77	S1
Eff class IE2					50Hz : IE2 - 86,7(100%) - 86,5(75%) - 85,2(50%)						
60Hz : IE2 - 87,6(100%)											
Resistance					Insulation resistance at 23,9 °C					Overload	
Line Ambient: 24,9 °C					R > 2000 Mohm 1000 V					Current 150 % 120s	
U ₁ - V ₁ 2,05400 Ω										Torque 160 % 15s	
U ₁ - W ₁ 2,05200 Ω										Speed 120 % 120s	
V ₁ - W ₁ 2,05400 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	4,5	0,29		1500	0,09			
Locked rotor test		73,7 D	50	8,6	0,61		0	0,56			
Thermal test (100% load)	26,4	400 D	50	8,3	4,64	4,00	1445	0,80	86,20		
Partial load points:											
~75% load	19,6	400 D	50	6,9	3,46	3,00	1461	0,72	86,70		
~50% load	12,9	400 D	50	5,7	2,34	2,00	1476	0,59	85,30		
~25% load	6,4	400 D	50	4,8	1,28	1,00	1488	0,38	77,90		
Temperature rise at rated load.					°C	K	Method		Measurement method		
Stator winding :					64,5	3			1 Resistance		
Frame :					31	3			2 Thermometer		
Bearing D-end :					39,8	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			22.1.2010					
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.