



Type Test Report					Date of issue: 2011-10-05							
Customer:					Serial No.: 3GE071009T2202							
					Type: M2AA 90L 2 Product Code: 3GAA091002-_SE							
Customer ref.:												
Rating:												
					V	Hz	kW	r/min	A	cos φ	Duty	
3~Motor					230	D	50	2,20	2890	7,70	0,84	S1
Insul.cl.F					400	Y	50	2,20	2890	4,50	0,84	S1
IP55					460	Y	60	2,20	3495	3,90	0,83	S1
Eff class IE1					50Hz : IE1 - 82,6(100%) - 84,4(75%) - 83,7(50%) 60Hz : IE1 - 84,9(100%)							
Resistance					Insulation resistance at 23 °C					Overload		
Line					R > 2000 Mohm 1000 V					Current 150% 120s		
U ₁ - V ₁					Ambient: 24,0 °C					Torque 160% 15s		
U ₁ - W ₁					5,09900 Ω					Speed 120% 120s		
V ₁ - W ₁					5,09400 Ω							
					5,09600 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 Y	50	2,2	0,15		3000	0,10				
Locked rotor test		82,5 Y	50	4,6	0,36		0	0,55				
Thermal test (100% load)	7,3	400 Y	50	4,5	2,66	2,20	2886	0,84	82,60			
Partial load points:												
~75% load	5,4	400 Y	50	3,6	1,95	1,65	2918	0,77	84,40			
~50% load	3,6	400 Y	50	2,9	1,31	1,10	2951	0,65	83,70			
~25% load	1,8	400 Y	50	2,4	0,72	0,55	2978	0,43	76,80			
Temperature rise at rated load.					°C	[K]	Method		Measurement method			
Stator winding :					68,2	3			1 Resistance			
Frame :					17	3			2 Thermometer			
Bearing D-end :					28	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 2007-03-26												
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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