



Type Test Report					Date of issue: 2011.12.28						
Customer:					Serial No.: 3GE110109T2702						
					Type: M3AA 90LB 2 HO					Product Code: 3GAA091003-_SE	
Customer ref.:											
Rating:					V	Hz	kW	r/min	A	cos φ	Duty
3~Motor					230	D 50	2,7	2840	9,50	0,86	S1
Insul.cl.F					400	Y 50	2,7	2840	5,50	0,86	S1
IP55					460	Y 60	2,7	3470	4,70	0,84	S1
Eff class IE1					50Hz : IE1 - 81,0(100%) - 83,2(75%) - 83,5(50%)						
					60Hz : IE1 - 84,8(100%)						
Resistance					Insulation resistance at 23,5 °C					Overload	
Line					R > 2000 Mohm 1000 V					Current 150 % 120s	
U ₁ - V ₁					Ambient: 13,2 °C					Torque 160 % 15s	
U ₁ - W ₁					4,34600 Ω					Speed 120 % 120s	
V ₁ - W ₁					4,34200 Ω						
					4,34300 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	2,3	0,17		3000	0,11			
Locked rotor test		88,4 Y	50	5,5	0,50		0	0,60			
Thermal test (100% load)	9,1	400 Y	50	5,5	3,36	2,70	2841	0,88	80,30		
Partial load points:											
~75% load	6,7	400 Y	50	4,2	2,46	2,03	2883	0,84	82,50		
~50% load	4,4	400 Y	50	3,2	1,63	1,35	2926	0,73	82,90		
~25% load	2,2	400 Y	50	2,5	0,88	0,68	2964	0,50	77,20		
Temperature rise at rated load.					°C	K	Method		Measurement method		
Stator winding :					90,5	3			1 Resistance		
Frame :					31,2	3			2 Thermometer		
Bearing D-end :					37,8	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			10.1.2011					
Tested by Asea Brown Boveri, S.A., Fabrica Motores , 08192 Sant Quirze del Valles , Spain								Telephone		+34 93 728 85 00	
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