



Type Test Report				Date of issue: 2011-10-05							
Customer:				Serial No.: 3GE070909T1504							
				Type: M2AA 90L 4 Product Code: 3GAA092002-_SE							
Customer ref.:											
Rating:				V	Hz	kW	r/min	A	cos φ	Duty	
3-Motor				230	D	50	1,50	1420	6,00	0,75 S1	
Insul.cl.F				400	Y	50	1,50	1420	3,50	0,75 S1	
IP55				460	Y	60	1,50	1735	3,00	0,73 S1	
Eff class IE1				50Hz : IE1 - 81,3(100%) - 81,9(75%) - 80,1(50%) 60Hz : IE1 - 83,6(100%)							
Resistance				Insulation resistance at 22 °C				Overload			
Line				Ambient: 22,0 °C				R > 2000 Mohm 1000 V			
U ₁ - V ₁				8,21000 Ω				Current 150% 120s			
U ₁ - W ₁				8,21000 Ω				Torque 160% 15s			
V ₁ - W ₁				8,20000 Ω				Speed 120% 120s			
				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	0,15		1500	0,09			
Locked rotor test		81,6 Y	50	3,5	0,34		0	0,69			
Thermal test (100% load)	10,1	400 Y	50	3,5	1,85	1,50	1420	0,75	81,30		
Partial load points:											
~75% load	7,4	400 Y	50	2,9	1,37	1,13	1443	0,66	81,90		
~50% load	4,9	400 Y	50	2,6	0,94	0,75	1465	0,52	80,10		
~25% load	2,4	400 Y	50	2,3	0,53	0,38	1483	0,33	70,80		
Temperature rise at rated load.				[°C]	[K]	Method		Measurement method			
Stator winding :				54,6	3			1 Resistance			
Frame :				25	3			2 Thermometer			
Bearing D-end :				30	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			2007-03-20					
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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