



Type Test Report					Date of issue: 2012.03.19						
Customer:					Serial No.: 3GE121209S1804						
					Type: M3AA 090 L 4 HO					Product Code: 3GAA092003-_SE	
Customer ref.:											
Rating:					V	Hz	kW	r/min	A	cos φ	Duty
3~Motor					230	D 50	1,85	1410	7,60	0,76	S1
Insul.cl.F					400	Y 50	1,85	1410	4,40	0,76	S1
IP55					460	Y 60	1,85	1695	3,70	0,74	S1
Eff class IE1					50Hz : IE1 - 79,7(100%) - 82(75%) - 80,9(50%)						
60Hz : IE1 - 83,7(100%)											
Resistance					Insulation resistance at 25 °C					Overload	
Line					R > 2000 Mohm 1000 V					Current 150 % 120s	
U <sub>1</sub> - V <sub>1</sub>					Ambient: 16,5 °C					Torque 160 % 15s	
U <sub>1</sub> - W <sub>1</sub>					6,90000 Ω					Speed 120 % 120s	
V <sub>1</sub> - W <sub>1</sub>					6,93000 Ω						
					6,94000 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	2,7	0,19		1500	0,10			
Locked rotor test		89,7 Y	50	4,1	0,46		0	0,71			
Thermal test ( 100% load )	12,6	400 Y	50	4,2	2,35	1,85	1398	0,79	78,70		
Partial load points:											
~75% load	9,3	400 Y	50	3,5	1,73	1,39	1428	0,71	80,10		
~50% load	6,1	400 Y	50	3,0	1,18	0,93	1455	0,56	78,60		
~25% load	3,0	400 Y	50	2,7	0,67	0,46	1478	0,35	69,40		
Temperature rise at rated load.					°C	K	Method		Measurement method		
Stator winding :					62,6	3			1 Resistance		
Frame :					35	3			2 Thermometer		
Bearing D-end :					38,4	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		16.3.2012						
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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