



Type Test Report				Date of issue: 4.11.2015						
Customer:				Serial No.:						
Customer ref.:				Type: M3AA 90L 2 Product Code: 3GAA091500-DE						
Rating:		V	Hz	kW	r/min	A	$\eta$ [%]	Duty		
3-Motor		690	Y 50	1,50	2900	1,74	0,86	S1		
Insul.cl.F		400	D 50	1,50	2900	2,90	0,86	S1		
IP55		460	D 60	1,50	3510	2,60	0,84	S1		
Eff class IE2		50Hz : IE2 - 84,1(100%) - 85,0(75%) - 83,5(50%) 60Hz : IE2 - 85,1(100%)								
Resistance				Insulation resistance at 30 °C			Overload			
Line				Ambient: 31,0 °C			R > 2000 Mohm 1000 V			
U <sub>1</sub> - V <sub>1</sub>				7,18000 Ω			Current 150 % 120s			
U <sub>1</sub> - W <sub>1</sub>				7,20000 Ω			Torque 160 % 15s			
V <sub>1</sub> - W <sub>1</sub>				7,21000 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	$\eta$ [%]	
No load test		400 D	50	1,32	0,10		3000	0,11		
Locked rotor test		68,4 D	50	3,1	0,20		0	0,55		
Thermal test ( 100% load )	4,9	400 D	50	2,9	1,78	1,50	2900	0,86	84,20	
Partial load points:										
~75% load	3,7	400 D	50	2,3	1,32	1,13	2930	0,81	85,00	
~50% load	2,4	400 D	50	1,91	0,90	0,75	2955	0,68	83,50	
~25% load	1,2	400 D	50	1,38	0,48	0,38	2977	0,50	77,60	
Temperature rise at rated load.		[°C]		[K]	Method		Measurement method			
Stator winding :				42,2	3		1 Resistance			
Frame :				12,0	3		2 Thermometer			
Bearing D-end :				13,0	3		3 Thermocouples			
Ambient Temperature :		25			3					
These tests have been carried out on motor no. 3GE072909T1502, on date 2007-07-20 which is identical in electrical design with the above.										
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						
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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