



Type Test Report				Date of issue: 2012.02.20							
Customer:				Serial No.: 3GE110209P9009							
				Type: M3AA 90LD 6 Product Code: 3GAA093444-_HE							
Customer ref.:											
Rating:				V	Hz	kW	r/min	A	cos φ	Duty	
3~Motor Insul.cl.F IP55  Eff class IE2				415	D 50	1,10	945	2,70	0,71	S1	
50Hz : IE2 - 78,3(100%) - 78,2(75%) - 75,4(50%)											
Resistance Line				Ambient: 14,6 °C				Insulation resistance at 23,5 °C		Overload	
U <sub>1</sub> - V <sub>1</sub> U <sub>1</sub> - W <sub>1</sub> V <sub>1</sub> - W <sub>1</sub>				10,65000 Ω 10,38000 Ω 10,66000 Ω				R > 2000 Mohm 1000 V		Current 150 % 120s Torque 160 % 15s 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		415 D	50	1,87	0,14		1000	0,11			
Locked rotor test		116 D	50	3,0	0,35		0	0,58			
Thermal test ( 100% load )	11,1	415 D	50	2,7	1,40	1,10	943	0,71	78,30		
Partial load points:											
~75% load	8,2	415 D	50	2,3	1,05	0,83	959	0,63	78,20		
~50% load	5,4	415 D	50	2,0	0,73	0,55	976	0,50	75,40		
~25% load	2,7	415 D	50	1,86	0,43	0,28	986	0,32	63,70		
Temperature rise at rated load.				°C	K	Method		Measurement method			
Stator winding :				44,0	3			1 Resistance			
Frame :				28	3			2 Thermometer			
Bearing D-end :				25,7	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			3.2.2011					
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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