



Test Report				Date of issue: 2013-03-06											
				Serial No.: 3GV13 11123829 001											
Customer: AT / Toni Andersson				Order no.: 11123829											
				Type: M3AA160MLC-2											
Customer ref.: TypeTest				Product Code: 3GAA161053-BDK											
				Protection type: IP55 IC411											
Rating:		Voltage		Freq.		Power		Speed		Current		cos phi		Insul. cl.	
		[V]		[Hz]		[W]		[r/min]		[A]					
		400,0 D		50,0		18500		2942,0		30,80		0,930		155 (F)	
Resistance Line Ambient: 22,4 °C U1-V1 224,40 mOhm U1-W1 222,20 mOhm V1-W1 223,10 mOhm				Insulation resistance at R > 2000,0 MOhm 1,0 kV						Overload					
				Thermistors: O.K.						Volt. 130,0 % 60 s					
										Curr. 160,0 % 120 s					
										Speed 120,0 % 120 s					
				High-voltage test winding 2,4 kV 1,0 min											
				Thermistors: O.K.											
Test		Torque	Line		Input		Output								
		[Nm]	U [V]	f [Hz]	I [A]	P1 [W]	P2 [W]	n	cos phi	Eta [%]					
No load test			402,0	50,0	8,27	572		3000,0	0,099						
Locked rotor test			57,6	50,0	31,06	1220			0,394						
Thermal test (100% load)		59,8	400,0	50,0	31,76	19956	18500	2952,0	0,907	92,70					
Partial load points:															
~75% load		44,7	400,0	50,0	24,34	14925	13875	2966,5	0,885	92,97					
~50% load		29,6	400,0	50,0	17,44	10022	9250	2979,8	0,829	92,30					
~25% load		14,8	400,0	50,0	11,55	5237	4625	2992,7	0,654	88,32					
Temperature rise at rated load				°C		[K]		Method		Measurement method					
Stator winding :				50,6		1		1 Resistance							
Frame :				47,5		2		2 Thermometer							
Bearing D-end :				46,2		2		3 Thermocouples							
Ambient Temperature :				22,5		2									
Starting current (Is / In): 8,76															
Locked rotor torque (Ti / Tn): 3,23															
Breakdown torque (Tb / Tn): 3,68															
Pull-up torque (Tu / Tn): 2,86															
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		2013-03-01									
Tested by ABB, LV Motors, 721 70 Västerås, Sweden															

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