



<b>Type Test Report</b>				Date of issue: 1.9.2015							
Customer:				Serial No.:							
Customer ref.:				Type: M3AA 225SMC 6 Product Code: 3GAA223230-ADG							
Rating:											
				V	Hz	kW	r/min	A	cos φ	Duty	
3-Motor				690	Y	50	45,0	984	48,9	0,83	S1
Insul.cl.F				400	D	50	45,0	984	84,4	0,83	S1
IP55				415	D	50	45,0	985	82,1	0,82	S1
				440	D	60	45,0	1185	76,2	0,83	S1
Eff class IE1				460	D	60	45,0	1187	73,5	0,82	S1
				50Hz : IE1 - 92,6(100%) - 93,9(75%) - 94,0(50%)				60Hz : IE1 - 93,3(100%)			
Resistance				Insulation resistance at 22,7 °C				Overload			
Line				R > 2000 Mohm 1000 V				Current 150 % 120s			
U <sub>1</sub> - V <sub>1</sub>				Ambient: 22,9 °C				Torque 160 % 15s			
U <sub>1</sub> - W <sub>1</sub>				0,10760 Ω				Speed 120 % 120s			
V <sub>1</sub> - W <sub>1</sub>				0,10760 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		399,9 D	50	28,5	0,9		1000	0,05			
Locked rotor test		89,7 D	50	81,1	4,12		0	0,33			
Thermal test ( 100% load )	437,2	400 D	50	84,5	48,71	45,00	983	0,83	92,39		
Partial load points:											
~75% load	308,1	400 D	50	62,2	34,17	31,91	989	0,79	93,39		
~50% load	259,3	400 D	50	54,8	28,78	26,91	991	0,76	93,50		
~25% load	112,8	400 D	50	35,8	12,88	11,77	997	0,52	91,36		
Temperature rise at rated load.				[°C]	[K]	Method		Measurement method			
Stator winding :				87,3	1			1 Resistance			
Frame :				47,6	2			2 Thermometer			
Bearing D-end :				54,7	2			3 Thermocouples			
Ambient Temperature :				23	2						
<p>These tests have been carried out on motor no. 08 638572 10001, on date 2009-02-02 which is identical in electrical design with the above.</p> <p>Manufactured and tested in accordance with rules of IEC 60034-1 and IEC 60034-2-1. PLL determined from residual loss.</p>											
On behalf of customer											
On behalf of manufacturer											
Date of test											
Tested by ABB AB, LV Motors, 721 70 Västerås, Sweden											
Telephone +46 (0)21 32 90 00											
Telefax +46 (0)21 32 90 22											

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