



Type Test Report				Date of issue: 4.11.2015						
Customer ref.:				Serial No.:						
				Motor Type: M3AA 112 MB 4						
				Product Code: 3GAA112320-ADE						
Rating:		V	Hz	kW	r/min	A	η [%]	Duty		
3-Motor		690	Y 50	4,00	1445	5,00	0,75	S1		
Insul.cl.F		400	D 50	4,00	1445	8,80	0,75	S1		
IP55		460	D 60	4,00	1745	7,40	0,77	S1		
Eff class IE2		50Hz : IE2 - 86,7%(100%) - 86,5%(75%) - 85,2%(50%) 60Hz : IE2 - 87,6%(100%)								
Resistance				Isulation resistans at 26 °C			Overload			
Line		Ambient: 20,0 °C		R>2000Mohm 1000V			Current 150 % 120s			
U ₁ - V ₁		2,0577 Ω					Torque 160 % 15s			
U ₁ - W ₁		2,0567 Ω					Speed 120 % 120s			
V ₁ - W ₁		2,0567 Ω		High-voltage test winding 2400V 60s						
Test	Torque [Nm]	Line U[V]	f[Hz]	Input I[A]	P1[kW]	Output P2[kW]	n[r/min]	cos ρ	η [%]	
No load test		400 D	50	4,8	0,27		1445	0,08		
Locked rotor test		74 D	50	8,8	0,63		0	0,56		
Thermal test (100% load)	27,1	400 D	50	8,7	4,79	4,09	1440	0,80	85,40	
Partial load points:										
~75% load	20,4	400 D	50	7,3	3,64	3,12	1456	0,73	85,70	
~50% load	13,3	400 D	50	5,9	2,43	2,04	1472	0,60	84,20	
~25% load	6,0	400 D	50	5,0	1,24	0,94	1487	0,36	75,30	
Temperature rise at rated load.				°C	K	Method	Measurement method			
Stator winding ⁺ :				65,5	3		1 Resistance			
Frame :				39,1	3		2 Thermometer			
Bearing D-end :				34,1	3		3 Thermocouples			
Ambient Temperature :				25	3					
<p>These tests have been carried out on motor no. 3GE12801016664, on date 2013-09-26 which is identical in electrical design with the above.</p> <p>Manufactured in accordance with rules of IEC 60034-1 and IEC 60034-2-1. PLL determined from residual loss.</p> <p>On behalf of customer</p>										
Tested by ABB AB, LV Motors, 721 70 Västerås, Sweden										