



Type Test Report				Date of issue: 1.9.2015																																													
Customer:				Serial No.:																																													
Customer ref.:				Type: M3AA 280SMA 4 Product Code: 3GAA282210-ADG																																													
Rating:				<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>V</th> <th>Hz</th> <th>kW</th> <th>r/min</th> <th>A</th> <th>cos φ</th> <th>Duty</th> </tr> </thead> <tbody> <tr> <td>690</td> <td>Y 50</td> <td>75,0</td> <td>1478</td> <td>78,3</td> <td>0,85</td> <td>S1</td> </tr> <tr> <td>400</td> <td>D 50</td> <td>75,0</td> <td>1478</td> <td>135,0</td> <td>0,85</td> <td>S1</td> </tr> <tr> <td>415</td> <td>D 50</td> <td>75,0</td> <td>1480</td> <td>133,0</td> <td>0,83</td> <td>S1</td> </tr> <tr> <td>440</td> <td>D 60</td> <td>75,0</td> <td>1779</td> <td>120,0</td> <td>0,86</td> <td>S1</td> </tr> <tr> <td>460</td> <td>D 60</td> <td>75,0</td> <td>1782</td> <td>116,0</td> <td>0,85</td> <td>S1</td> </tr> </tbody> </table>				V	Hz	kW	r/min	A	cos φ	Duty	690	Y 50	75,0	1478	78,3	0,85	S1	400	D 50	75,0	1478	135,0	0,85	S1	415	D 50	75,0	1480	133,0	0,83	S1	440	D 60	75,0	1779	120,0	0,86	S1	460	D 60	75,0	1782	116,0	0,85	S1
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3-Motor Insul.cl.F IP55 Eff class IE2				50Hz : IE2 - 94,3(100%) - 94,9(75%) - 94,6(50%) 60Hz : IE2 - 94,5(100%)																																													
Resistance				Insulation resistance at 26 °C		Overload																																											
Line				R > 2000 Mohm 1000 V		Current 150 % 120s																																											
U ₁ - V ₁				Ambient: 24,7 °C		Torque 160 % 15s																																											
U ₁ - W ₁				0,04272 Ω		Speed 120 % 120s																																											
V ₁ - W ₁				0,04292 Ω																																													
				0,04278 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		400,8 D	50	400,6	1,45		1500	0,04																																									
Locked rotor test		72,5 D	50	71,1	5,61		0	0,38																																									
Thermal test (100% load)	484,9	400 D	50	135,5	79,59	75,00	1477	0,85	94,24																																								
Partial load points:																																																	
~75% load	362,5	400 D	50	105,8	59,51	56,34	1484	0,81	94,67																																								
~50% load	242,4	400 D	50	79,9	40,04	37,82	1490	0,72	94,46																																								
~25% load	122,2	400 D	50	58,6	20,79	19,13	1495	0,51	92,05																																								
Temperature rise at rated load.				°C	[K]	Method	Measurement method																																										
Stator winding :				73,5	1	1 Resistance																																											
Frame :				25,6	2	2 Thermometer																																											
Bearing D-end :				39,3	2	3 Thermocouples																																											
Ambient Temperature :				26	2																																												
<p>These tests have been carried out on motor no. 3GV1010461793001, on date 2010-05-18 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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