



V6.0.1 - 1.0.7455.19842

Type Test Report				Date of Issue: 30.6.2020																																			
Tests have been carried out for motor no. 3G1R1922202246, which is identical in electrical design with motor type(s) stated in this report.				Type: M3AA 71B 8 Product Code: 3GAA074002-_SE																																			
Rating:		<table border="1"> <thead> <tr> <th></th> <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>3~Motor</td> <td>400</td> <td>Y 50</td> <td>0,12</td> <td>680</td> <td>0,56</td> <td>0,60</td> <td>S1</td> </tr> <tr> <td>Ins. Class F</td> <td>230</td> <td>D 50</td> <td>0,12</td> <td>680</td> <td>0,97</td> <td>0,60</td> <td>S1</td> </tr> <tr> <td></td> <td>460</td> <td>Y 60</td> <td>0,12</td> <td>840</td> <td>0,53</td> <td>0,52</td> <td>S1</td> </tr> </tbody> </table>							V	Hz	kW	r/min	A	cos φ	Duty	3~Motor	400	Y 50	0,12	680	0,56	0,60	S1	Ins. Class F	230	D 50	0,12	680	0,97	0,60	S1		460	Y 60	0,12	840	0,53	0,52	S1
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Eff class IE2		50Hz: IE2 - 39.8(100%) - 36.4(75%) - 26.6(50%) 60Hz: IE2 - 40.0(100%)																																					
Winding resistance		Measured at 23 °C		Calculated at 20 °C																																			
U ₁ - V ₁		148,170 Ω		146,447 Ω																																			
U ₁ - W ₁		148,160 Ω		146,437 Ω																																			
V ₁ - W ₁		148,310 Ω		146,585 Ω																																			
Test	Torque [Nm]	Line U[V]	f[Hz]	Input I[A]	P1 [kW]	Output P2 [kW]	η[r/min]	cos φ	η [%]	s [%]																													
No-load test		399,9 Y	50	0,53	0,09			0,24																															
Short circuit test		181,4 Y	50	0,60	0,16			0,84																															
Temp. rise test S1	1,6	400,2 Y	50	0,55	0,23	0,12	680	0,60	50,4	9,33																													
Partial load points:																																							
~75% load	1,3	400,4 Y	50	0,53	0,20	0,10	695	0,54	49,3	7,29																													
~50% load	0,9	400,4 Y	50	0,52	0,16	0,07	711	0,45	42,3	5,22																													
~25% load	0,5	400,5 Y	50	0,52	0,13	0,04	730	0,35	29,5	2,63																													
Temperature rise at rated load.		[°C]		[K]		Method		Measurement method																															
Stator winding :		37		1		1 Resistance																																	
Frame :		31		2		2 Thermocouples																																	
Bearing D-end :		26		2		3 Thermometer																																	
Rotor :		36		3																																			
Ambient Temperature :		21		2																																			
Starting current (I_S / I_N) : 2,22 Locked rotor torque (T_L / T_N) : 2,14 Current unbalance at full load: 0,30 %																																							
Manufactured and tested acc. to IEC/EN 60034-1:2017 and IEC/EN 60034-2-1:2014 Method 2-1-1B.																																							
On behalf of customer																																							
On behalf of manufacturer		Date of test:		9.3.2020																																			
Tested by ABB Oy, Motors and Generators, Vaasa, Finland Test laboratory has been certified acc. to ISO/IEC 17025:2005 <i>Tommi Pantti</i> Tommi Pantti, Test Floor Manager																																							