



V6.0.1 - 1.1.8840.16287

ReportId: 3G1F1951646053_89579CA94E18439582068DE367C4B5FC

Type Test Report				Date of test: 20.3.2020 Date of Issue: 9.4.2024							
Tests have been carried out for motor no. 3G1F1951646053, which is identical in electrical design with motor type(s) stated in this report.				Type: M3JM 80MB 8 Product Code: 3GJM084320- SJ Protection type: Ex d I Mb / Ex db I Mb							
Rating:											
				V	Hz	kW	r/min	A	cos φ	Duty	
3-Motor				400	Y	50	0.25	680	0.94	0.62	S1
Ins. Class F				230	D	50	0.25	680	1.64	0.62	S1
				460	Y	60	0.25	845	0.85	0.55	S1
Eff class IE2				50Hz: IE2 - 50.6(100%) - 51.0(75%) - 46.0(50%) 60Hz: IE2 - 52.0(100%)							
Winding resistance		Measured at 22 °C		Calculated at 20 °C		Insulation resistance after heat run at 47 °C 161500 MΩ , tested at 1000 V					
U ₁ - V ₁		56.000 Ω		55.651 Ω							
U ₁ - W ₁		56.120 Ω		55.770 Ω							
V ₁ - W ₁		56.090 Ω		55.740 Ω							
				Withstand voltage test for winding				2407 V 1 s			
Performance tests	Torque [Nm]	Line U[V]	f[Hz]	Input I[A]	P1 [kW]	Output P2 [kW]	n[r/min]	cos φ	η [%]	s [%]	
No-load test		400.1	Y 50	0.73	0.08			0.15			
Short circuit test		163.3	Y 50	0.95	0.16			0.60			
Temp. rise test S1	3.6	400.3	Y 50	0.95	0.41	0.25	680	0.62	62.8	9.30	
Partial load points:											
~75% load	2.7	400.1	Y 50	0.85	0.31	0.20	702	0.53	63.3	6.42	
~50% load	1.8	400.2	Y 50	0.78	0.23	0.14	719	0.42	59.5	4.12	
~25% load	0.9	400.3	Y 50	0.74	0.15	0.07	735	0.29	46.7	2.06	
Temperature rise at performance tests				°C	K	Method		Measurement method			
Stator winding :				36	1			1 Resistance			
Frame :				31	2			2 Thermocouples			
Bearing D-end :				26	2			3 Thermometer			
Rotor :				39	3						
Ambient Temperature :				21	2						
Starting current (I _S / I _N) : 3.13 Locked rotor torque (T _L / T _N) : 2.00 Current unbalance at full load: 0.59 %											
On behalf of manufacturer Tested by ABB Oy, IEC LV Motors, Strömbergin puistotie 5, 65320 Vaasa, Finland The results stated in this report relate only to the item tested. Manufactured and tested acc. to IEC/EN 60034-1:2017 and IEC/EN 60034-2-1:2014 Method 2-1-1B. Test laboratory has been certified acc. to ISO/IEC 17025:2017											

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