



V6.0.1 - 1.1.8840.16287

ReportId: 3G1F1951646052_F4823F5031D14ED3A91C788159AADE93

Type Test Report				Date of test: 19.3.2020 Date of Issue: 9.4.2024							
Tests have been carried out for motor no. 3G1F1951646052, which is identical in electrical design with motor type(s) stated in this report.				Type: M3JM 80MA 8 Product Code: 3GJM 084310- _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	0.18	680	0.7	0.61	S1
Ins. Class F				230	D	50	0.18	680	1.21	0.61	S1
				460	Y	60	0.18	845	0.65	0.54	S1
Eff class IE2				50Hz: IE2 - 45.9(100%) - 45.4(75%) - 38.6(50%) 60Hz: IE2 - 46.0(100%)							
Winding resistance		Measured at 23 °C		Calculated at 20 °C		Insulation resistance after heat run at 45 °C 197800 MΩ , tested at 1000 V					
U ₁ - V ₁		82.690 Ω		81.887 Ω							
U ₁ - W ₁		82.600 Ω		81.798 Ω							
V ₁ - W ₁		82.910 Ω		82.105 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			400.0	Y	50	0.58	0.07		0.17		
Short circuit test			161.7	Y	50	0.71	0.13		0.65		
Temp. rise test S1		2.5	400.1	Y	50	0.71	0.30	0.18	679	0.60	61.1 9.50
Partial load points:											
~75% load		1.9	400.2	Y	50	0.65	0.23	0.14	700	0.52	60.7 6.65
~50% load		1.3	400.2	Y	50	0.61	0.17	0.10	718	0.41	55.8 4.27
~25% load		0.6	400.3	Y	50	0.58	0.12	0.05	734	0.29	41.8 2.13
Temperature rise at performance tests				°C	K	Method		Measurement method			
Stator winding :					32	1		1 Resistance			
Frame :					26	2		2 Thermocouples			
Bearing D-end :					21	2		3 Thermometer			
Rotor :					33	3					
Ambient Temperature :				21		2					
Starting current (I _S / I _N) : 2.74 Locked rotor torque (T _L / T _N) : 2.17 Current unbalance at full load: 0.71 %											
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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