



V6.0.1 - 1.1.8668.21305

Type Test Report				Date of test: 20.12.2022 Date of Issue: 30.9.2023							
Tests have been carried out for motor no. 3G1F2241874010, which is identical in electrical design with motor type(s) stated in this report.				Type: M3GP 225SMA 4 Product Code: 3GGP222210- _DK Protection type: Ex tb IIIB T125C Db / Ex tc IIIB T125C Dc / Ex tb IIIC T125C Db / Ex tc IIIC T125C Dc Ex nA IIC T3Gc							
Rating:											
				V	Hz	kW	r/min	A	cos φ	Duty	
3-Motor				690	Y 50	37	1482	37.9	0.86	S1	
Ins. Class F				400	D 50	37	1482	65.4	0.86	S1	
				660	Y 50	37	1480	39.4	0.87	S1	
				380	D 50	37	1480	68.4	0.87	S1	
				415	D 50	37	1484	63.6	0.85	S1	
Eff class IE3				460	D 60	37	1784	57.3	0.85	S1	
				50Hz: IE3 - 93.9(100%) - 94.6(75%) - 94.5(50%) 60Hz: IE3 - 94.5(100%)							
Winding resistance*		Measured at 21 °C	Calculated at 20 °C	Insulation resistance after heat run at 73 °C 5500 MΩ , tested at 1000 V				Overload tests Torque 160 % 15 s			
U ₁ - V ₁		0.08284 Ω	0.08252 Ω								
U ₁ - W ₁		0.08285 Ω	0.08253 Ω								
V ₁ - W ₁		0.08286 Ω	0.08254 Ω								
				Withstand voltage test for winding				2900 V 1 s			
Performance tests*		Torque [Nm]	Line U[V]	f[Hz]	Input I[A]	P ₁ [kW]	Output P ₂ [kW]	η[r/min]	cos φ	η [%]	s [%]
No-load test			400.0 D	50	21.3	0.77			0.05		
Short circuit test			74.6 D	50	65.9	2.96			0.35		
Temp. rise test S1		239.4	400.4 D	50	66.1	39.3	37.1	1479	0.86	94.3	1.39
Partial load points:											
~75% load		179.2	400.7 D	50	51.2	29.4	27.9	1485	0.83	94.7	1.00
~50% load		119.6	400.9 D	50	37.9	19.8	18.7	1490	0.75	94.3	0.65
~25% load		60.1	401.1 D	50	26.9	10.3	9.41	1495	0.55	91.6	0.33
Temperature rise at performance tests*				°C	K	Method		Measurement method			
Stator winding :				63	1			1 Resistance			
Frame :				41	2			2 Thermocouples			
Bearing D-end :				53	2			3 Thermometer			
Ambient Temperature :				20	2						
Starting current (I _S / I _N) : 7.75 Locked rotor torque (T _L / T _N) : 2.86 Current unbalance at full load: 0.50 %											
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 is accredited acc. to SFS-EN ISO/IEC 17025:2017 by FINAS. Ref. T345. (*) Accredited test method											

Tommi Pantti
Test Floor Manager