V6.0.1 - 1.0.7455.19842

Type Test Report

Date of Issue: 30.6.2020

Tests have been carried out for motor no. 3G1R1905177683,
which is identical in electrical design with motor type(s)
stated in this report.

Type: M3AA 90S 8
Product Code: 3GAA094100-_SE

Rating:

	V		Hz	kW	r/min	A	cos φ	Duty
3~Motor	400	Y	50	0,37	695	1,65	0,57	S1
Ins. Class F	230	D	50	0,37	695	2,86	0,57	S1
	460	Y	60	0,37	851	1,56	0,50	S1

Eff class IE2

50Hz: IE2 - 56.1(100%) - 55.3(75%) - 48.6(50%)
60Hz: IE2 - 58.0(100%)

Winding resistance	Measured at 23 °C	Calculated at 20 °C
U_1 - V_1	39,560 Ω	39,100 Ω
U_1 - W_1	39,530 Ω	39,070 Ω
V_1 - W_1	39,530 Ω	39,070 Ω

Insulation resistance after heat run at 53 °C
13800 MΩ , tested at 1000 V

Test	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	1,53	0,20			0,19		
Short circuit test		175,2	Y	50	1,60	0,33			0,68		
Temp. rise test S1	5,1	400,1	Y	50	1,64	0,65	0,37	687	0,57	56,4	8,45
Partial load points:											
~75% load	3,9	400,1	Y	50	1,55	0,52	0,29	706	0,49	55,5	5,88
~50% load	2,7	400,2	Y	50	1,51	0,41	0,20	721	0,39	48,8	3,81
~25% load	1,4	400,3	Y	50	1,50	0,31	0,11	735	0,30	34,6	1,93

Temperature rise at rated load.	[°C]	[K]	Method
Stator winding :		67	1
Frame :		48	2
Bearing D-end :		35	2
Rotor :		55	3
Ambient Temperature :	21		2

Measurement method
1 Resistance
2 Thermocouples
3 Thermometer

Starting current (I_S / I_N) : 6,80
Locked rotor torque (T_L / T_N) : 2,42

Current unbalance at full load: 0,10 %

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: 2.4.2020

Tested by ABB Oy, Motors and Generators, Vaasa, Finland
Test laboratory has been certified acc. to ISO/IEC 17025:2005

Tommi Pantti, Test Floor Manager

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