V6.0.1 - 1.0.7455.19842

Type Test Report

Date of Issue: 30.6.2020

Tests have been carried out for motor no. 3G2C192205021142, which is identical in electrical design with motor type(s) stated in this report.

Type: M3AA 90L 8
Product Code: 3GAA094500-_SE

Rating:

	V		Hz	kW	r/min	A	cos φ	Duty
3~Motor	400	Y	50	0,55	700	2,32	0,52	S1
Ins. Class F	230	D	50	0,55	700	4,03	0,52	S1
	460	Y	60	0,55	860	2,16	0,46	S1

Eff class IE2

50Hz: IE2 - 61.7(100%) - 59.7(75%) - 52.2(50%)
60Hz: IE2 - 62.0(100%)

Winding resistance	Measured at	Calculated at
	23 °C	20 °C
U_1 - V_1	20,457 Ω	20,258 Ω
U_1 - W_1	20,362 Ω	20,164 Ω
V_1 - W_1	20,387 Ω	20,189 Ω

Test	Torque	Line			Input		Output				
	[Nm]	U[V]		f[Hz]	I[A]	P1 [kW]	P2 [kW]	n[r/min]	cos φ	η [%]	s [%]
No-load test		399,9	Y	50	2,12	0,20			0,14		
Short circuit test		158,0	Y	50	2,32	0,39			0,61		
Temp. rise test S1	7,5	400,3	Y	50	2,31	0,84	0,55	699	0,52	65,4	6,80
Partial load points:											
~75% load	5,6	400,2	Y	50	2,19	0,66	0,42	714	0,44	63,6	4,85
~50% load	3,8	400,3	Y	50	2,13	0,50	0,29	726	0,34	56,8	3,15
~25% load	1,9	400,2	Y	50	2,10	0,35	0,14	738	0,24	41,1	1,58

Temperature rise at rated load.	[°C]	[K]	Method
Stator winding :		63	1
Frame :		44	2
Bearing D-end :		35	2
Rotor :		53	3
Ambient Temperature :	21		2

Measurement method
1 Resistance
2 Thermocouples
3 Thermometer

Starting current (I_S / I_N) : 3,03
Locked rotor torque (T_L / T_N) : 2,28

Current unbalance at full load: 0,40 %

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: 22.2.2020

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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