V6.0.1 - 1.0.7455.19842

Type Test Report

Date of Issue: 18.6.2020

Tests have been carried out for motor no. 3G1F1951646054,
which is identical in electrical design with motor type(s)
stated in this report.

Type: M3JM / M3JP / M3KP 90SLB 8
Product Code: 3GJM / 3GJP / 3GKP 094020-_SJ
Protection type: Ex d I Mb / Ex db I Mb
Ex d IIB T4 Gb / Ex db IIB T4 Gb
Ex de IIB T4 Gb / Ex db eb IIB T4 Gb

Rating:

	V		Hz	kW	r/min	A	cos φ	Duty
3~Motor	400	Y	50	0,37	705	1,47	0,57	S1
Ins. Class F	230	D	50	0,37	705	2,50	0,57	S1
	460	Y	60	0,37	860	1,38	0,51	S1

Eff class IE2: 50Hz: IE2 - 56.1(100%) - 54.5(75%) - 47.1(50%)
60Hz: IE2 - 58.0(100%)

Winding resistance	Measured at 22 °C	Calculated at 20 °C
U_1 - V_1	38,150 Ω	37,897 Ω
U_1 - W_1	38,110 Ω	37,858 Ω
V_1 - W_1	38,200 Ω	37,947 Ω

Insulation resistance after heat run at 47 °C
85300 MΩ , tested at 1000 V

Withstand voltage test for winding 2409 V 1 s

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		400,0	Y	50	1,24	0,13			0,15		
Short circuit test		161,1	Y	50	1,47	0,25			0,62		
Temp. rise test S1	5,0	400,4	Y	50	1,44	0,57	0,36	700	0,57	64,0	6,62
Partial load points:											
~75% load	3,7	400,0	Y	50	1,33	0,45	0,28	716	0,48	62,7	4,59
~50% load	2,5	400,1	Y	50	1,27	0,34	0,19	728	0,38	56,6	2,95
~25% load	1,2	400,2	Y	50	1,24	0,23	0,09	739	0,27	40,9	1,43

Temperature rise at rated load.

	[°C]	[K]	Method
Stator winding :		42	1
Frame :		31	2
Bearing D-end :		23	2
Rotor :		38	3
Ambient Temperature :	21		2

Measurement method
1 Resistance
2 Thermocouples
3 Thermometer

Starting current (I_S / I_N) : 2,85
Locked rotor torque (T_L / T_N) : 1,78

Current unbalance at full load: 0,14 %

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: 24.3.2020

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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