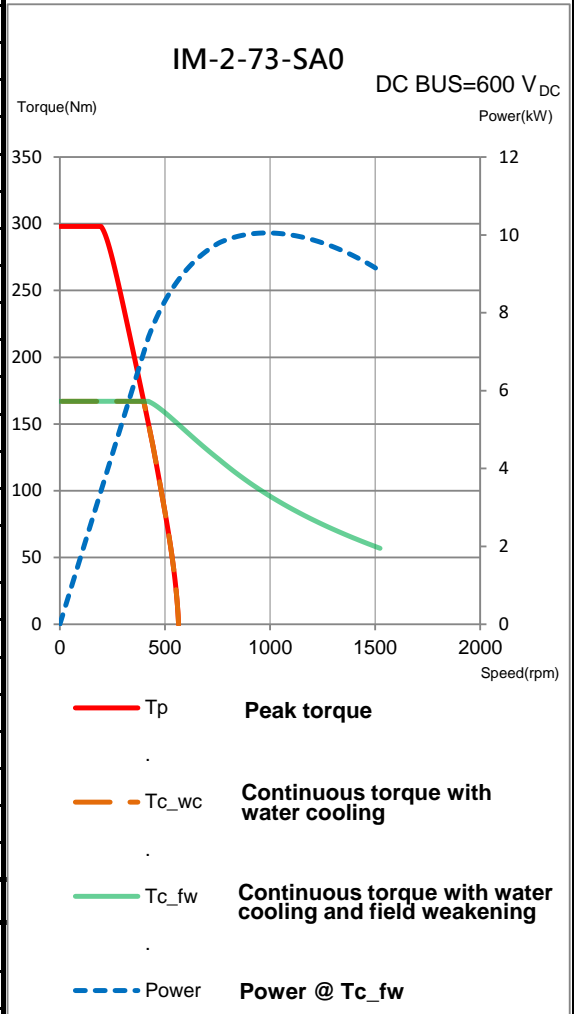


IM-2-73-SA0

Electrical specifications

Winding code : SA0	Symbol	Unit	Field weakening & Water cooling
Continuous torque	T_c	Nm	167
Continuous current	I_c	A_{rms}	16.2
Stall torque	T_s	Nm	138
Stall current	I_s	A_{rms}	13
Peak torque(for 1sec.)	T_p	Nm	298
Peak current(for 1sec.)	I_p	A_{rms}	44.2
Torque constant	K_t	Nm/A_{rms}	11.29
Electrical time constant	T_e	ms	6.7
Resistance (line to line at 25°C)	R_{25}	Ω	2.7
Inductance (line to line)	L_d / L_q	mH	18.1 / 24.69
Number of poles	2p		44
Back emf constant (line to line)	K_v	$V_{rms}/rad/s$	6.52
Motor constant (at 25°C)	K_m	Nm/\sqrt{W}	5.28
Thermal resistance	R_{th}	K/W	0.099
Thermal sensor			PTC SNM100+SNM130+Pt1000
Max. DC BUS	V_{DC}		750
Inertia of rotor	J	kgm^2	0.071
Thermal time constant	T_{th}	s	260
Max. continuous power dissipation	P_c	W	1499
Max. peak power dissipation	P_p	W	11165
Max. speed(at 600VDC)		rpm	1500
Based speed(at 600VDC)		rpm	420
Rated speed(at 600VDC)		rpm	1500

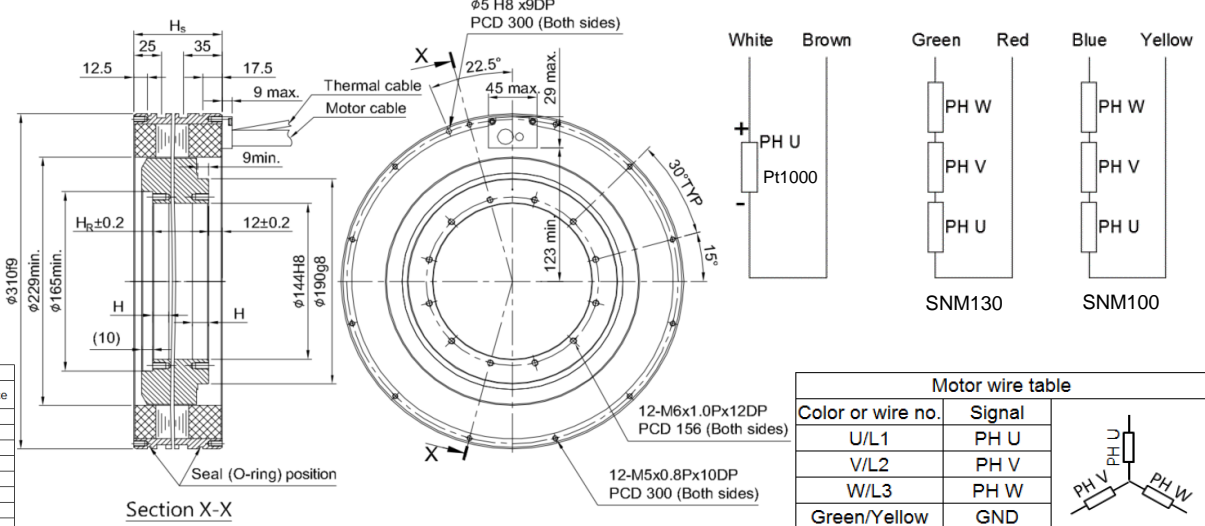
T-N curve



Mechanical specifications

	Symbol	Unit	Field weakening & Water cooling
Mass of rotor	M_r	kg	8.2
Mass of stator	M_s	kg	13.6
Height of stator	H_s	mm	80
Height of rotor	H_r	mm	51
Length of rotor centring fit	H	mm	15
Water temperature difference for Pc	$\Delta\theta$	K	5
Minimum water flow	q	l/min	4.3
Max. pressure drop	Δp	bar	1

Thermal sensor



Except dimensions, all the specifications in the table are in $\pm 10\%$ of tolerance

Version: 2.00

This drawing is only for reference, detail dimensions please refer to approval drawing.

Date: 2020/10/23