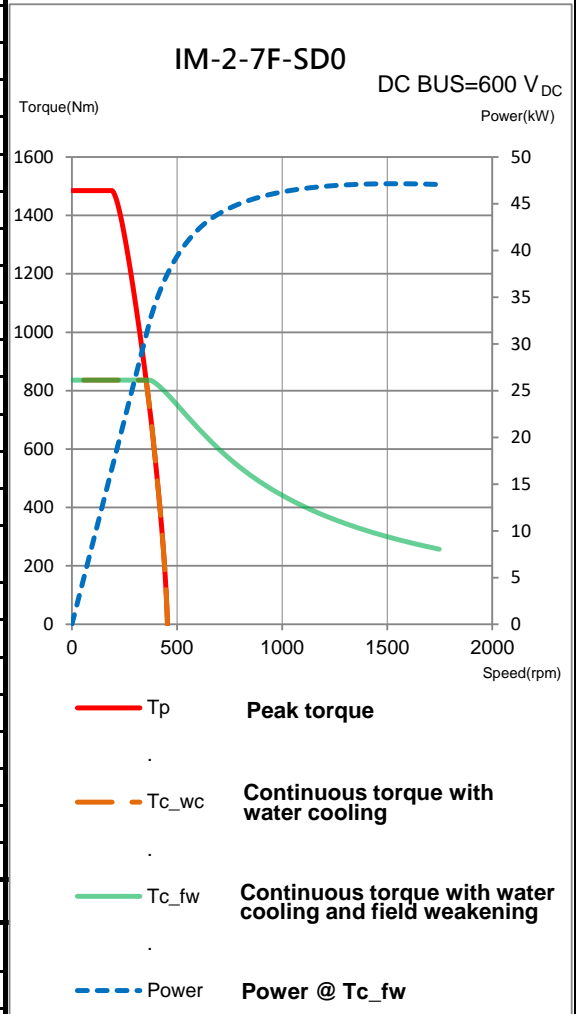


IM-2-7F-SD0

Electrical specifications

Winding code : SD0	Symbol	Unit	Field weakening & Water cooling
Continuous torque	T_c	Nm	836
Continuous current	I_c	A_{rms}	64.5
Stall torque	T_s	Nm	688
Stall current	I_s	A_{rms}	51.6
Peak torque(for 1sec.)	T_p	Nm	1485
Peak current(for 1sec.)	I_p	A_{rms}	176.6
Torque constant	K_t	Nm/A_{rms}	14.03
Electrical time constant	T_e	ms	6.6
Resistance (line to line at 25°C)	R_{25}	Ω	0.65
Inductance (line to line)	L_d / L_q	mH	4.3 / 5.87
Number of poles	2p		44
Back emf constant (line to line)	K_v	$V_{rms}/rad/s$	8.1
Motor constant (at 25°C)	K_m	Nm/\sqrt{W}	13.53
Thermal resistance	R_{th}	K/W	0.026
Thermal sensor			PTC SNM100+SNM130+Pt1000
Max. DC BUS		V_{DC}	750
Inertia of rotor	J	kgm^2	0.271
Thermal time constant	T_{th}	s	100
Max. continuous power dissipation	P_c	W	5741
Max. peak power dissipation	P_p	W	43038
Max. speed(at 600VDC)		rpm	1700
Based speed(at 600VDC)		rpm	373
Rated speed(at 600VDC)		rpm	1700

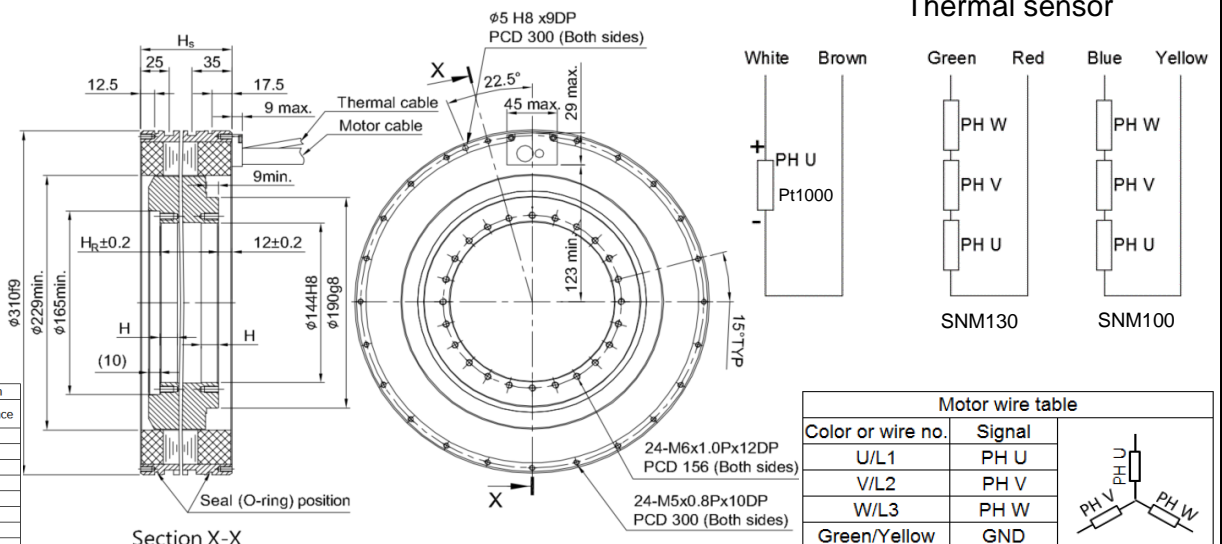
T-N curve



Mechanical specifications

	Symbol	Unit	Field weakening & Water cooling
Mass of rotor	M_r	kg	30.2
Mass of stator	M_s	kg	40.6
Height of stator	H_s	mm	200
Height of rotor	H_r	mm	171
Length of rotor centring fit	H	mm	20
Water temperature difference for P_c	$\Delta\theta$	K	5
Minimum water flow	q	l/min	16.5
Max. pressure drop	Δp	bar	2

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