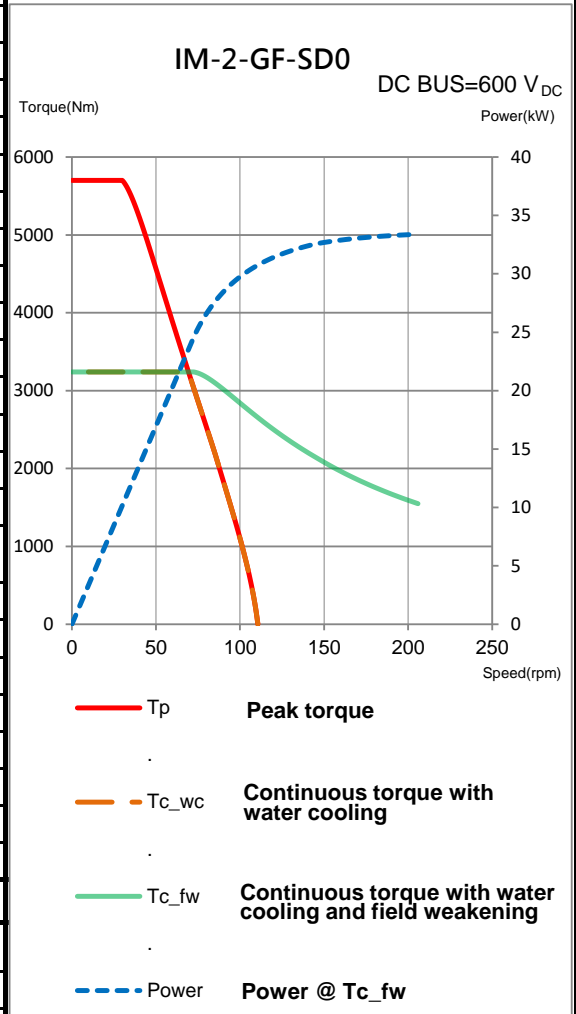


IM-2-GF-SD0

Electrical specifications

Winding code : SD0	Symbol	Unit	Field weakening & Water cooling
Continuous torque	T_c	Nm	3240
Continuous current	I_c	A_{rms}	60.6
Stall torque	T_s	Nm	2676
Stall current	I_s	A_{rms}	48.5
Peak torque(for 1sec.)	T_p	Nm	5700
Peak current(for 1sec.)	I_p	A_{rms}	160
Torque constant	K_t	Nm/A_{rms}	57.68
Electrical time constant	T_e	ms	9.9
Resistance (line to line at 25°C)	R_{25}	Ω	1.4
Inductance (line to line)	L_d / L_q	mH	13.8 / 15.18
Number of poles	$2p$		88
Back emf constant (line to line)	K_v	$V_{rms}/rad/s$	33.3
Motor constant (at 25°C)	K_m	Nm/\sqrt{W}	38.82
Thermal resistance	R_{th}	K/W	0.014
Thermal sensor			PTC SNM100+SNM130+Pt1000
Max. DC BUS	V_{DC}		750
Inertia of rotor	J	kgm^2	3.42
Thermal time constant	T_{th}	s	150
Max. continuous power dissipation	P_c	W	10906
Max. peak power dissipation	P_p	W	76032
Max. speed(at 600VDC)		rpm	200
Based speed(at 600VDC)		rpm	72
Rated speed(at 600VDC)		rpm	200

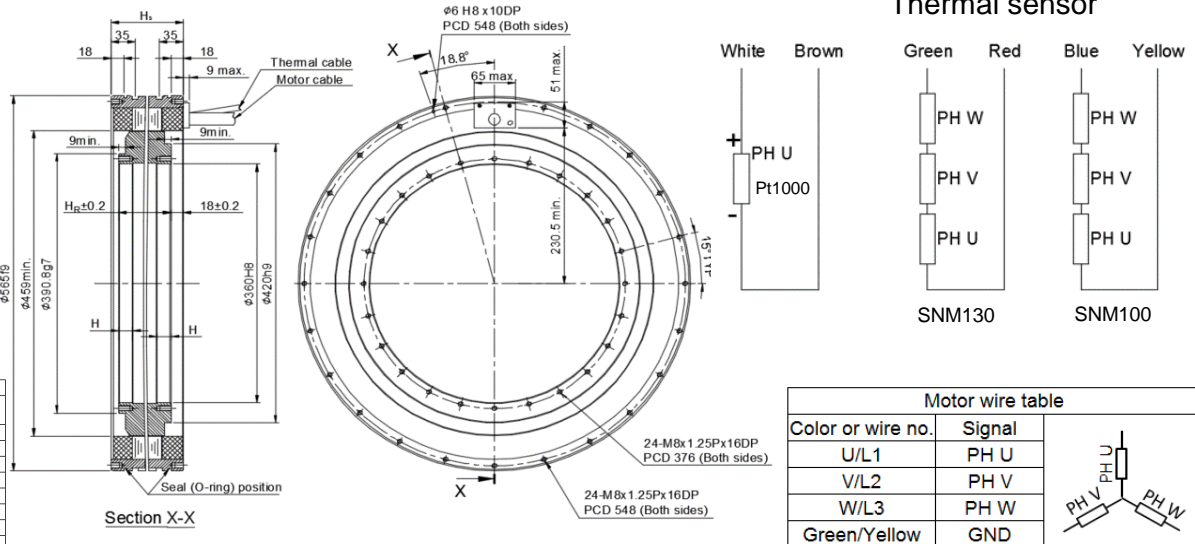
T-N curve



Mechanical specifications

	Symbol	Unit	Field weakening & Water cooling
Mass of rotor	M_r	kg	81.5
Mass of stator	M_s	kg	111.8
Height of stator	H_s	mm	210
Height of rotor	H_r	mm	181
Length of rotor centring fit	H	mm	20
Water temperature difference for P_c	$\Delta\theta$	K	5
Minimum water flow	q	l/min	31.2
Max. pressure drop	Δp	bar	4

Thermal sensor



Except dimensions, all the specifications in the table are in ±10% of tolerance

Version: 2.00

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

Date: 2020/10/23