

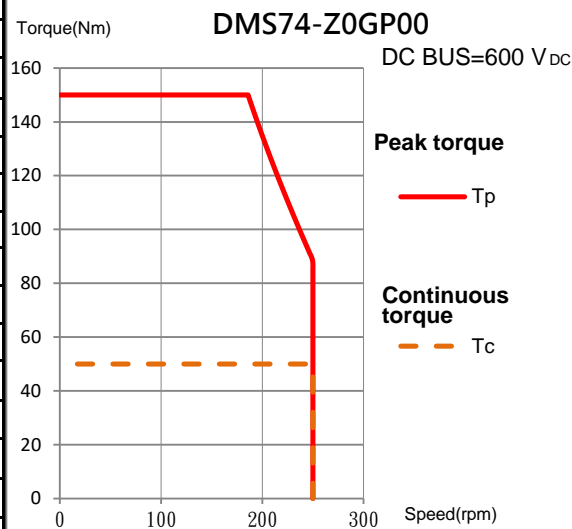
DMS74-Z0GP00 Direct Drive Motor

Spec No: DB100302-V2.03

Electrical specifications

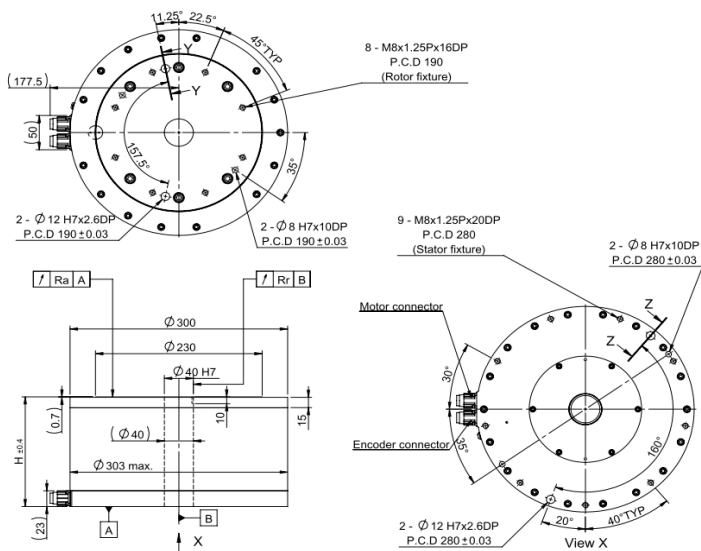
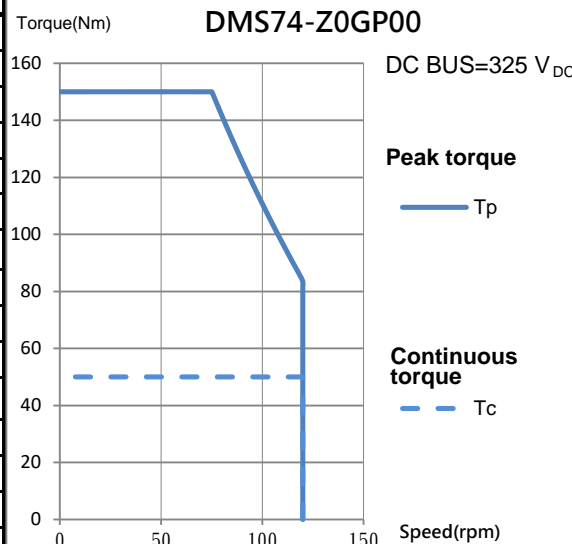
Winding code : LA	Symbol	Unit	
Continuous torque	T_c	Nm	50
Continuous current	I_c	A_{rms}	3.4
Peak torque(for 1sec.)	T_p	Nm	150
Peak current(for 1sec.)	I_p	A_{rms}	10.2
Torque constant	K_t	Nm/Arms	17
Electrical time constant	T_e	ms	4.3
Resistance (line to line at 25°C)	R_{25}	Ω	12.9
Inductance (line to line)	L	mH	55
Number of poles			44
Back emf constant (line to line)	K_v	Vrms/rad/s	9.8
Motor constant (at 25°C)	K_m	Nm/ \sqrt{W}	3.9
Thermal resistance	R_{th}	K/W	0.42
Thermal sensor			PTC 120
Max. DC BUS	V_{DC}		600

T-N curve



Mechanical specifications

	Symbol	Unit	
Inertia of rotor	J	kgm^2	0.152
Mass of motor	M_m	kg	36
Max. axial load	F_a	N	8000
Max. moment load	M	Nm	360
Max. speed(at 600VDC)		rpm	250
Max. speed(at 325VDC)		rpm	120
Resolution			25bit(EnDat2.2)
Repeatability		arc-sec	± 2.5
Accuracy		arc-sec	± 25
Axial run-out	R_a	μm	30
Radial run-out	R_r	μm	30
Motor dimensions	DxH	mm	$\phi 300 \times 160$



Nominal dimension	Tolerance
- 6	± 0.1
> 6 ~ 30	± 0.2
> 30 ~ 120	± 0.3
> 120 ~ 300	± 0.4
> 300 ~ 600	± 0.5
> 600 ~ 1200	± 0.8
> 1200 ~ 2400	± 1.0
> 2400	± 1.5

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

Version: 2.03

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

Date: 20241227