

NHDM58G6

Brushless DC/AC Servomotors

Technical Data

Parameter	Unit	-118S	-82S	-53S
General				
Voltage Gradient No Load	Volts	118	82	53
Max. Motor EMF Line-Line	Volts	700	660	420
Max. Speed (300 V DC link)	RPM	1700	2700	4700
Max. Speed (560 V DC link) ¹	RPM	3800	5800	8000
Continuous Stall Torque	Nm	1.5	1.5	1.5
Peak Stall Torque	Nm	4.6	4.6	4.6
Continuous Stall Current	Amps	1.09	1.6	2.4
Peak Current	Amps	5.9	8.5	13.1
Rated Torque ²	Nm	1.3	1.3	1.3
Rated Current ²	Amps	0.94	1.35	2.1
Rotor Polar Moment of Inertia	kgcm ²	0.25	0.25	0.25
Cogging Torque	Nm	0.05	0.05	0.05
Torque Constant K _T ^{3,4}	Nm/Amp	1.38	0.96	0.63

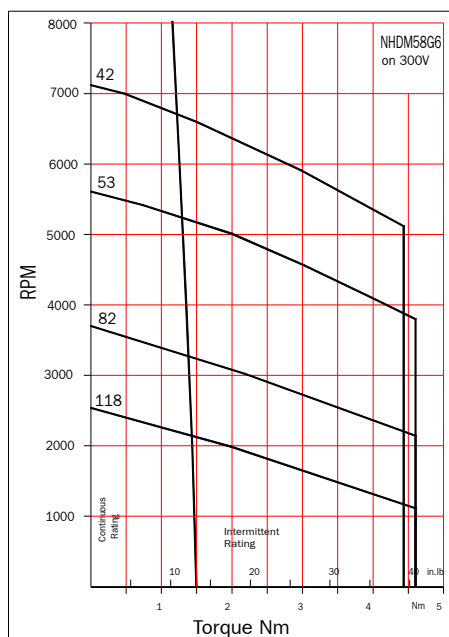
Winding

Resistance Line-Line ³	Ohms	33	16	6.6
Inductance Line-Line	Millihenrys	79	38	16
Insulation Class		F	F	F
Max. Ambient Temperature	°C	40	40	40
Thermal Time Constant	Minutes	30	30	30
Thermal Resistance	°C/Watt	1.34	1.34	1.34
Static Friction Torque	Nm	0.02	0.02	0.02
Motor Weight	kg	1.7	1.7	1.7

Notes:

- Where no motor speed is specified, optimal performance may not be achieved on 560V DC link.
- Motors are tested on an aluminium heatsink with dimensions 255x255x6mm and with a temperature rise dT of 100K on the windings. The maximum temperature of the windings is therefore 140 °C.
- At 25 °C.
- At rated values Torque = K_t x rms current.

NHDM58G6 on 300V



NHDM58G6 on 560V

