NHDM58C6

Brushless DC/AC Servomotors

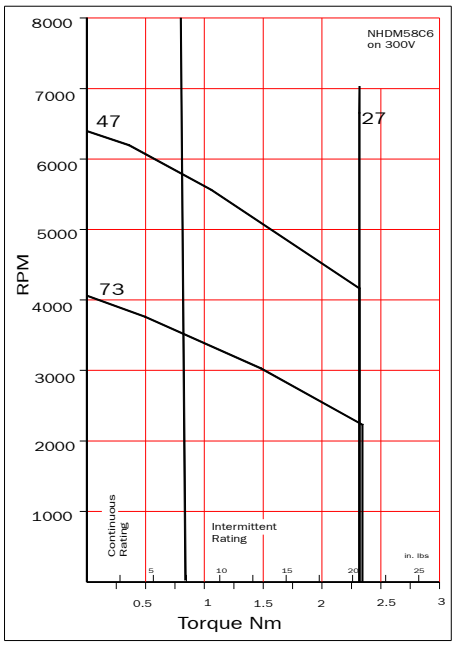
Technical Data

Parameter	Unit	-73S	-47S	-27S
General				
Voltage Gradient No Load	Volts	73	47	27
Max. Motor EMF Line-Line	Volts	580	380	220
Max. Speed (300 V DC link)	RPM	2800	4600	8000
Max. Speed (560 V DC link) [1]	RPM	6000	8000	-
Continuous Stall Torque	**Nm**	**0.85**	**0.85**	**0.85**
Peak Stall Torque	Nm	2.3	2.3	2.3
Continuous Stall Current	**Amps**	**1**	**1.5**	**2.7**
Peak Current	**Amps**	**4.8**	**7.4**	**12.9**
Rated Torque [2]	Nm	0.8	0.8	0.8
Rated Current [2]	Amps	0.95	1.48	2.5
Rotor Polar Moment of Inertia	kgcm²	0.15	0.15	0.15
Cogging Torque	Nm	0.04	0.04	0.04
Torque Constant K_T [3,4]	Nm/Amp	0.84	0.54	0.32
Winding				
Resistance Line-Line [3]	Ohms	29	12.2	3.9
Inductance Line-Line	Millihenrys	62	26	8.4
Insulation Class		F	F	F
Max. Ambient Temperature	˚C	40	40	40
Thermal Time Constant	Minutes	30	30	30
Thermal Resistance	˚C/Watt	1.8	1.8	1.8
Static Friction Torque	Nm	0.02	0.02	0.02
Motor Weight	kg	1.1	1.1	1.1

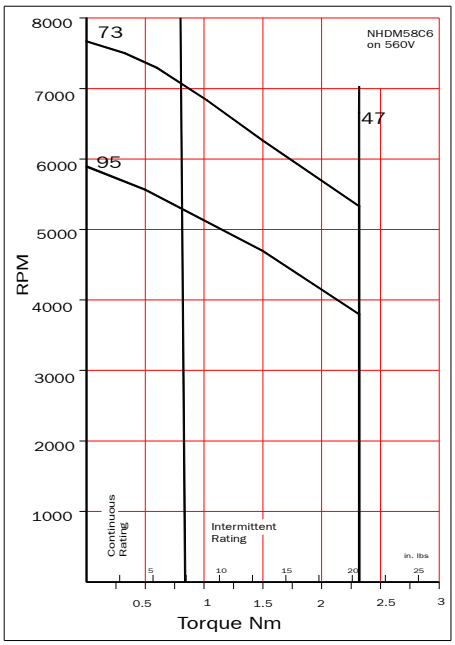
Notes:

1. Where no motor speed is specified, optimal performance may not be achieved on 560V DC link.
2. 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.
3. At 25 ˚C.
4. At rated values Torque = Kt x rms current.

NHDM58C6 on 300V



NHDM58C6 on 560V



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