NHDM105G10

Brushless DC/AC Servomotors

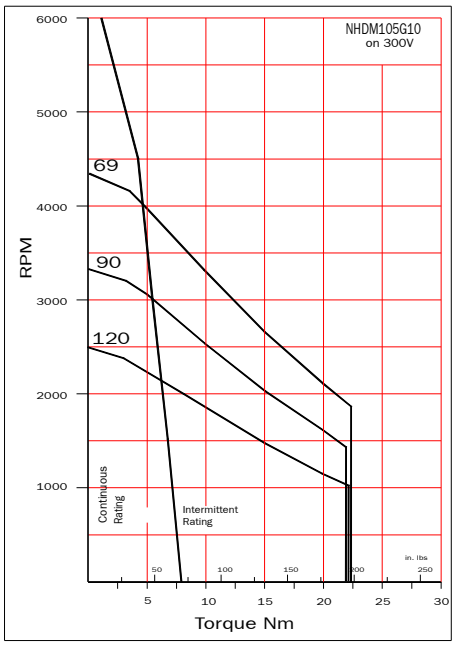
Technical Data

Parameter	Unit	-120S	-90S	-69S
General				
Voltage Gradient No Load	Volts	120	90	69
Max. Motor EMF Line-Line	Volts	700	540	410
Max. Speed (300 V DC link)	RPM	1300	1800	2400
Max. Speed (560 V DC link) [1]	RPM	2600	3600	4600
Continuous Stall Torque	**Nm**	**7.9**	**7.9**	**7.9**
Peak Stall Torque	Nm	22	22	22
Continuous Stall Current	**Amps**	**5.6**	**7.5**	**9.8**
Peak Current	**Amps**	**28**	**37**	**49**
Rated Torque [2]	Nm	5.7	5.7	5.7
Rated Current [2]	Amps	4	5.4	7
Rotor Polar Moment of Inertia	kgcm²	4.1	4.1	4.1
Cogging Torque	Nm	0.26	0.26	0.26
Torque Constant K_T [3,4]	Nm/Amp	1.41	1.05	0.81
Winding				
Resistance Line-Line [3]	Ohms	2.5	1.34	0.82
Inductance Line-Line	Millihenrys	14	7.8	4.6
Insulation Class		F	F	F
Max. Ambient Temperature	˚C	40	40	40
Thermal Time Constant	Minutes	40	40	40
Thermal Resistance	˚C/Watt	0.58	0.58	0.58
Static Friction Torque	Nm	0.11	0.11	0.11
Motor Weight	kg	6.7	6.7	6.7

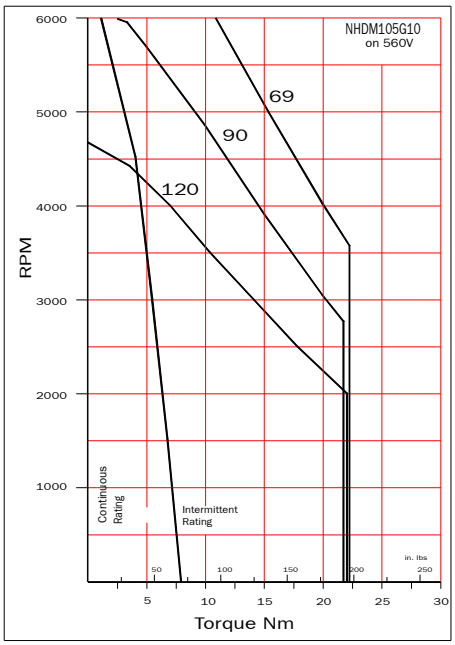
Notes:

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.

NHDM105G10 on 300V



NHDM105G10 on 560V



NOVOTRON
Industrie-Automation GmbH
Mauserstrasse 31
D-71640 Ludwigsburg
phone 0049-7141-29690
fax 0049-7141-296922
e-mail: info@novotron-online.com
www.novotron-online.com