

NHDM142C10

Brushless DC/AC Servomotors

Technical Data

Parameter	Unit	-152S	-107S	-76S
General				
Voltage Gradient No Load	Volts	152	107	76
Max. Motor EMF Line-Line	Volts	700	540	380
Max. Speed (300 V DC link)	RPM	1000	1500	2200
Max. Speed (560 V DC link) ¹	RPM	1900	2800	4000
Continuous Stall Torque	Nm	13	13	13
Peak Stall Torque	Nm	34	34	34
Continuous Stall Current	Amps	7.3	10.4	15
Peak Current	Amps	34	48	68
Rated Torque ²	Nm	11	11	11
Rated Current ²	Amps	6.1	8.7	12.2
Rotor Polar Moment of Inertia	kgcm ²	10.7	10.7	10.7
Cogging Torque	Nm	0.38	0.38	0.38
Torque Constant K _T ^{3,4}	Nm/Amp	1.8	1.26	0.9

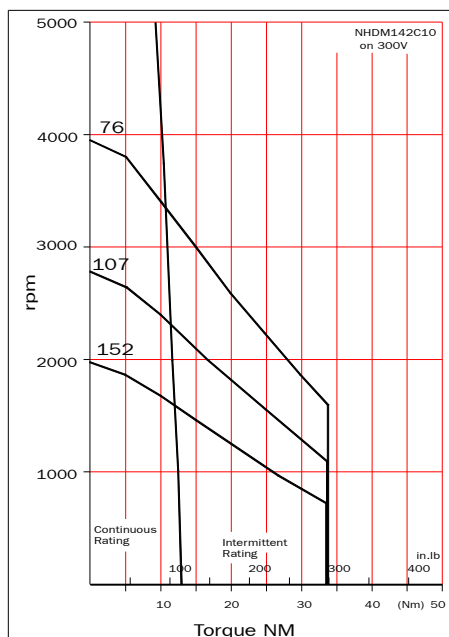
Winding

Resistance Line-Line ³	Ohms	2	1.03	0.52
Inductance Line-Line	Millihenrys	24	11.6	5.8
Insulation Class		F	F	F
Max. Ambient Temperature	°C	40	40	40
Thermal Time Constant	Minutes	35	35	35
Thermal Resistance	°C/Watt	0.43	0.43	0.43
Static Friction Torque	Nm	0.12	0.12	0.12
Motor Weight	kg	8.3	8.3	8.3

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.

NHDM142C10 on 300V



NHDM142C10 on 560V

