

NHDM142E10

Brushless DC/AC Servomotors

Technical Data

Parameter	Unit	-204S	-147S	-92S
General				
Voltage Gradient No Load	Volts	204	147	92
Max. Motor EMF Line-Line	Volts	700	700	460
Max. Speed (300 V DC link)	RPM	800	1200	2000
Max. Speed (560 V DC link) ¹	RPM	1700	2300	3900
Continuous Stall Torque	Nm	17	17	17
Peak Stall Torque	Nm	51	51	51
Continuous Stall Current	Amps	7.1	9.9	16
Peak Current	Amps	38	52	84
Rated Torque ²	Nm	14	14	14
Rated Current ²	Amps	5.8	8.2	13
Rotor Polar Moment of Inertia	kgcm ²	16	16	16
Cogging Torque	Nm	0.6	0.6	0.6
Torque Constant K _T ^{3,4}	Nm/Amp	2.4	1.7	1.08

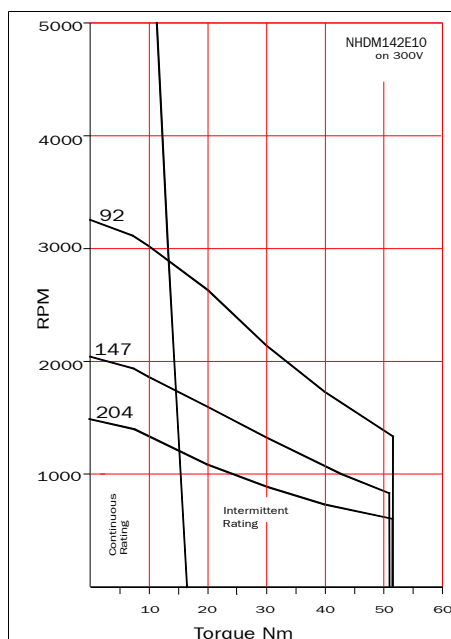
Winding

Resistance Line-Line ³	Ohms	2.2	1.17	0.45
Inductance Line-Line	Millihenrys	28	14	5.6
Insulation Class		F	F	F
Max. Ambient Temperature	°C	40	40	40
Thermal Time Constant	Minutes	40	40	40
Thermal Resistance	°C/Watt	0.42	0.42	0.42
Static Friction Torque	Nm	0.12	0.12	0.12
Motor Weight	kg	10.8	10.8	10.8

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.

NHDM142E10 on 300V



NHDM142E10 on 560V

