

NHDM82J8

Brushless DC/AC Servomotors

Technical Data

Parameter	Unit	-116S	-56S	-40S
General				
Voltage Gradient No Load	Volts	116	56	40
Max. Motor EMF Line-Line	Volts	700	450	320
Max. Speed (300 V DC link)	RPM	1600	3300	4700
Max. Speed (560 V DC link) ¹	RPM	2900	6200	-
Continuous Stall Torque	Nm	3.5	3.5	3.5
Peak Stall Torque	Nm	11.6	11.6	11.6
Continuous Stall Current	Amps	2.6	5.3	7.5
Peak Current	Amps	15	32	44
Rated Torque ²	Nm	2.6	2.6	2.6
Rated Current ²	Amps	1.9	3.9	5.4
Rotor Polar Moment of Inertia	kgcm ²	1.4	1.4	1.4
Cogging Torque	Nm	0.11	0.11	0.11
Torque Constant K _T ^{3,4}	Nm/Amp	1.35	0.66	0.48

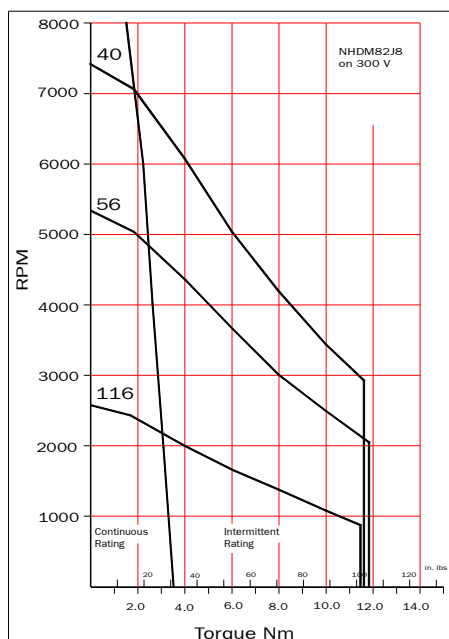
Winding

Resistance Line-Line ³	Ohms	7.1	1.7	0.89
Inductance Line-Line	Millihenrys	37	8.4	4.4
Insulation Class		F	F	F
Max. Ambient Temperature	°C	40	40	40
Thermal Time Constant	Minutes	30	30	30
Thermal Resistance	°C/Watt	0.95	0.95	0.95
Static Friction Torque	Nm	0.04	0.04	0.04
Motor Weight	kg	4	4	4

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.

NHDM82J8 on 300V



NHDM82J8 on 560V

