

NHDM82E8

Brushless DC/AC Servomotors

Technical Data

Parameter	Unit	-76S	-38S	-30S
General				
Voltage Gradient No Load	Volts	76	38	30
Max. Motor EMF Line-Line	Volts	610	300	240
Max. Speed (300 V DC link)	RPM	2100	4400	5800
Max. Speed (560 V DC link) ¹	RPM	4200	-	-
Continuous Stall Torque	Nm	2.3	2.3	2.3
Peak Stall Torque	Nm	6.9	6.9	6.9
Continuous Stall Current	Amps	2.6	5.2	6.6
Peak Current	Amps	14	28	35
Rated Torque ²	Nm	2.1	2.1	2.1
Rated Current ²	Amps	2.3	4.7	6
Rotor Polar Moment of Inertia	kgcm ²	0.88	0.88	0.88
Cogging Torque	Nm	0.075	0.075	0.075
Torque Constant K _T ^{3,4}	Nm/Amp	0.9	0.45	0.35

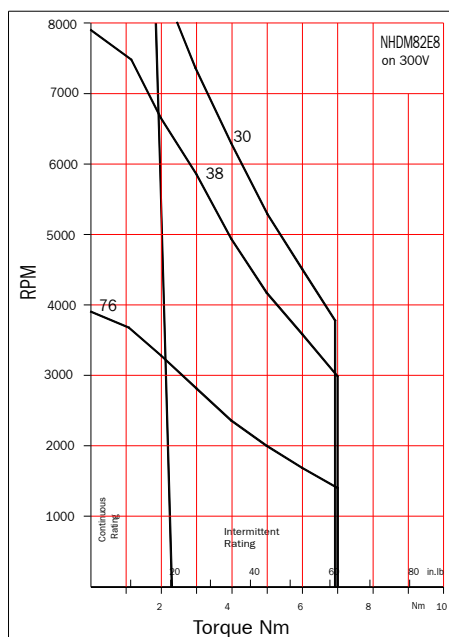
Winding

Resistance Line-Line ³	Ohms	5.8	1.5	0.91
Inductance Line-Line	Millihenrys	27	6.8	4.3
Insulation Class		F	F	F
Max. Ambient Temperature	°C	40	40	40
Thermal Time Constant	Minutes	26	26	26
Thermal Resistance	°C/Watt	1.18	1.18	1.18
Static Friction Torque	Nm	0.04	0.04	0.04
Motor Weight	kg	2.9	2.9	2.9

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.

NHDM82E8 on 300V



NHDM82E8 on 560V

