

NHDM82C8

Brushless DC/AC Servomotors

Technical Data

Parameter	Unit	-63S	-44S	-28S	-22S
General					
Voltage Gradient No Load	Volts	63	44	28	22
Max. Motor EMF Line-Line	Volts	500	350	220	180
Max. Speed (300 V DC link)	RPM	2200	4000	5400	8000
Max. Speed (560 V DC link) ¹	RPM	4400	-	-	-
Continuous Stall Torque	Nm	1.7	1.7	1.7	1.7
Peak Stall Torque	Nm	4.6	4.6	4.6	4.6
Continuous Stall Current	Amps	2.3	3.3	5.2	6.6
Peak Current	Amps	11	16	25	32
Rated Torque ²	Nm	1.6	1.6	1.6	1.6
Rated Current ²	Amps	2.1	3.1	4.8	6.2
Rotor Polar Moment of Inertia	kgcm ²	0.61	0.61	0.61	0.61
Cogging Torque	Nm	0.05	0.05	0.05	0.05
Torque Constant K _T ^{3,4}	Nm/Amp	0.75	0.52	0.33	0.26

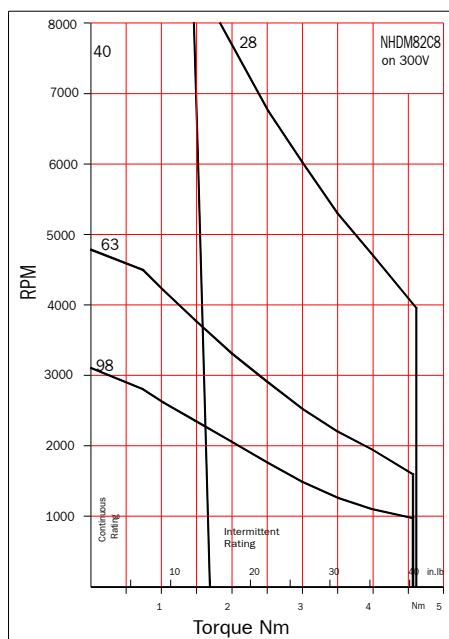
Winding

Resistance Line-Line ³	Ohms	7	3.3	1.37	0.83
Inductance Line-Line	Millihenrys	30	23	5.9	3.6
Insulation Class	F	F	F	F	F
Max. Ambient Temperature	°C	40	40	40	40
Thermal Time Constant	Minutes	23	23	23	23
Thermal Resistance	°C/Watt	1.24	1.24	1.24	1.24
Static Friction Torque	Nm	0.04	0.04	0.04	0.04
Motor Weight	kg	2.3	2.3	2.3	2.3

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.

NHDM82C8 on 300V



NHDM82C8 on 560V

