

NHR55G4

Brushless DC/AC Servomotors

Technical Data

Parameter	Unit	-130	-88	-64	-44	-32
General						
Voltage Gradient No Load Line-Line	Volts/1000RPM	130	88	64	44	32
Max. Motor EMF Line-Line	Volts	700	700	510	350	260
Max. Speed	RPM	8000	8000	8000	8000	8000
Continuous Stall Torque TENV (110K) ³	Nm	0.8	0.8	0.8	0.8	0.8
Continuous Stall Torque when fitted to Heatsink (Size 150 x 150 x 6 mm)	Nm	0.85	0.85	0.85	0.85	0.85
Peak Stall Torque	Nm	3	3	3	3	3
Continuous Stall Current rms ³	Amps	0.5	0.8	1.1	1.6	2.1
Rotor Polar Moment of Inertia	kgcm ²	0.28	0.28	0.28	0.28	0.28
Maximum Current (Peak)	Amp	3.0	4.5	6.1	8.7	12.1
Cogging Torque	Nm	0.0295	0.0295	0.0295	0.0295	0.0295
Torque Constant K _T rms ^{1,2}	Nm/Amp	1.53	1.02	0.75	0.51	0.375

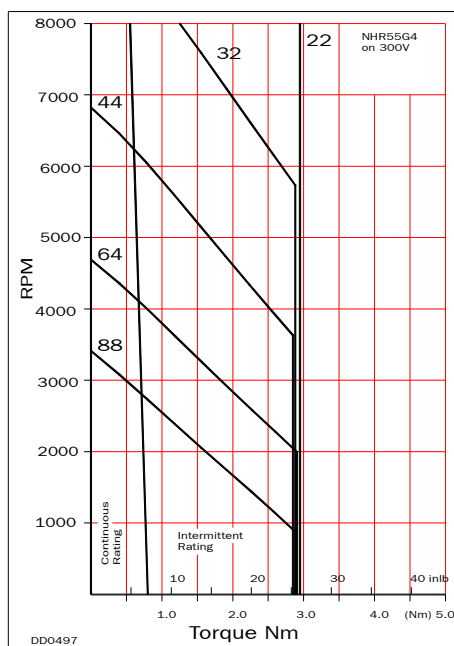
Winding

Resistance Line-Line ¹	Ohms	116	60	29.2	15	7.3
Inductance Line-Line	Millihenrys	116	60	30	15	7.8
Insulation Class		F	F	F	F	F
Max. Ambient Temperature	°C	40	40	40	40	40
Thermal Time Constant	Minutes	25	25	25	25	25
Thermal Resistance	°C/Watt	1.4	1.4	1.4	1.4	1.4
Static Friction Torque	Nm	0.0015	0.0015	0.0015	0.0015	0.0015
Motor Weight	kg	1.9	1.9	1.9	1.9	1.9

Tolerance All data is subject to a tolerance of ± 10% (except motor 'Voltage Gradient' and K_T which are to +15%/-5%).

- At 25°C.
- Note that K_T is shown as a combined value for all **three phases**.
- The temperature rise Δ T on the windings is 110K and applies to all continuous torque values. The maximum ambient temperature is 40°C and therefore the temperature on the windings should not be more than 150°C. A value higher than 150°C would exceed the class F insulation temperature specification.

NHR55G4 on 300V



NHR55G4 on 560V

