

NHJ116C6

Brushless DC/AC Servomotors

Technical Data

Parameter	Unit	-130	-88	-64	-44
General					
Voltage Gradient No Load Line-Line	Volts/1000RPM	130	88	64	44
Max. Motor EMF Line-Line	Volts	700	530	380	260
Max. Speed	RPM	5400	6000	6000	6000
Continuous Stall Torque TENV (110K) ³	Nm	5	5	5	5
Continuous Stall Torque when fitted to Heatsink (Size 300 x 300 x 12 mm)	Nm	5.4	5.4	5.4	5.4
Peak Stall Torque	Nm	16	16	16	16
Continuous Stall Current rms ³	Amps	3.3	4.9	6.7	9.7
Rotor Polar Moment of Inertia	kgcm ²	7.5	7.5	7.5	7.5
Maximum Current (Peak)	Amp	18	27	36	54
Cogging Torque	Nm	0.145	0.145	0.145	0.145
Torque Constant K _T rms ^{1,2}	Nm/Amp	1.5	1.03	0.75	0.51

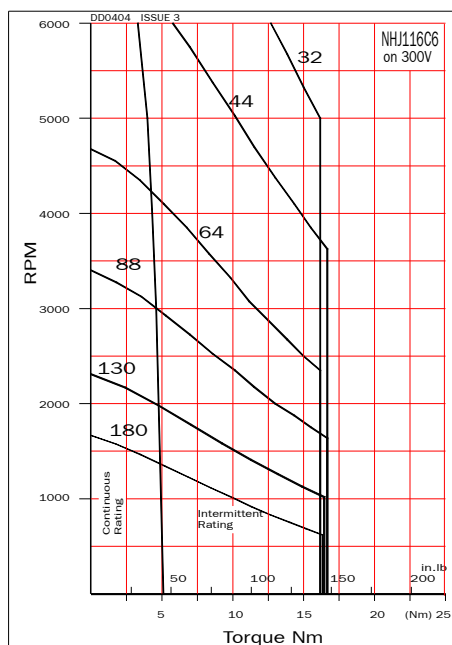
Winding

Resistance Line-Line ¹	Ohms	7.6	3.4	1.8	0.8
Inductance Line-Line	Millihenrys	27	12.1	6.8	3
Insulation Class		F	F	F	F
Max. Ambient Temperature	°C	40	40	40	40
Thermal Time Constant	Minutes	60	60	60	60
Thermal Resistance	°C/Watt	0.69	0.69	0.69	0.69
Static Friction Torque	Nm	0.09	0.09	0.09	0.09
Motor Weight	kg	6.9	6.9	6.9	6.9

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.

NHJ116C6 on 300V



NHJ116C6 on 560V

