

NHJ116E6 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	7.2	7.2	7.2	7.2
Continuous Stall Torque when fitted to Heatsink (Size 300 x 300 x 12 mm)	Nm	7.9	7.9	7.9	7.9
Peak Stall Torque	Nm	25	25	25	25
Continuous Stall Current rms ³	Amps	4.7	7	9.6	14
Rotor Polar Moment of Inertia	kgcm ²	9.9	9.9	9.9	9.9
Maximum Current (Peak)	Amp	27	41	54	81
Cogging Torque	Nm	0.213	0.213	0.213	0.213
Torque Constant K _T rms ^{1,2}	Nm/Amp	1.5	1.03	0.75	0.51

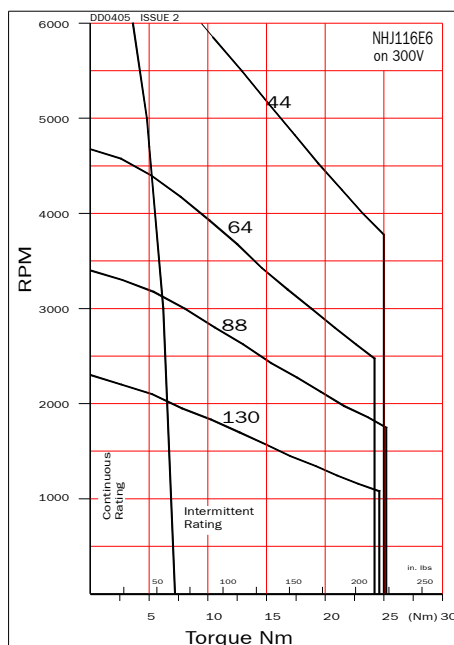
Winding

Resistance Line-Line ¹	Ohms	4.1	1.7	0.95	0.41
Inductance Line-Line	Millihenrys	17	7.7	4.3	1.9
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	0.62	0.62	0.62	0.62
Static Friction Torque	Nm	0.09	0.09	0.09	0.09
Motor Weight	kg	8.6	8.6	8.6	8.6

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.

NHJ116E6 on 300V



NHJ116E6 on 560V

