

## NHJ96C6 Brushless DC/AC Servomotors

### Technical Data

Parameter	Unit	-130	-88	-64	-44
<b>General</b>					
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
<b>Continuous Stall Torque TENV (110K)</b> <sup>3</sup>	<b>Nm</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>
Continuous Stall Torque when fitted to Heatsink (Size 300 x 300 x 12 mm)	Nm	3.3	3.3	3.3	3.3
Peak Stall Torque	Nm	11	11	11	11
<b>Continuous Stall Current rms</b> <sup>3</sup>	<b>Amps</b>	<b>2</b>	<b>2.9</b>	<b>4</b>	<b>5.8</b>
Rotor Polar Moment of Inertia	kgcm <sup>2</sup>	3.3	3.3	3.3	3.3
<b>Maximum Current (Peak)</b>	<b>Amp</b>	<b>11.9</b>	<b>18</b>	<b>25</b>	<b>36</b>
Cogging Torque	Nm	0.088	0.088	0.088	0.088
Torque Constant K <sub>T</sub> rms <sup>1,2</sup>	Nm/Amp	1.5	1.03	0.75	0.51

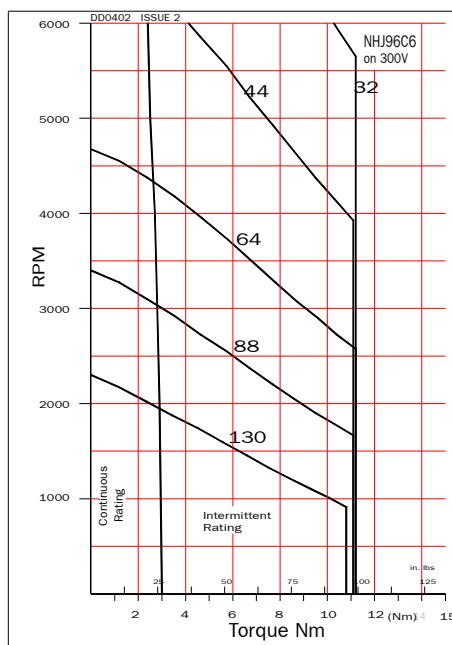
### Winding

Resistance Line-Line <sup>1</sup>	Ohms	15	6.8	3.2	1.6
Inductance Line-Line	Millihenrys	32	14	7.2	3.5
Insulation Class		F	F	F	F
Max. Ambient Temperature	°C	40	40	40	40
Thermal Time Constant	Minutes	50	50	50	50
Thermal Resistance	°C/Watt	0.99	0.99	0.99	0.99
Static Friction Torque	Nm	0.07	0.07	0.07	0.07
Motor Weight	kg	5	5	5	5

Tolerance All data is subject to a tolerance of ± 10% (except motor 'Voltage Gradient' and K<sub>T</sub> which are to +15%/-5%).

- At 25°C.
- Note that K<sub>T</sub> 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.

NHJ96C6 on 300V



NHJ96C6 on 560V

