

## NHRS115B6 Brushless DC/AC Servomotors

### Technical Data

Parameter	Unit	-130	-88	-64
<b>General</b>				
Voltage Gradient No Load Line-Line	Volts/1000RPM	130	88	64
Max. Motor EMF Line-Line	Volts	700	530	380
Max. Speed	RPM	5400	6000	6000
<b>Continuous Stall Torque TENV (110K)<sup>3</sup></b>	<b>Nm</b>	<b>5.2</b>	<b>5.2</b>	<b>5.2</b>
Continuous Stall Torque when fitted to Heatsink (Size 300 x 300 x 12 mm)	Nm	5.8	5.8	5.8
Peak Stall Torque	Nm	16	16	16
<b>Continuous Stall Current rms<sup>3</sup></b>	<b>Amps</b>	<b>3.4</b>	<b>5.1</b>	<b>6.9</b>
Rotor Polar Moment of Inertia	kgcm <sup>2</sup>	3.9	3.9	3.9
<b>Maximum Current (Peak)</b>	<b>Amp</b>	<b>18</b>	<b>26</b>	<b>36</b>
Cogging Torque	Nm	0.137	0.137	0.137
Torque Constant K <sub>T</sub> rms <sup>1,2</sup>	Nm/Amp	1.53	1.02	0.75

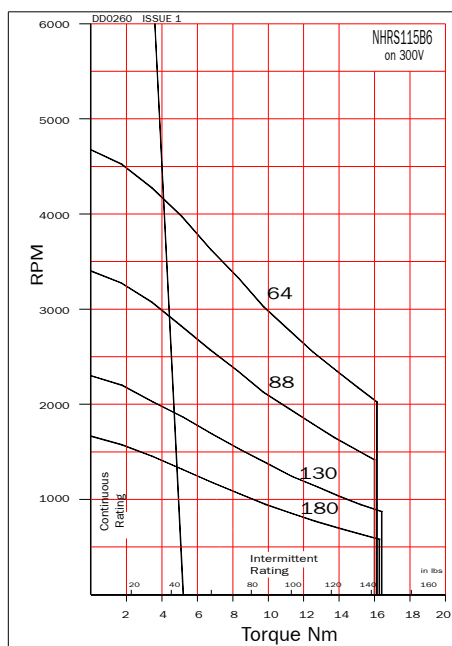
### Winding

Resistance Line-Line <sup>1</sup>	Ohms	6.4	2.9	1.5
Inductance Line-Line	Millihenrys	39	18	9.4
Insulation Class		F	F	F
Max. Ambient Temperature	°C	40	40	40
Thermal Time Constant	Minutes	40	40	40
Thermal Resistance	°C/Watt	0.72	0.72	0.72
Static Friction Torque	Nm	0.066	0.066	0.066
Motor Weight	kg	6.9	6.9	6.9

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.

NHRS115B6 on 300V



NHRS115B6 on 560V

