

# NHRS92G4

## Brushless DC/AC Servomotors

### Technical Data

Parameter	Unit	-64	-44	-32
<b>General</b>				
Voltage Gradient No Load Line-Line	Volts/1000RPM	64	44	32
Max. Motor EMF Line-Line	Volts	380	260	190
Max. Speed	RPM	6000	6000	6000
<b>Continuous Stall Torque TENV (110K) <sup>3</sup></b>	<b>Nm</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
Peak Stall Torque	Nm	9.2	9.2	9.2
<b>Continuous Stall Current rms <sup>3</sup></b>	<b>Amps</b>	<b>4</b>	<b>5.8</b>	<b>8</b>
Rotor Polar Moment of Inertia	kgcm <sup>2</sup>	1.6	1.6	1.6
<b>Maximum Current (Peak)</b>	<b>Amp</b>	<b>22</b>	<b>32</b>	<b>43</b>
Cogging Torque	Nm	0.076	0.076	0.076
Torque Constant K <sub>T</sub> rms <sup>1,2</sup>	Nm/Amp	0.75	0.51	0.375

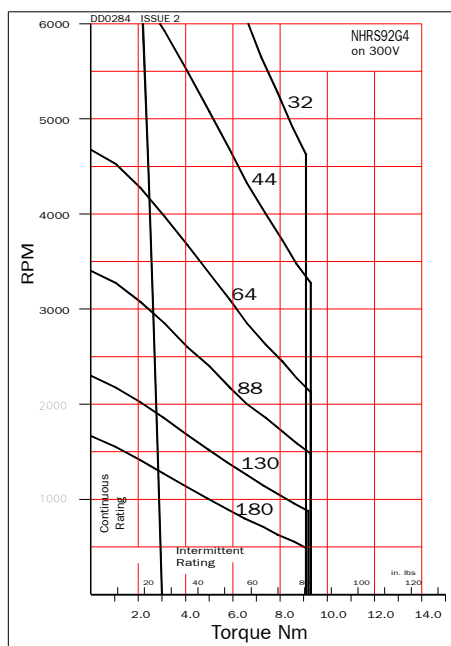
### Winding

Resistance Line-Line <sup>1</sup>	Ohms	3.4	1.5	0.86
Inductance Line-Line	Millihenrys	19	8.9	4.7
Insulation Class		F	F	F
Max. Ambient Temperature	°C	40	40	40
Thermal Time Constant	Minutes	32	32	32
Thermal Resistance	°C/Watt	0.92	0.92	0.92
Static Friction Torque	Nm	0.04	0.04	0.04
Motor Weight	kg	5.7	5.7	5.7

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.

NHRS92G4 on 300V



NHRS92G4 on 560V

