

# NHRS142G6

## Brushless DC/AC Servomotors

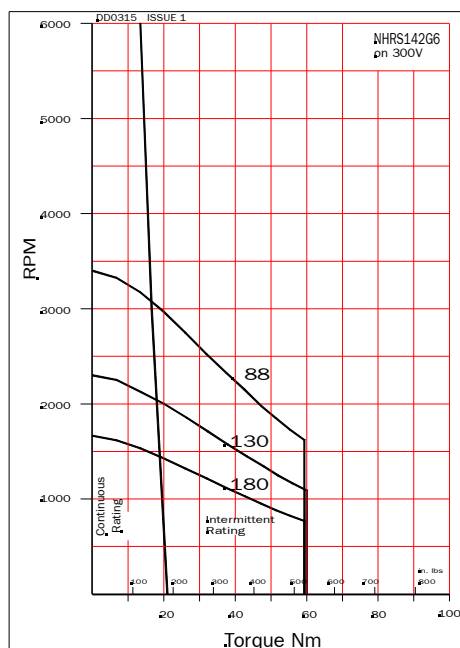
### Technical Data

Parameter	Unit	-260	-180	-130
<b>General</b>				
Voltage Gradient No Load Line-Line	Volts/1000RPM	260	180	130
Max. Motor EMF Line-Line	Volts	700	700	700
Max. Speed	RPM	2700	3900	5400
<b>Continuous Stall Torque TENV (110K) <sup>3</sup></b>	<b>Nm</b>	<b>21</b>	<b>21</b>	<b>21</b>
Continuous Stall Torque when fitted to Heatsink (Size 300 x 300 x 12 mm)	Nm	22	22	22
Peak Stall Torque	Nm	60	60	60
<b>Continuous Stall Current rms <sup>3</sup></b>	<b>Amps</b>	<b>6.9</b>	<b>10</b>	<b>13.8</b>
Rotor Polar Moment of Inertia	kgcm <sup>2</sup>	22	22	22
<b>Maximum Current (Peak)</b>	<b>Amp</b>	<b>35</b>	<b>50</b>	<b>70</b>
Cogging Torque	Nm	0.43	0.43	0.43
Torque Constant K <sub>T</sub> rms <sup>1,2</sup>	Nm/Amp	3.03	2.1	1.53
<b>Winding</b>				
Resistance Line-Line <sup>1</sup>	Ohms	2.4	1.24	0.6
Inductance Line-Line	Millihenrys	34	16	8.4
Insulation Class		F	F	F
Max. Ambient Temperature	°C	40	40	40
Thermal Time Constant	Minutes	60	60	60
Thermal Resistance	°C/Watt	0.43	0.43	0.43
Static Friction Torque	Nm	0.12	0.12	0.12
Motor Weight	kg	20	20	20

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 ΔT 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.

NHRS142G6 on 300V



NHRS142G6 on 560V

