

# NHRS142J6

## 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>25</b>	<b>25</b>	<b>25</b>
Continuous Stall Torque when fitted to Heatsink (Size 300 x 300 x 12 mm)	Nm	26	26	26
Peak Stall Torque	Nm	76	76	76
<b>Continuous Stall Current rms <sup>3</sup></b>	<b>Amps</b>	<b>8.2</b>	<b>11.9</b>	<b>16</b>
Rotor Polar Moment of Inertia	kgcm <sup>2</sup>	27	27	27
<b>Maximum Current (Peak)</b>	<b>Amp</b>	<b>44</b>	<b>64</b>	<b>89</b>
Cogging Torque	Nm	0.52	0.52	0.52
Torque Constant K <sub>T</sub> rms <sup>1,2</sup>	Nm/Amp	3.03	2.1	1.53

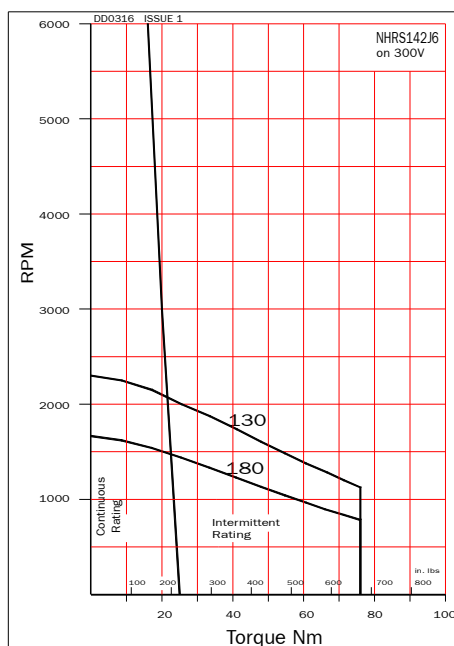
### Winding

Resistance Line-Line <sup>1</sup>	Ohms	1.8	0.88	0.43
Inductance Line-Line	Millihenrys	25	12.3	6.3
Insulation Class		F	F	F
Max. Ambient Temperature	°C	40	40	40
Thermal Time Constant	Minutes	65	65	65
Thermal Resistance	°C/Watt	0.42	0.42	0.42
Static Friction Torque	Nm	0.12	0.12	0.12
Motor Weight	kg	24	24	24

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.

NHRS142J6 on 300V



NHRS142J6 on 560V

