

# NHR190J8

## Brushless DC/AC Servomotors

### Technical Data

Parameter	Unit	-360	-260	-180
<b>General</b>				
Voltage Gradient No Load Line-Line	Volts/1000RPM	360	260	180
Max. Motor EMF Line-Line	Volts	700	700	700
Max. Speed	RPM	1900	2700	3900
<b>Continuous Stall Torque TENV (110K)</b> <sup>3</sup>	<b>Nm</b>	<b>67</b>	<b>67</b>	<b>67</b>
Continuous Stall Torque when fitted to Heatsink (Size 500 x 500 x 20 mm)	Nm	70	70	70
Peak Stall Torque	Nm	210	210	210
<b>Continuous Stall Current rms</b> <sup>3</sup>	<b>Amps</b>	<b>16</b>	<b>22</b>	<b>32</b>
Rotor Polar Moment of Inertia	kgcm <sup>2</sup>	130	130	130
<b>Maximum Current (Peak)</b>	<b>Amp</b>	<b>91</b>	<b>125</b>	<b>180</b>
Cogging Torque	Nm	1.2	1.2	1.2
Torque Constant K <sub>T</sub> rms <sup>1,2</sup>	Nm/Amp	4.2	3.03	2.1

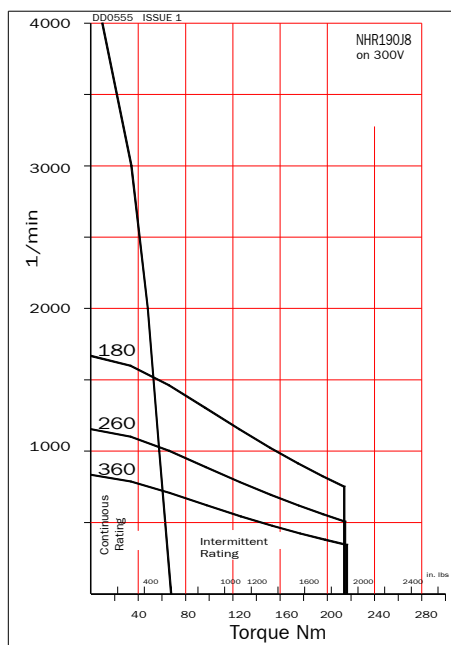
### Winding

Resistance Line-Line <sup>1</sup>	Ohms	0.75	0.37	0.18
Inductance Line-Line	Millihenrys	16	8	3.8
Insulation Class		F	F	F
Max. Ambient Temperature	°C	40	40	40
Thermal Time Constant	Minutes	100	100	100
Thermal Resistance	°C/Watt	0.27	0.27	0.27
Static Friction Torque	Nm	0.14	0.14	0.14
Motor Weight	kg	50	50	50

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.

NHR190J8 on 300V



NHR190J8 on 560V

