NHR115C6

Brushless DC/AC Servomotors

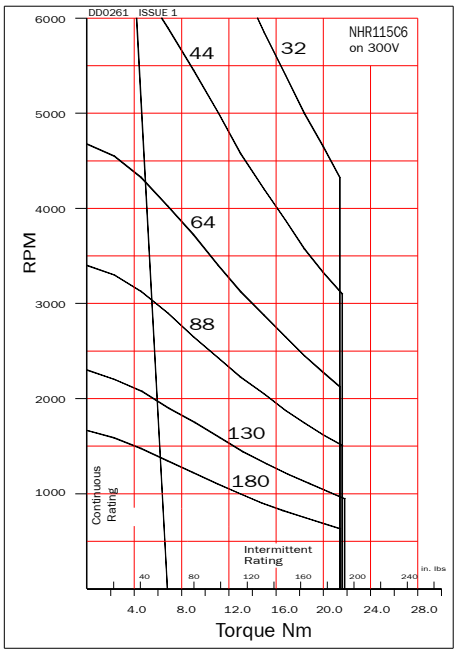
Technical Data

Parameter	Unit	-130	-88	-64	-44
General					
Voltage Gradient No Load Line-Line	Volts/1000RPM	130	88	64	44
Max. Motor EMF Line-Line	Volts	700	530	380	260
Max. Speed	RPM	5400	6000	6000	6000
Continuous Stall Torque TENV (110K) [3]	**Nm**	**6.8**	**6.8**	**6.8**	**6.8**
Continuous Stall Torque when fitted to Heatsink (Size 300 x 300 x 12 mm)	Nm	7.5	7.5	7.5	7.5
Peak Stall Torque	Nm	22	22	22	22
Continuous Stall Current rms [3]	**Amps**	**4.5**	**6.6**	**9.1**	**13.2**
Rotor Polar Moment of Inertia	kgcm²	5.1	5.1	5.1	5.1
Maximum Current (Peak)	**Amp**	**24**	**35**	**48**	**70**
Cogging Torque	Nm	0.17	0.17	0.17	0.17
Torque Constant K_T rms [1,2]	Nm/Amp	1.53	1.02	0.75	0.51
Winding					
Resistance Line-Line [1]	Ohms	3.7	1.7	0.9	0.46
Inductance Line-Line	Millihenrys	28	12.6	6.7	3.2
Insulation Class		F	F	F	F
Max. Ambient Temperature	˚C	40	40	40	40
Thermal Time Constant	Minutes	45	45	45	45
Thermal Resistance	˚C/Watt	0.7	0.7	0.7	0.7
Static Friction Torque	Nm	0.066	0.066	0.066	0.066
Motor Weight	kg	9	9	9	9

Tolerance All data is subject to a tolerance of ± 10% (except motor 'Voltage Gradient' and Kt which are to +15%/-5%).

1. At 25˚C.
2. Note that Kt is shown as a combined value for all **three phases**.
3. The temperature rise ∆ 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.

NHR115C6 on 300V



NHR115C6 on 560V