

NHR115A6

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	3.7	3.7	3.7	3.7
Continuous Stall Torque when fitted to Heatsink (Size 300 x 300 x 12 mm)	Nm	4.2	4.2	4.2	4.2
Peak Stall Torque	Nm	11	11	11	11
Continuous Stall Current rms ³	Amps	2.4	3.6	4.9	7.2
Rotor Polar Moment of Inertia	kgcm ²	2.7	2.7	2.7	2.7
Maximum Current (Peak)	Amp	12.1	18	24	36
Cogging Torque	Nm	0.101	0.101	0.101	0.101
Torque Constant K _T rms ^{1,2}	Nm/Amp	1.53	1.02	0.75	0.51

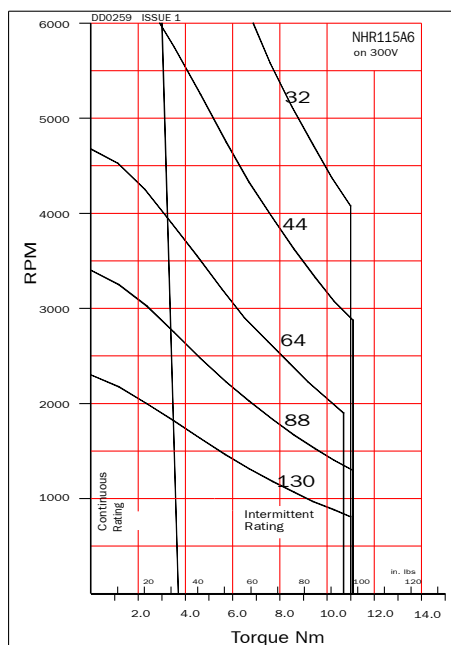
Winding

Resistance Line-Line ¹	Ohms	11.4	5.5	2.7	1.29
Inductance Line-Line	Millihenrys	60	28	15	6.9
Insulation Class		F	F	F	F
Max. Ambient Temperature	°C	40	40	40	40
Thermal Time Constant	Minutes	35	35	35	35
Thermal Resistance	°C/Watt	0.78	0.78	0.78	0.78
Static Friction Torque	Nm	0.066	0.066	0.066	0.066
Motor Weight	kg	6.6	6.6	6.6	6.6

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

- At 25°C.
- Note that K_T 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.

NHR115A6 on 300V



NHR115A6 on 560V

