

NHR92J4

Brushless DC/AC Servomotors

Technical Data

Parameter	Unit	-130	-88	-64	-44	-32
General						
Voltage Gradient No Load Line-Line	Volts/1000RPM	130	88	64	44	32
Max. Motor EMF Line-Line	Volts	700	530	380	260	190
Max. Speed	RPM	6000	6000	6000	6000	6000
Continuous Stall Torque TENV (110K) ³	Nm	3.8	3.8	3.8	3.8	3.8
Continuous Stall Torque when fitted to Heatsink (Size 300 x 300 x 12 mm)	Nm	4.1	4.1	4.1	4.1	4.1
Peak Stall Torque	Nm	2.9	3.7	5.1	7.4	11.5
Continuous Stall Current rms ³	Amps	2.9	3.7	5.1	7.4	11.5
Rotor Polar Moment of Inertia	kgcm ²	2	2	2	2	2
Maximum Current (Peak)	Amp	13.5	20	27	39	54
Cogging Torque	Nm	0.09	0.09	0.09	0.09	0.09
Torque Constant K _T rms ^{1,2}	Nm/Amp	1.53	1.02	0.75	0.51	0.375

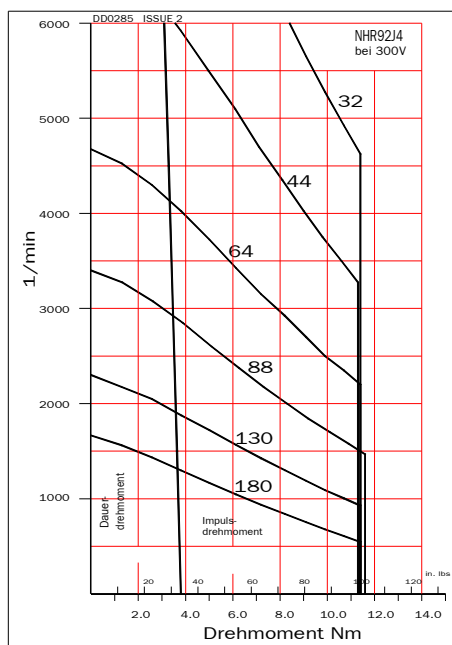
Winding

Resistance Line-Line ¹	Ohms	10	5	2.5	1.24	0.63
Inductance Line-Line	Millihenrys	60	29	15	7.2	3.7
Insulation Class		F	F	F	F	F
Max. Ambient Temperature	°C	40	40	40	40	40
Thermal Time Constant	Minutes	33	33	33	33	33
Thermal Resistance	°C/Watt	0.77	0.77	0.77	0.77	0.77
Static Friction Torque	Nm	0.04	0.04	0.04	0.04	0.04
Motor Weight	kg	6.6	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.

NHR92J4 on 300V



NHR92J4 on 560V

