

NHR190E8

Brushless DC/AC Servomotors

Technical Data

Parameter	Unit	-260	-180	-130
General				
Voltage Gradient No Load Line-Line	Volts/1000RPM	260	180	130
Max. Motor EMF Line-Line	Volts	700	700	520
Max. Speed	RPM	2700	3900	4000
Continuous Stall Torque TENV (110K) ³	Nm	45	45	45
Continuous Stall Torque when fitted to Heatsink (Size 500 x 500 x 20 mm)	Nm	49	49	49
Peak Stall Torque	Nm	129	129	129
Continuous Stall Current rms ³	Amps	15	21	30
Rotor Polar Moment of Inertia	kgcm ²	78	78	78
Maximum Current (Peak)	Amp	75	108	150
Cogging Torque	Nm	0.76	0.76	0.76
Torque Constant K _T rms ^{1,2}	Nm/Amp	3.03	2.1	1.53

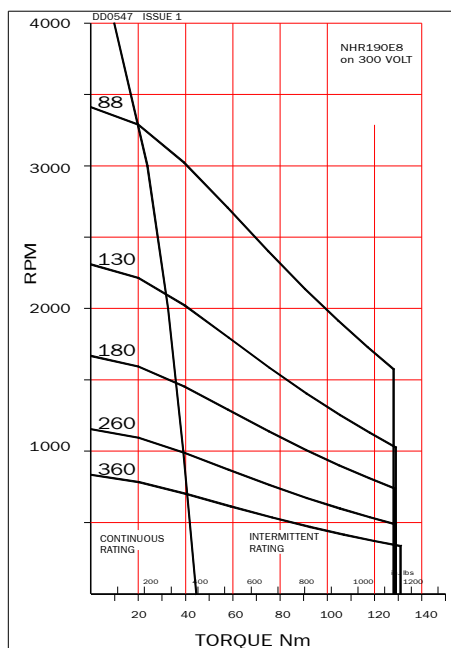
Winding

Resistance Line-Line ¹	Ohms	0.83	0.38	0.19
Inductance Line-Line	Millihenrys	13.7	6.4	3.4
Insulation Class		F	F	F
Max. Ambient Temperature	°C	40	40	40
Thermal Time Constant	Minutes	60	60	60
Thermal Resistance	°C/Watt	0.28	0.28	0.28
Static Friction Torque	Nm	0.14	0.14	0.14
Motor Weight	kg	36	36	36

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.

NHR190E8 on 300V



NHR190E8 on 560V

