

NHR190C8

Brushless DC/AC Servomotors

Technical Data

Parameter	Unit	-260	-180	-130	-88
General					
Voltage Gradient No Load Line-Line	Volts/1000RPM	260	180	130	88
Max. Motor EMF Line-Line	Volts	700	700	520	350
Max. Speed	RPM	2700	3900	4000	4000
Continuous Stall Torque TENV (110K) ³	Nm	32	32	32	32
Continuous Stall Torque when fitted to Heatsink (Size 500 x 500 x 20 mm)	Nm	35	35	35	35
Peak Stall Torque	Nm	87	87	87	87
Continuous Stall Current rms ³	Amps	10.5	15	21	31
Rotor Polar Moment of Inertia	kgcm ²	55	55	55	55
Maximum Current (Peak)	Amp	51	73	100	150
Cogging Torque	Nm	0.56	0.56	0.56	0.56
Torque Constant K _T rms ^{1,2}	Nm/Amp	3.03	2.1	1.53	1.02

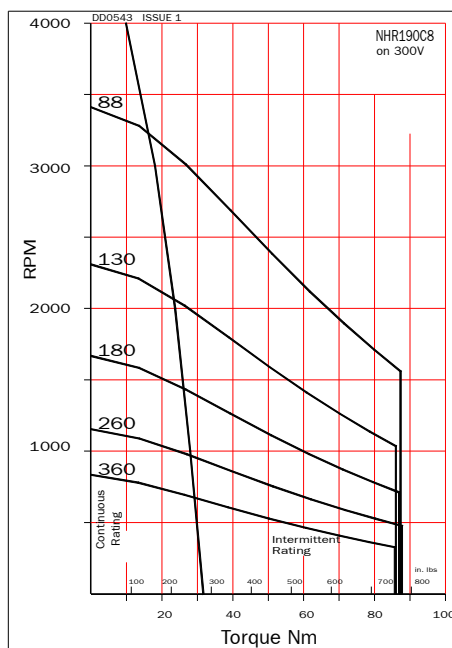
Winding

Resistance Line-Line ¹	Ohms	1.5	0.77	0.39	0.18
Inductance Line-Line	Millihenrys	20	9.7	4.9	2.2
Insulation Class		F	F	F	F
Max. Ambient Temperature	°C	40	40	40	40
Thermal Time Constant	Minutes	40	40	40	40
Thermal Resistance	°C/Watt	0.29	0.29	0.29	0.29
Static Friction Torque	Nm	0.14	0.14	0.14	0.14
Motor Weight	kg	28.5	28.5	28.5	28.5

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.

NHR190C8 on 300V



NHR190C8 on 560V

