CDA InterCorp

270 VDC Brushless Motor Specification

Built upon more than 47 years of experience and flight heritage, CDA Intercorp's line of **270 VDC** Brushless Motors offers the most power dense solution available today. These motors offer superior performance and reliability for flight control and safety critical applications. CDA's selection of premium materials contribute to the wide temperature range of -80C to +225C, and resilience to severe environmental conditions, when tested per MIL-STD-810 and RTCA-DO-160.

Motor Size (4pole 3phase)	Data at Max Continuous Torque Output*				Data at Stall (Room Temp)			No Load Speed est.	Torque Constant**	
	Motor Torque		Motor Speed	Power Output	Motor Torque		Power Loss		(270VDC Supply)	
	Oz-in	mNm	RPM	Watts	Oz-in	mNm	Watts	RPM	Oz-in/Amp	mNm/Amp
0.750"	5.6	40	15000	62.2	5.7	40	41.5	27500	10.6	75
1.000"	16.6	117	15000	185	16.9	120	52.7	23500	15.3	108
1.250"	32.1	227	15000	357	32.7	231	71.3	21500	15.7	111
1.500"	57.6	407	15000	639	58.8	415	88.1	19000	17.6	124
2.000"	114	805	12500	1060	116.3	821	101	15000	22.7	160
2.500"	264	1864	10000	1950	269.3	1902	121	12000	29.4	208
3.000"	414	2924	10000	3060	422.3	2982	136	11000	32.9	232

*Assuming no gearhead attached, room temperature air environment running winding to 200°C. Higher efficiencies possible by decreasing torque. Significantly higher torques are possible in each size for finite durations. **Winding assumes full torque available at 200°C from 270V at listed speed. Other windings avail.

Based on your specific needs, CDA will create a unique motor winding to further optimize the efficiency and minimize the overall envelope. Any and all of these motors can be mated to any of CDA's output geartrains and often times CDA's final design is smaller than what is listed above.