

TECHNICAL DATASHEET

Dual-Servo Chain Motor Specifications

Model Parameters		EMC60S-0040-15ABK	EMC80S-0060-15ABK
Matched Driver		K2DC3640-CAFX_WDC4	K2DC3640-CAFX_WDC4
Continuous Characteristics	Rated Power P_n (W)	400	600
	Rated Torque T_n (Nm)	1.27	2.5
	Rated Speed n_N (rpm)	3000	1500
	Rated Current I_n (A)	12	12
Max. Instantaneous Torque T_m (Nm)		3.81	7.5
Max. Instantaneous Current I_m (A)		36	36
Continuous Stall Torque T_s (Nm)		0.7	2.2
Continuous Stall Current I_s (A)		1.65	3.5
Line-to-Line Resistance R_L (Ω)		0.3	0.33
Line-to-Line Inductance L_L (mH)		0.26	0.82
Electrical Time Constant τ_e (ms)		1.6	1.9
Mechanical Time Constant τ_m (ms)		1.47	1.05
Back EMF Constant K_e (V/krpm)		6.9	14.1
Torque Constant K_t (Nm/A)		0.11	0.24
Rotor Inertia J_m (kg · cm ²)		0.56	1.56
Brake Holding Torque T (Nm)		1.5	3.2
Number of Pole Pairs		5	5
Max. Allowable du/dt (kV/ μ s)		8	8
Insulation Class		F	F
Radial Shaft Force F (N)		180	335
Axial Shaft Force F (N)		90	167
Weight G (kg)		1.28	2.2
Cooling Method		Totally Enclosed, Natural Cooling	
Protection Class		IP65, Shaft End IP54 ¹	

²Note: IP54 with oil seal on shaft end; IP50 without oil seal.

Operating Environment	
Temperature	−20°C to 75°C (No freezing)
Humidity	Under 90% RH (Non-condensing)
Environment	Keep away from corrosive, flammable gases, oil droplets, and dust.
Altitude	Max. altitude 4000m. Above 1000m, power derates by 1.5% for every additional 100m.