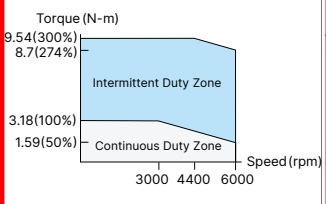
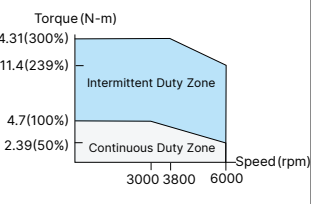
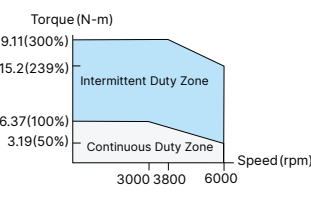



ECM-B3M Series Servo Motor Specifications 電氣規

Electrical Specifications - 200 V

	ECM-B3M-C 1010	ECM-B3M-C 1015	ECM-B3M-C 1020
Rated Power (kW)	1	1.5	2
Rated Torque (N-m) ²	3.18	4.77	6.37
Maximum Torque (N-m)	9.54	14.3	19.1
Rated Speed (rpm)		3,000	
Maximum Speed (rpm)		6,000	
Rated Current (Arms)	6.05	7.48	9.96
Max. Instantaneous Current (Arms)	18.4	22.8	30.7
Rated Power Rate (kW/s)	36.4	61.7	86.7
Rated Power Rate (kW/s) with brake	33	57.3	82
Rotor Inertia (×10 ⁻⁴ kg.m ²)	2.78	3.69	4.68
Rotor Inertia (×10 ⁻⁴ kg.m ²) with brake	3.06	3.97	4.95
Mechanical Time Constant (ms)	0.741	0.552	0.523
Mechanical Time Constant (ms) with brake	0.815	0.594	0.554
Torque Constant -KT (N-m/A)	0.526	0.638	0.64
Voltage Constant -KE (mV/(rpm))	19.8	23.8	23.7
Armature Resistance (Ohm)	0.265	0.217	0.162
Armature Inductance (mH)	1.86	1.71	1.23
Electrical Time Constant (ms)	7.02	7.88	7.59
Weight – without brake (kg)	3.56	4.37	5.09
Weight – with brake (kg)	4.88	5.68	6.51
Max. Radial Loading (N) ⁵	490	490	490
Max. Axial Loading (N) ⁵	196	196	196
Brake Working Voltage	24 V _{DC} ± 10%		
Brake Power Consumption (at 20°C)[W]	17.6	17.6	17.6
Brake Holding Torque [Nt-m (min)] ^{*3}	9.5	9.5	9.5
Brake Release Time [ms (Max)]	50	50	50
Brake Pull-In Time [ms (Max)]	110	110	110
Derating (%) (with oil seal)	5	5	5
Torque Feature (T-N Curve)			
Insulation Class	Class F (UL), Class F (CE)		
Insulation Resistance	> 100 MΩ, DC 500 V		
Insulation Strength	1.8k Vac, 1 sec		
Vibration Level (μm)	V15		
Operating Temperature	-20°C - 60°C*4		
Storage Temperature	-20°C - 80°C		
Storage & Operation Humidity	20 - 90%RH (non-condensing)		
Vibration Capacity	2.5 G		
IP Rating	IP67 (when using waterproof connections and when an oil seal is fitted to the rotating shaft (for an oil seal model))		
Certifications			

Notes:

- In the servo motor model name, 2 represents the encoder type.
- The rated torque is the continuous permissible torque between 0 to 40°C operating temperature which is suitable for the servo motor mounted with the following heat sink dimensions.
F130: 400 mm x 400 mm x 20 mm
Material: aluminum
- The built-in servo motor brake is only for keeping the object in a stopped state.
- If the operating temperature is over 40°C, refer to the power derating curves of B3 motors on page 37.

- Please follow the max. tolerant loading of the motor shaft end listed below during operation

