AC Synchronous Servo Motor Specification

ShenZhen Tiger Motion Control Technology Co.,Ltd

Model Number SM060R10B30M0AD

Basic Index

Working Time	Continue
Thermal Endurance Class	Class F
Dielectric Voltage Withstand	AC1500V 1min
Insulation Resistance	DC500V 100M Ω
Ambient Temperature	0 ~ +40℃
Ambient Humidity	20 ~ 80% without condensation
Vibration Class	V15
Connection Way	Direct Connection
Motor Mounting	Flange
Excitation Way	Permanent Magnet
Degree of Protection	Whole sealing,Self cooling,IP65 (except the pass-through parts of the axle)
Direction of Rotation	anticlockwise rotation from the side of axle stretch end

Basic Parameters

Rated Power	W	100
Pole Number		8
Rated Voltage	VAC	36
Rated Speed	rpm	3000
Max Speed	rpm	5000
Rated Torque	N.m	0.318
Peak Torque	N.m	0.954
Rated Current	A	4.6
Peak Current	A	13.8
Line Counter EMF Coefficient	mV/rpm	5.35
Torque Coefficient	N.m/A	0.0712
Moment of inertia of the rotor	$kg.m^2.10^{-4}$	0.0588
Line Resistance	Ω	0.75 @25℃
Line Inductance	mH	2 @1kHz , 1V
Rated Voltage of the Brake	V	N/A
Rated Power of the Brake	W	N/A
Holding Torque of the Brake	N.m	N/A
Moment of inertia of the Brake	$kg.m^2.10^{-4}$	N/A
Weight	Kg	0.8
Sensor	Incremental, ABZ+uvw,2500PPR	

Test Condition

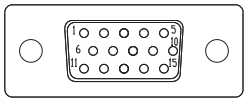
1. The motor is installed on a 200x200x20mm aluminum panel horizontally,with a 25℃ and free-flowing air environment.
2. Adopt interference fitting,unlimited inertia loading are imposed on the extension part of the motor axle.
3. Typical error of the standard value is less the 10%.

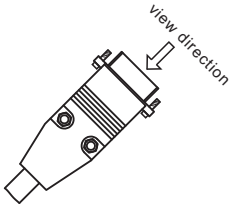
Connect

1.Power Line

Color	Yellow/Green	Red	Blue	Black
Signal	FG	U	V	W

2.Encoder Line





Socket type	DB15															
Pin No	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Housing
Siganl	0V	5V	W+	V+	U+	Z+	B+	A+	NC	W-	V-	U-	Z-	B-	A-	FG

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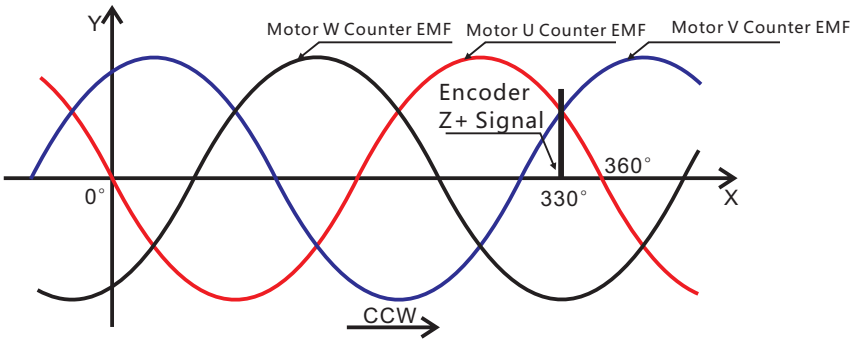
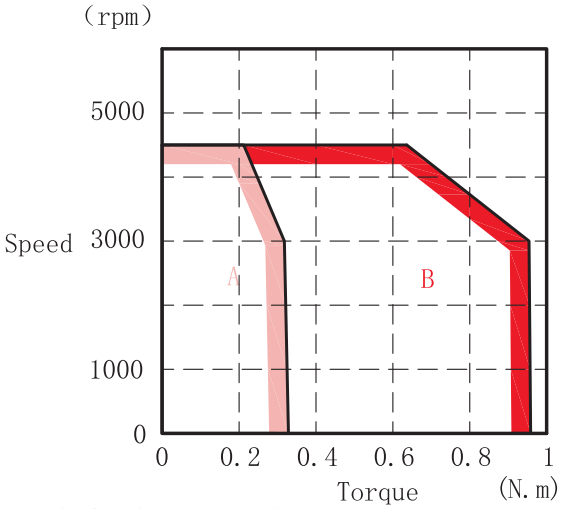
3.Relationship between Encoder Zero and Motor Phase Position

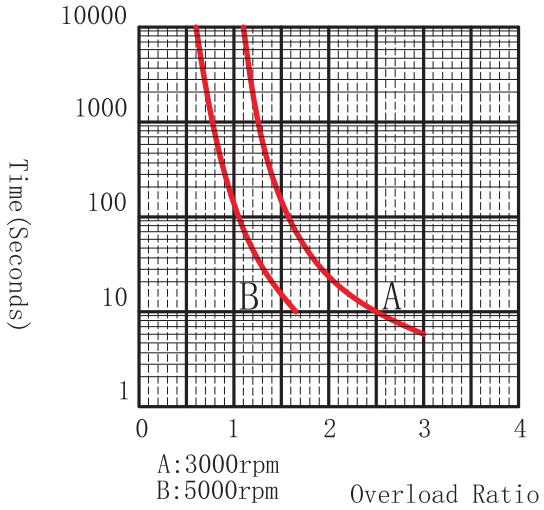


Torque - Speed Characteristics

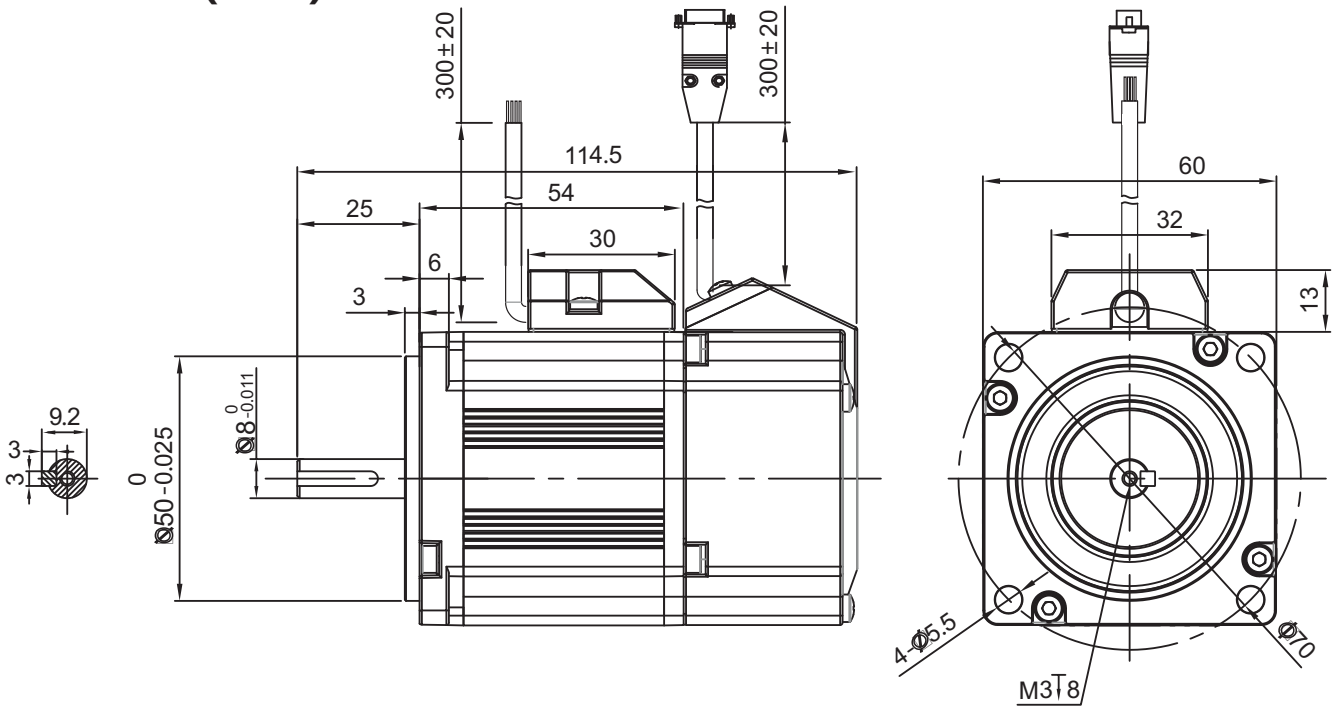


A: Continuous Duty Zone
B: Intermittent Duty Zone

Overload Characteristics Curve



Dimensions(mm)



Note: Due to product improvement or specification change,we will update our specifications from time to time without prior notice, please pay attention to relevant information.Thank you!