

Servo Motor Specifications

CUSTOMER : E-Motion America

Product : Servo Motor

Model : KANS-10GG2TC(IP65,IP67)
KANS-45GG2TC(IP65,IP67)

2017 / 05 / 15 _Rev00

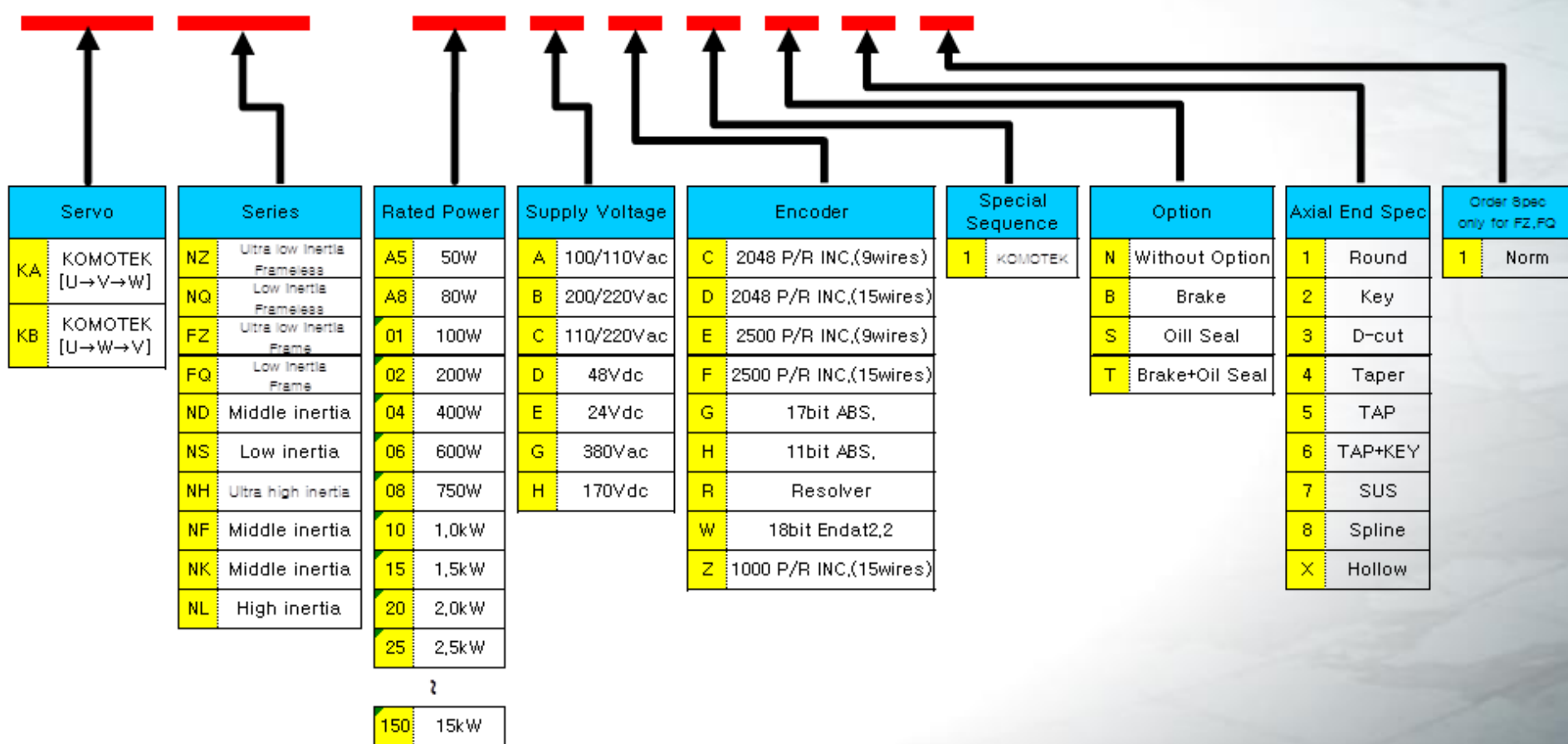
Designed	Checked	Checked	Approved
Approved			

1. Revision

DATE	Page	REVISION	SINGED
2017.05.15	KMDS 10611	New Registration	

2. Model configurations

K A N Z - 01 B F 1 N 2 1



3. Detail Specifications

DATE	MODEL	Specification	Drawing No	Remark
2017.05.12	KANS-10GG2TC	KMDS 10611	10100731	Oil Seal, Brake , IP67
2017.05.12	KANS-10GG2TC-IP67	KMDS 10611	10100732	Oil Seal, Brake , IP65
2017.05.12	KANS-45GG2TC	KMDS 10611	10100733	Oil Seal, Brake , IP67
2017.05.12	KANS-45GG2TC-IP67	KMDS 10611	10100734	Oil Seal, Brake , IP65

4. Encoder specifications

Item		Specifications		Remark
Manufacturer		NEMICON.(JAPAN)		
Encoder Type		37HA-M		
Resolution	Abs	17bit/Single-turn and 16bit/multi-turns		
Supply Voltage		Main Supply	DC +5V ±10%	
		External Battery	DC +3.6V	
Consumption Current		Main Supply	≤120mA	
		External Battery	Power cut timer mode ≤ 180μA Power cut mode ≤ 80μA	
Output Form		BISS-C		
Data Code		Pure Binary Code		
EEPROM Accessible Address		8kbit		
Moment of Inertia		$1.0 \times 10^{-6} \text{ Kg} \cdot \text{m}^2$		
Maximum Rotating Speed		6000rpm (Max)		
Operating Temp. Range		-30℃ ~ +105℃		
Storage Temp. Range		-30℃ ~ +105℃		
Protective Construction		Not Enclosed		
Vibration		98 m/sec ² 2000Hz		
Shock		1960 m/sec ² 6msec		
Mass		70g		

5. Brake specifications

Item	Unit	Applicable Motor Flange Size			
		100/120	130	180	220
Static friction torque	N • m	12	16.5	25	45
Rotor inertia	$10^{-4}\text{kg} \cdot \text{m}^2$	0.45	1.2	4.7	11
Armature suction time	ms	100	110	160	220
Armature release time	ms	20	50	75	100
Release voltage	DC, V	2 (at 20℃)	2 (at 20℃)	2 (at 20℃)	2 (at 20℃)
excitation voltage	DC, V	24 ± 2.4	24 ± 2.4	24 ± 2.4	24 ± 2.4
excitation current	DC, A	0.83	0.876	1.287	0.797

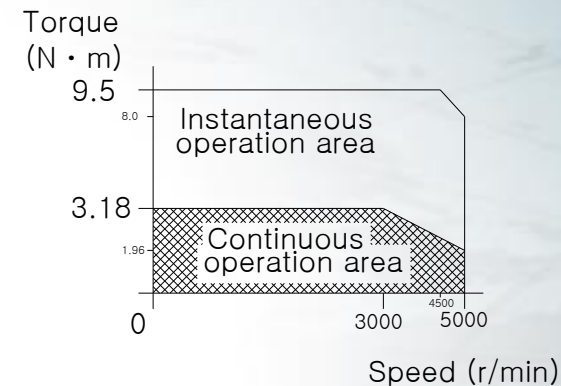
Written term "Static Friction Torque" only Guaranteed till -10℃ environment.
 With -35℃ environment, It only demonstrate below 70% of torque it originally had.

6. Servo Motor Specifications

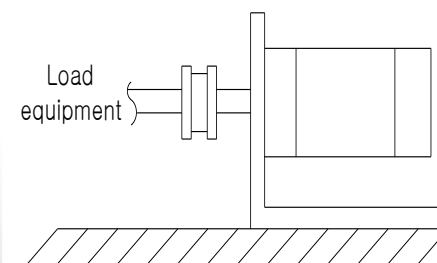
Item	Unit	KANS-10GG2TC	KANS-10GG2TC-IP67	Remarks
Flange size	mm	100		
Rated output	kW	1.0		
Continuous Running Duty	%	100		
No. of poles		8		
Rated speed	r/min	3000		
Maximum speed	r/min	5000		
Rated torque	N·m	3.18		
	kgf·cm	32.4		
Maximum torque	N·m	9.5		
	kgf·cm	96.9		
Rated current	A _(rms)	4.3		±10%
Rotor inertia	×10 ⁻⁴ kg·m ²	2.5		
	gf·cm·sec ²	2.55		
Elec. time constant	ms	9.99		
Mech. time constant	ms	1.09		
Rated power rate	kW/s	41.2		
Momentary maximum current	A _(o-p)	18.4		
Back EMF constant per phase	×10 ⁻³ V _(rms) /min ⁻¹	27.6		±10%
	V _(rms) /Krpm			
Torque constant	N·m/A _(rms)	0.74		±10%
	kgf·cm/A _(rms)	7.5		±10%
Phase resistance	Ω	0.74		±10%
Phase inductance	mH	7.4		±20%
Insulation class		F		
Vibration class		V-15		
Oil seal		O		
Brake		O		
Structure		Totally-enclosed self-cooled		
IP class		65	67	
Operation temperature	℃	-35 ~ +45		
Supply voltage	V _{ac}	380		

1. These values are representative of the ideal sinusoidal operating conditions of the motors.
(at ambient temperature 20℃)
2. Rated torque is the allowable continuous torque value when measured in the conditions shown below.

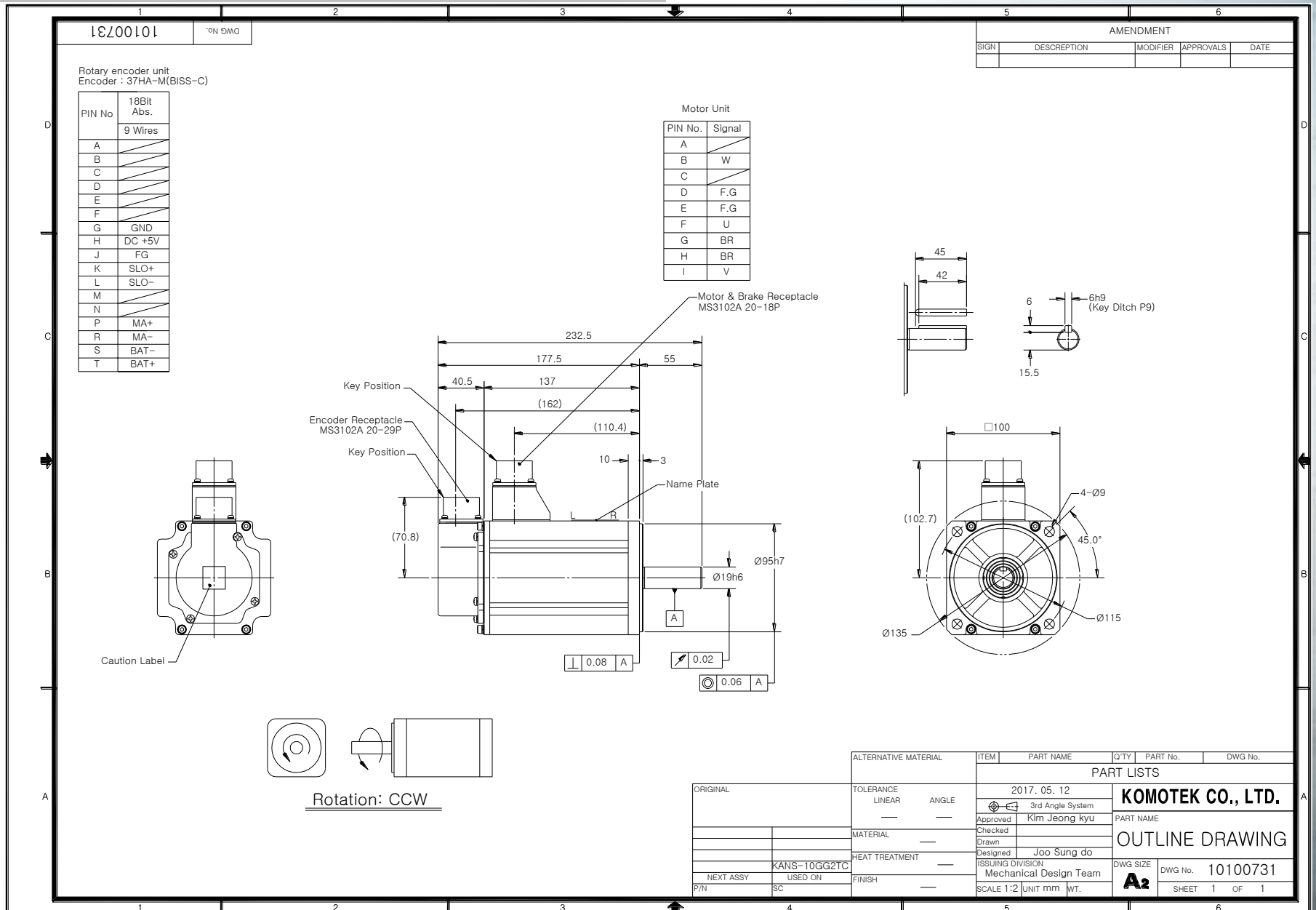
Characteristic curve



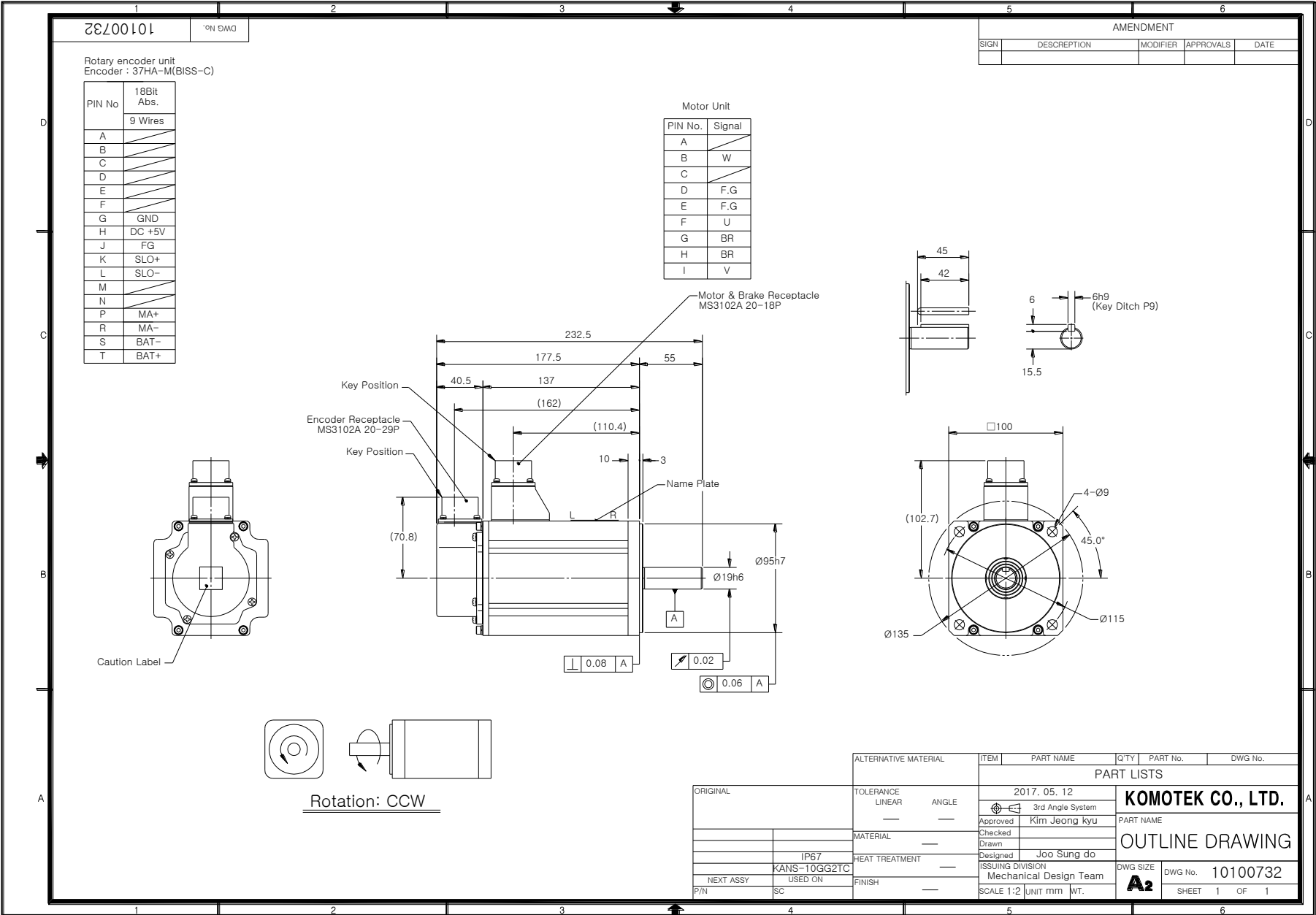
Test Method



7. KANS-10GG2B2 (Oil Seal, Brake Model Outline Drawing)



8. KANS-10GG2B2-IP67 (Oil Seal, Brake Model Outline Drawing)

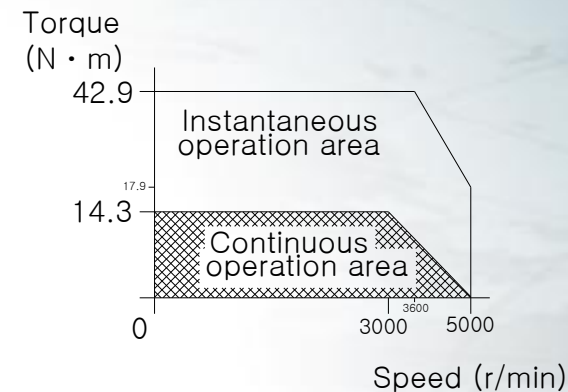


9. Servo Motor Specifications

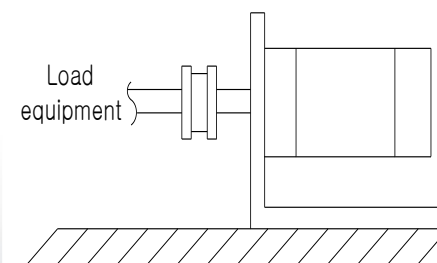
Item	Unit	KANS-45GG2TC	KANS-45GG2TC-IP67	Remarks
Flange size	mm	130		
Rated output	kW	4.5		
Continuous Running Duty	%	100		
No. of poles		8		
Rated speed	r/min	3000		
Maximum speed	r/min	4500		
Rated torque	N·m	14.3		
	kgf·cm	146		
Maximum torque	N·m	42.9		
	kgf·cm	437		
Rated current	A _(rms)	15.2		±10%
Rotor inertia	×10 ⁻⁴ kg·m ²	14.9		
	gf·cm·sec ²	15.2		
Elec. time constant	ms	26.1		
Mech. time constant	ms	0.521		
Rated power rate	kW/s	140		
Momentary maximum current	A _(o-p)	60.8		
Back EMF constant per phase	×10 ⁻³ V _(rms) /min ⁻¹	36.0		±10%
	V _(rms) /Krpm			
Torque constant	N·m/A _(rms)	0.94		±10%
	kgf·cm/A _(rms)	9.6		±10%
Phase resistance	Ω	0.098		±10%
Phase inductance	mH	2.6		±20%
Insulation class		F		
Vibration class		V-15		
Oil seal		O		
Brake		O		
Structure		Totally-enclosed self-cooled		
IP class		65	67	
Operation temperature	℃	-35 ~ +45		
Supply voltage	V _{ac}	380		

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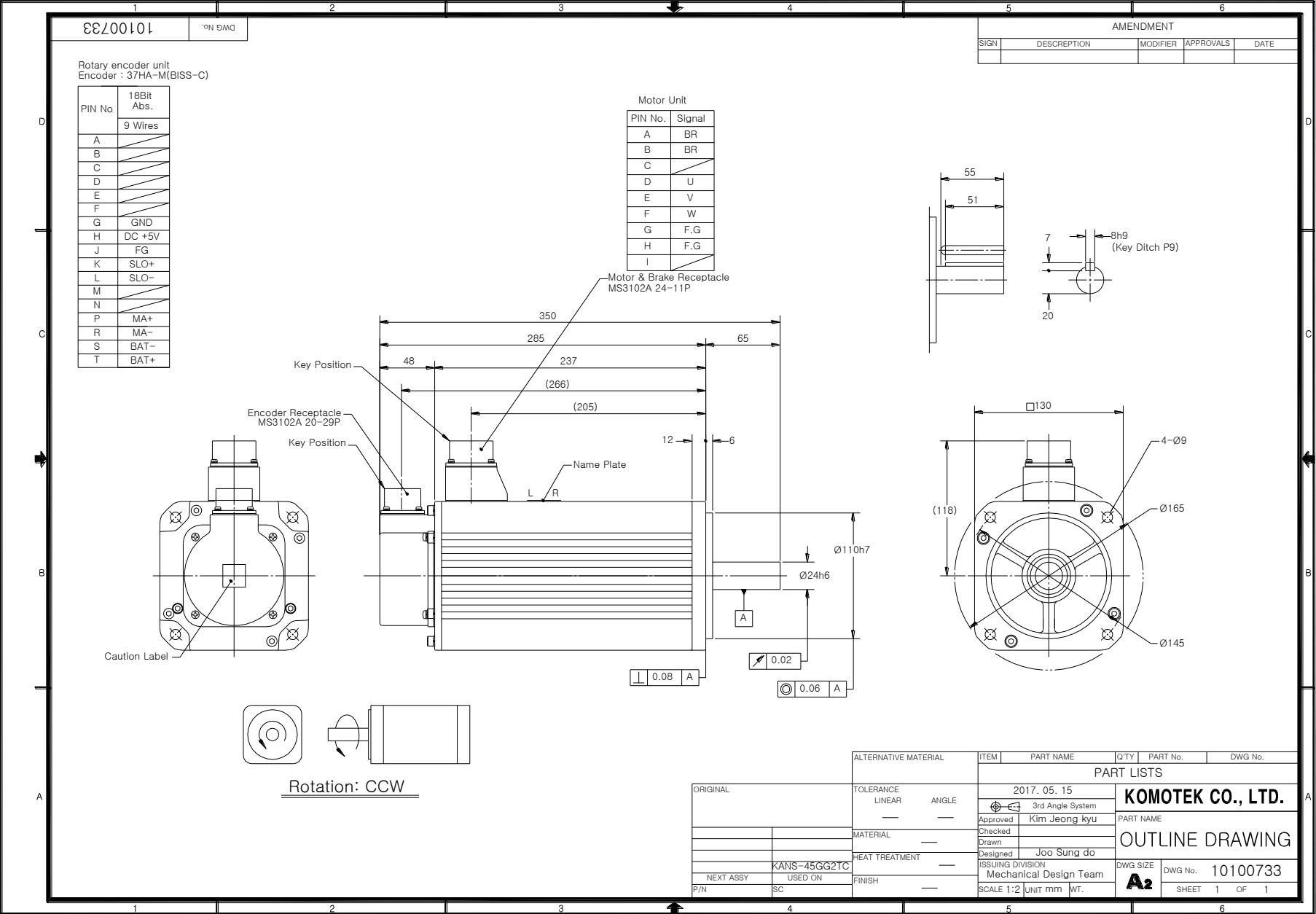
Characteristic curve



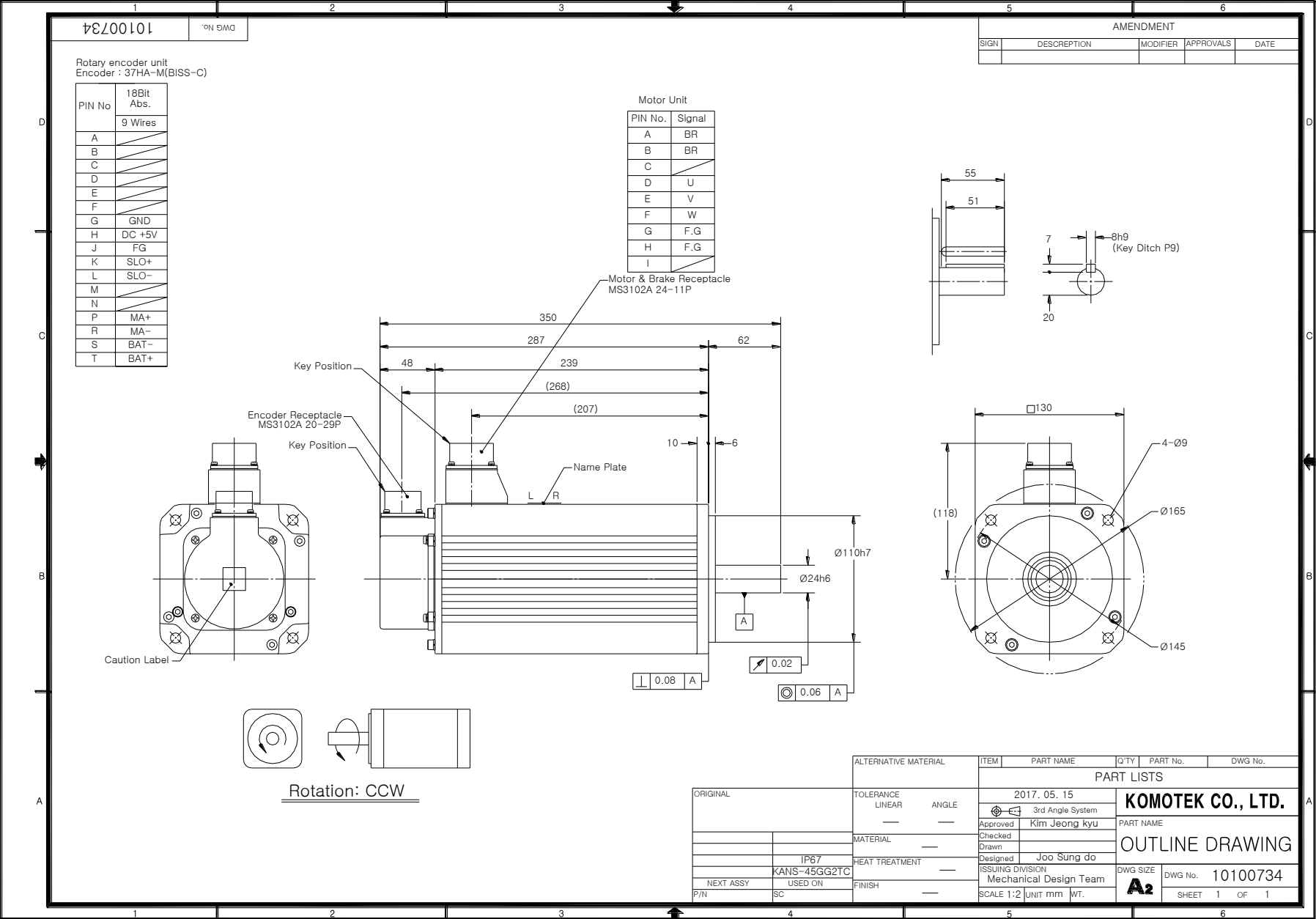
Test Method



10. KANS-45GG2B2 (Oil Seal, Brake Model Outline Drawing)



11. KANS-45GG2B2-IP67 (Oil Seal, Brake Model Outline Drawing)



A conceptual image featuring a central handshake between two hands, one wearing a grey suit sleeve and the other a dark grey suit sleeve. The background is a light, hazy scene filled with numerous small flags on thin poles, creating a sense of global unity. The flags include the Japanese flag, the German flag, the South Korean flag, and the United States flag, among others. The text "Thank You" is overlaid in a large, bold, blue font.

Thank You