

SM060AS Brushless Motor Series

General Features

- 60 mm square Frame Sizes
- Torques up to 575.00 Oz-in Peak, 191.00 Oz-in continuous
- Speeds up to 6000 RPM
- Voltage rating up to 48 Vdc
- Integrated Hall Effect Commutation
- IP54 protection and Class B rated construction
- RoHS and CE compliant

Available Options

- Encoder - IMS Q or EQM35 Series
- Connectors and Matting cables
- Custom Shaft ends
- Custom Winding (Voltage or Current)
- Gearbox - IMS EL60 Series
- IP65 Class protection



Technical and Performance Data

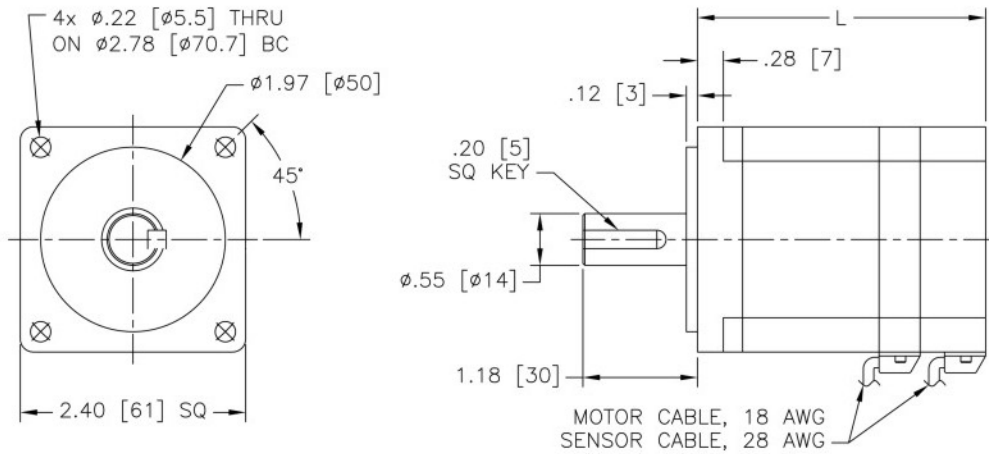
Model Number		SM060AS100	SM060AS200	SM060AS300
General				
	Maximum Terminal Voltage	Vdc	48.00	48.00
	Continuous Stall Torque	Oz-in	53.17	95.12
		Nm	0.38	0.67
	Continuous Current (3)	Amps	8.03	14.36
		Oz-in	159.52	285.35
	Peak Stall Torque	Nm	1.13	2.02
		Amps	23.65	42.31
24 Vdc Bus Rating	Rated Speed	RPM	2250	2750
	Rated Torque @ Rated Speed	Oz-in	52.00	90.00
		Nm	0.37	0.64
	Rated Output Power @ Rated Speed	Watts	87	183
Maximum Speed (1)	RPM	4000	4000	
36 Vdc Bus Rating	Rated Speed	RPM	4000	4000
	Rated Torque @ Rated Speed	Oz-in	50.00	88.00
		Nm	0.35	0.62
	Rated Output Power @ Rated Speed	Watts	148	260
Maximum Speed (1)	RPM	6000	6000	
48 Vdc Bus Rating	Rated Speed	RPM	4000	4000
	Rated Torque @ Rated Speed	Oz-in	50.00	88.00
		Nm	0.35	0.62
	Rated Output Power @ Rated Speed	Watts	148	260
Maximum Speed (1)	RPM	6000	6000.0	
	Thermal Resistance	° C/W	2.3	2.0
Electrical				
	Torque Constant (± 10%), (2)	Oz-in/Amp	7.61	7.61
		Nm/Amp	0.0538	0.0538
	Voltage Constant (± 10%), (2)	V/KRPM	5.64	5.64
		V s/rad	0.0538	0.0538
	Resistance (± 15%), (2)	Ohms	0.64	0.23
	Inductance (± 15%), (2)	mH	0.50	0.22
Mechanical				
	Inertia	Oz-in-Sec ²	0.001416	0.002124
		kg m ²	1.00E-05	1.50E-05
	Weight	Oz	30.0	44.1
		gm	850.00	1250.00
	Length (L)	Inch	3.98	4.45
		mm	101.00	113.00

(1) Maximum Speed can be limited by bus voltage and feedback types

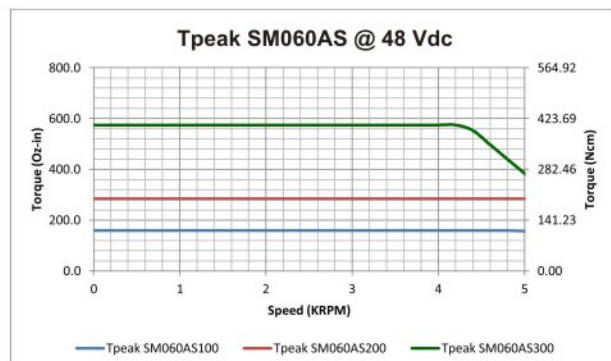
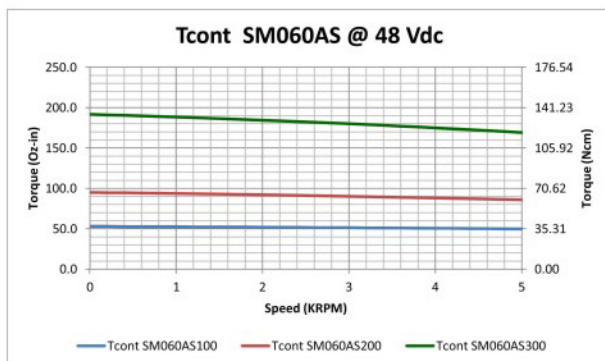
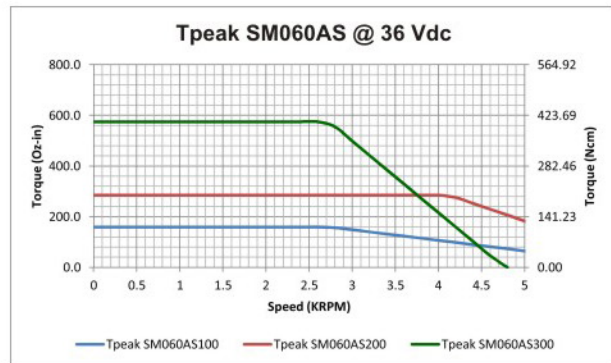
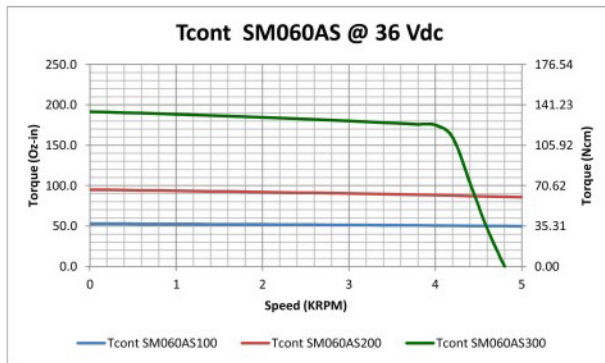
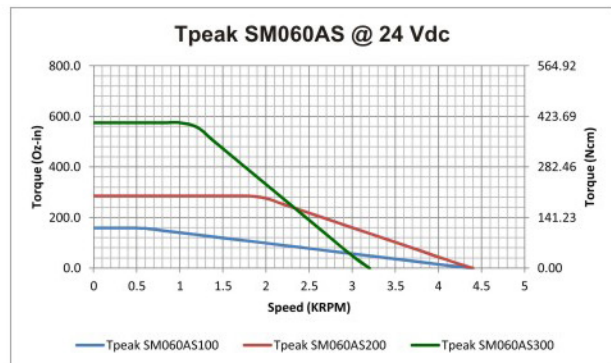
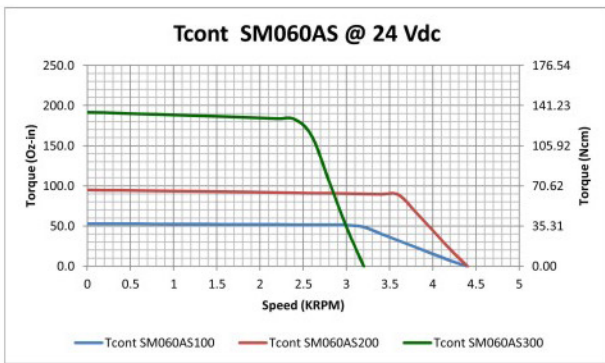
(2) Measure values at 20 °C

(3) Current values are at maximum allowable winding temperature 125 °C

Outline Drawing and Dimensional Data



Performance Curves



* Motor performance curves may vary with the drive technology used

** Motor performance curves may vary based upon the quality of the input voltage