ISMD23

Integrated Stepper Motor + Drive

AMCI by IDEC CORPORATION

SPECIFICATIONS

Environmental Specifications

Part Numbers	ISMD23-130	ISMD23-240
Supply Voltage	24V DC to 75V DC max, 4 Amps max per axis, user supplied	
Operating Temperature	32° to 122°F (0° to 50°C)	
Motor Specifications	Holding Torque – 130oz-in (0.91Nm)	Holding Torque – 240oz-in (1.69Nm)
	Maximum Starting Torque – 120oz-in (0.85Nm)	Maximum Starting Torque – 220oz-in (1.55Nm)
	Rotor Inertia – 1.42oz-in^2 (0.26kg-cm^2)	Rotor Inertia – 2.51oz-in^2 (0.46kg-cm^2)
	Weight – 1.56lbs (0.71kg)	Weight – 2.48lbs (1.13kg)

Electrical Specifications

Motor Current	User Selectable – 3.4 Arms max 0.3 –3.4Arms in 0.3 increments (10%-100%)
	Default value – 2.70 Arms (80%)
Steps per Revolution	400, 1000, 2000, and 5000 – user selectable
	Default value – 2000 steps/rev
	Frequency on the Step input (max) - 100KHz
Idle current reduction time	1 sec
Idle current selection	0% to 70% of the maximum operating current
	Default Value – 20%

Digital Inputs

Three opto-isolated differential inputs:	Step – Velocity/position command Direction – Direction Control Disable – Disables motion and disables current to motor
Type of input	5V TTL logic
Input Current	15mA max
Input Connector	AMCI Part # MS-8P, provided (Phoenix part # MC 1.5/8-ST3.81)
	8 screw terminal type – 16 AWG max
Programming Communications	Interface – RS232
	Programming Interface – AMCI SPI Interface software,
	Interface Cable – AMCI CSMD-5 5 ft serial cable (optional)

PRODUCT DESCRIPTION

The ISMD23 Size 23 Integrated Stepper Motor + Drive package combines value-driven pricing and simplified installation in a dynamically matched drive-to-motor package that optimizes a wide range of industrial automation applications.

Powerful 3.4 amp stepper drive technology has been designed into this package to achieve a space-saving design that delivers outstanding performance.

Simplified installation begins with configuration software that allows you to configure the current level, the idle current amount and the steps per revolution over an RS232 serial link from your PC.

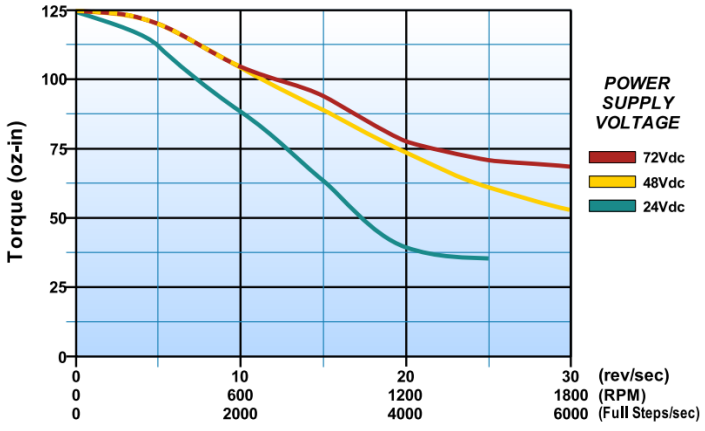
While the ISMD23 size 23 Integrated Stepper Motor + Drive is configured over a serial link, motion is controlled by a separate device, such as a stepper indexer, that outputs step and direction signals.

KEY FEATURES

- Stepper motor + drive dynamically-matched to optimize performance/ reliabilty
- High-torque, NEMA-frame size 23 stepper motor
- Powerful 3.4 amp, DC-powered microstepping drive
- Anti-resonance circuitry ensures smooth performance at any speed
- Space-saving design simplifies installation with reduced wiring

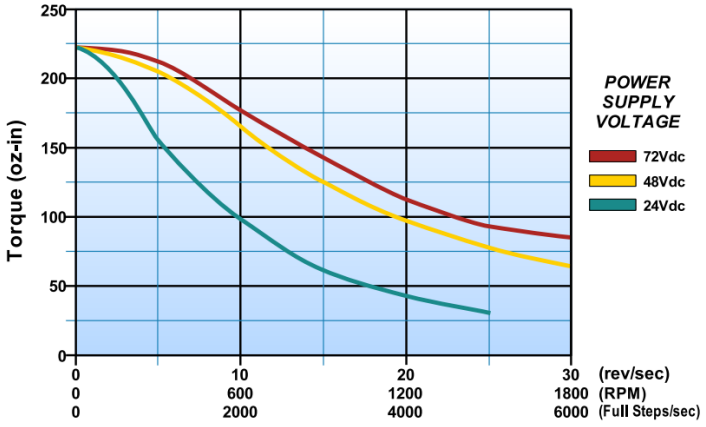
TORQUE CURVES

ISMD23-130



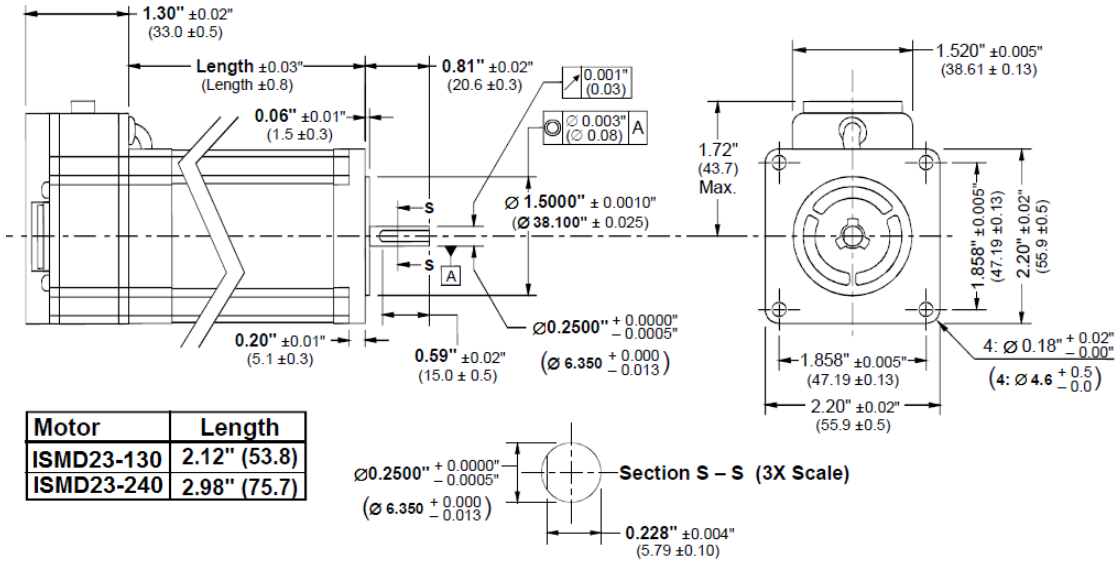
All measurements taken at 100% current (3.4A) and 2000 steps/rev

ISMD23-240



All measurements taken at 100% current (3.4A) and 2000 steps/rev

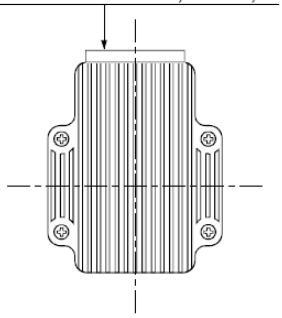
DIMENSIONS (mm)



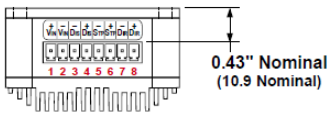
Motor	Length
ISMD23-130	2.12" (53.8)
ISMD23-240	2.98" (75.7)

REAR VIEW

Indexer Input Connector (8 Pins)
Mates with AMCI #: MS-8P
Phoenix Contact #: MC1,5/8-ST-3,81



Pin 1 +Vdc	Pin 5 – Step
Pin 2 Vdc Common	Pin 6 + Step
Pin 3 – Disable	Pin 7 – Direction
Pin 4 + Disable	Pin 8 + Direction



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