

# ISMD23E 3-in-1 Integrated Stepper Motor + Drive + Controller



## SPECIFICATIONS

### General Specifications

	ISMD23E (130oz-in)	ISMD23E (240oz-in)
<b>Network Availability:</b>	ISMD23E (Modbus TCP/IP)	
	ISMD23E2 (Modbus TCP/IP w/Embedded Switch)	
<b>Driver Type</b>	Two bipolar MOSFET H-bridges with 20KHz PWM current control.	
<b>Steps Per Revolution:</b>	Programmable between 200 and 32,767 steps	
<b>Input voltage:</b>	24 to 48V DC	
<b>Motor current:</b>	3.4A/phase	
<b>Aux-logic supply voltage:</b>	24 to 48V DC	
<b>Operating Temp:</b>	-4°F to 122°F (-20°C to 50°C)	
<b>Storage Temp:</b>	-40°F to 185°F (-40°C to 85°C)	
<b>IP Rating</b>	ISMD23E: IP20 ISMD23E-M12: IP50 ISMD23E-M12P: IP67	
<b>Humidity</b>	0 to 95%, non-condensing	
<b>Weight</b>	ISMD23E-130(E) ..... 2.20lbs. (1.00 kg.) ISMD23E-130(E)-M12(P) ..... 2.30lbs. (1.05 kg.) ISMD23E-240(E) ..... 2.70lbs. (1.23 kg.) ISMD23E-240(E)-M12(P) ..... 2.80 lbs. (1.27 kg.)	

### Inputs

General Purpose Inputs	ISMD23 (130oz-in)	ISMD23 (240oz-in)
<b>Number/type</b>	2 or 3 inputs, programmable	
<b>Logic range</b>	5-24V DC	
<b>Function</b>	Home Limit, Over Travel Limit, Capture Input, Manual Jog Stop, E-Stop, registration, index move	
<b>Input Specifications</b>	Off State Voltage: 0 to 1.5V DC On State Voltage: 3.3 to 27V DC Input Requires 10mA of current to operate	

### Communication

	ISMD23 (130oz-in)	ISMD23 (240oz-in)
<b>Interface</b>	Ethernet	
<b>Bit rate</b>	10-100Mbps	
<b>Protocol</b>	Modbus TCP/IP	

## PRODUCT DESCRIPTION

ISMD23E is a size 23 3-in-1 Integrated Stepper Motor + Drive + Controller package with network interface. It is a self-contained motion control product that is easy to install while delivering best-in-class performance at a competitive price.

ISMD23E incorporates a Stepper motor + drive + controller into a single product that interfaces to the MicroSmart FC6A PLC over the Modbus TCP network. We've reduced total system costs and simplified installation because users only have to purchase one product versus a separate controller, drive, and motor. Plus, programming & configuration is streamlined because it uses user-defined macro instructions in WindLDR PLC programming software. No additional software is required, and users don't need to learn another programming language!

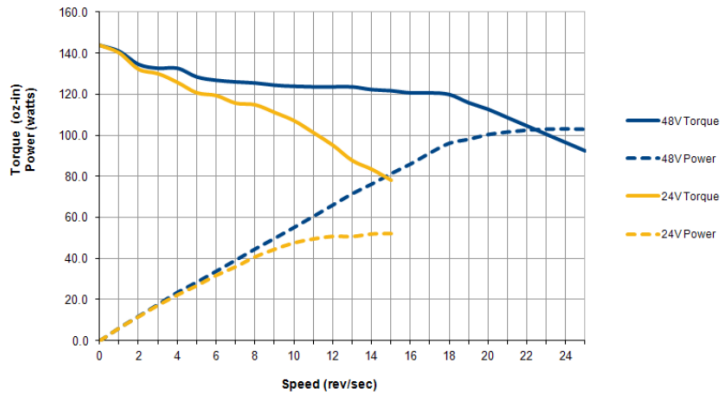
## KEY FEATURES

- Stepper motor + drive + controller integrated for optimum performance
- 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
- Optional M12 connectors for rigorous applications requiring IP50 or IP67 rating

# TORQUE AND POWER CURVES

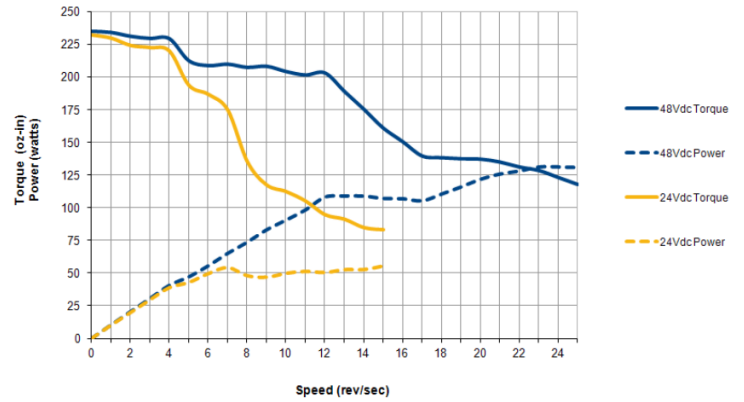
ISMD23E-130

Motor Current = 3.4A

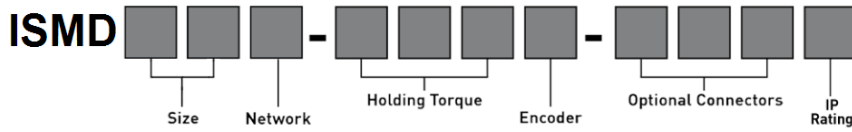


ISMD23E-240

Motor Current = 3.4A



## PART NUMBER GUIDE



<b>Part Number Character</b>	Size 23 Integrated Stepper Motor Package
<b>Frame size:</b>	23 = NEMA size 23
<b>Network:</b>	E = Modbus TCP (RJ45 only) E2 = Modbus TCP w/Embedded Switch (M12 connectors option required)
<b>Holding torque:</b>	130 = 130oz-in 240 = 240oz-in
<b>Encoder:</b>	E = Incremental encoder A = Absolute multi-turn encoder ("E2" network option required) Blank for no encoder
<b>Optional Connectors:</b>	M12 = M12 connectors (E2 network option required) (Blank) = Standard RJ45 & Phoenix connectors
<b>IP Rating:</b>	[Blank] = No shaft seal; IP50 S = Shaft seal; IP64

