# ISMD23E 3-in-1 Integrated

# Stepper Motor + Drive + Controller



#### **SPECIFICATIONS**

#### **General Specifications**

	ISMD23E (130oz-in)	ISMD23E (240oz-in)
Network Availability:	ISMD23E (Modbus TCP/IP)	
	ISMD23E2 (Modbus TCP/IP w/Embedded	Switch)
Driver Type	Two bipolar MOSFET H-bridges with 20KHz PWM current control.	
Steps Per Revolution:	Programmable between 200 and 32,767 steps	
Input voltage:	24 to 48V DC	
Motor current:	3.4A/phase	
Aux-logic supply voltage:	24 to 48V DC	
Operating Temp:	-4°F to 122°F (-20°C to 50°C)	
Storage Temp:	-40°F to 185°F (-40°C to 85°C)	
IP Rating	ISMD23E: IP20 ISMD23E-M12: IP50 ISMD23E-M12P: IP67	
Humidity	0 to 95%, non-condensing	
Weight	ISMD23E-130(E) 2.20lbs. (1.0 ISMD23E-130(E)-M12(P) 2.30lbs. (1.0 ISMD23E-240(E) 2.70lbs. (1.2 ISMD23E-240(E)-M12(P) 2.80 bs. (1.27	5 kg.) 3 kg.)

#### Inputs

General Purpose Inputs	ISMD23 (130oz-in)	ISMD23 (240oz-in)
Number/type	2 or 3 inputs, programmable	
Logic range	5-24V DC	
Function	Home Limit, Over Travel Limit, Capture Input, Manual Jog Stop, E-Stop, registration, index move	
Input Specifications	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)
Interface	Ethernet	
Bit rate	10-100Mbps	
Protocol	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-inclass 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**

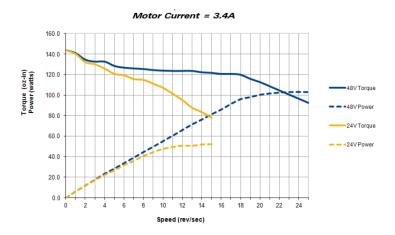
- Stepper motor + drive + controller integrated for optimum performance
- High-torque, NEMA frame size 23 stepper motor
- Powerful 3.4 amp, DC-powered microstepping drive
- Anti-resonance circuitry ensures smooth performance at any speed
- Space saving design simplifies installation with reduced wiring
- Optional M12 connectors for rigorous applications requiring IP50 or IP67 rating

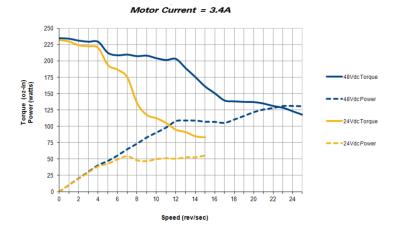
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# **TORQUE AND POWER CURVES**

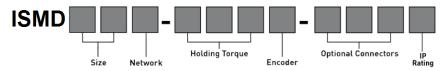
ISMD23E-130

#### ISMD23E-240





## **PART NUMBER GUIDE**



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

