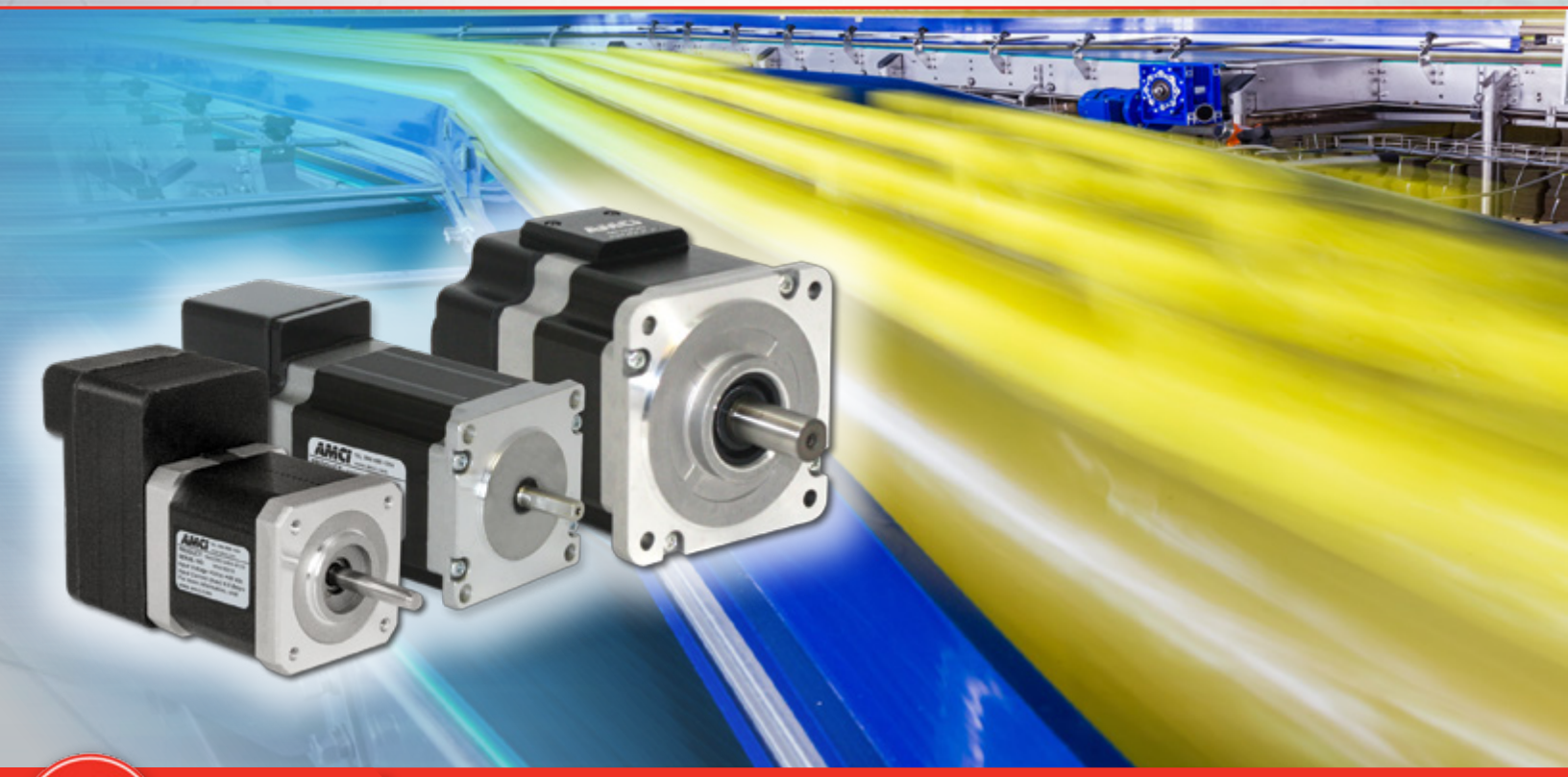
SMD Series Integrated Motion

Integrated Stepper Motor Package



E2 Technology

EtherNet/IP

Modbus

PROFINET

AMCI ADVANCED MICRO CONTROLS INC.
www.amci.com

PLC-Based by Design

AMCI products are uniquely designed to provide the best PLC integration available. Unlike other products that require a separate software package for configuration or operation, AMCI's PLC-based products are programmed using your PLC's software - nothing new to buy or learn! Our expertise with the leading PLC manufacturers is unmatched when it comes to high performance Motion Control technology.

E2 Technology

Dual-Port Networking - An embedded network switch simplifies product daisy chaining, adds flexibility to any network architecture, and supports redundant protocols like DLR (device level ring) and MRP (media redundancy protocol).

Multi-Protocol - Every dual-port SMD Series unit comes with EtherNet/IP, Modbus-TCP, & Profinet networks built-in

Web Server - A quick and simple screen allows you to select your network type and configure your IP address

Native Software - Programming is performed by the same software used to configure your host PLC/PAC, eliminating the need to learn new software and/or language foreign to your controls environment. The results are seamless integration, intuitive troubleshooting, and valuable time savings.

- Use your PLCs native software
- No new software to buy or learn
- Tightest integration available

EtherNet/IP Modbus PROFINET

Resources

AMCI provides a myriad of resources on their website in an effort to provide the best PLC integration possible. Available resources include configuration files, sample programs, 2D & 3D drawings, User-Defined Function Blocks (UDFB's), Add-On Instructions (AOI's), informative webinars & tutorials, and much more.

Resources Include

- Configuration Files (EDS, GSDML)
- Sample Programs
- 2D & 3D Drawings
- Webinars & Tutorials
- and much more...

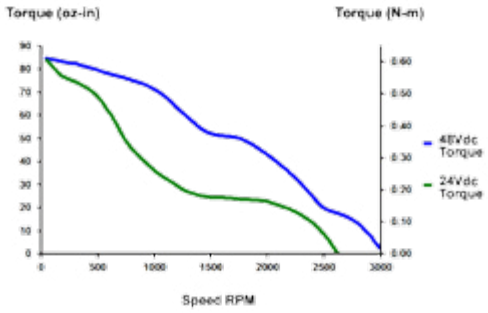
SMD Series At-A-Glance

Advances in motor and drive technology have enabled smarter, more affordable PLC-based automation. AMCI's SMD Series integrated stepper motors provide a motion control solution that is designed to streamline the proposal, installation, and commissioning of your motion axis. For over 10 years, AMCI has been engineering integrated motion technologies that fill a gap in the market like no other product.

SMD17E2

Input Voltage: 24 to 48 Vdc
Motor Current: 2.0 Amp/phase
Package Size: NEMA 17
Holding Torque: 80 oz-in torque
Encoder: Incremental or Absolute

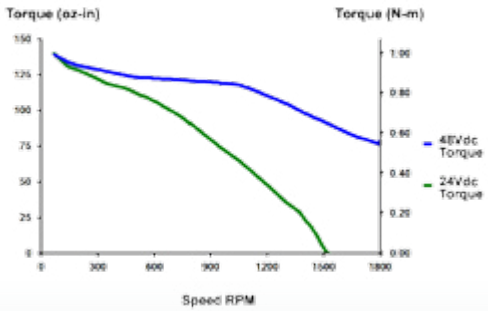
SMD17E2-80



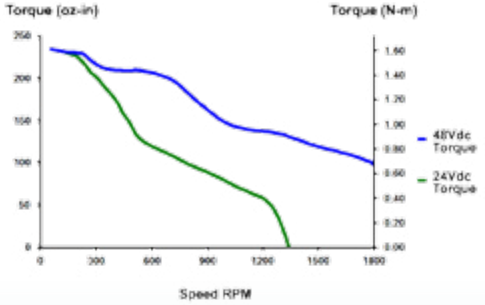
SMD23E2 & SMD24E2

Input Voltage: 24 to 48 Vdc
Motor Current: 3.4 Amp/phase
Package Size: NEMA 23 or 24
Holding Torque: 130 oz-in to 350 oz-in
Encoder: Incremental or Absolute

SMD23E2-130



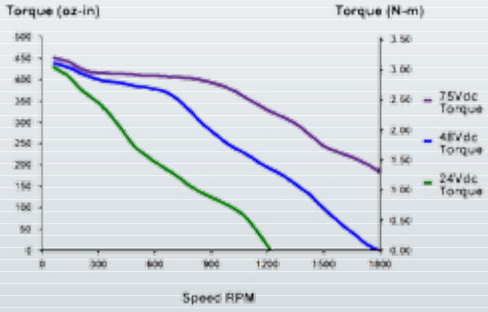
SMD23E2-240



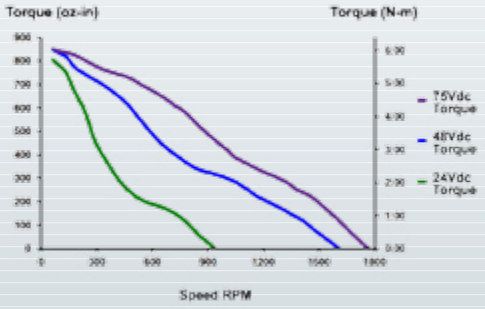
SMD34E2

Input Voltage: 24 to 80 Vdc
Motor Current: 5.4 Amp/phase
Package Size: NEMA 34
Holding Torque: 450 oz-in to 1100 oz-in
Encoder: Incremental or Absolute

SMD34E2-450

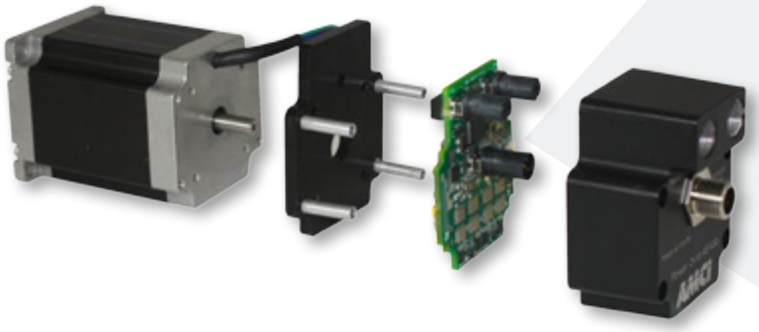


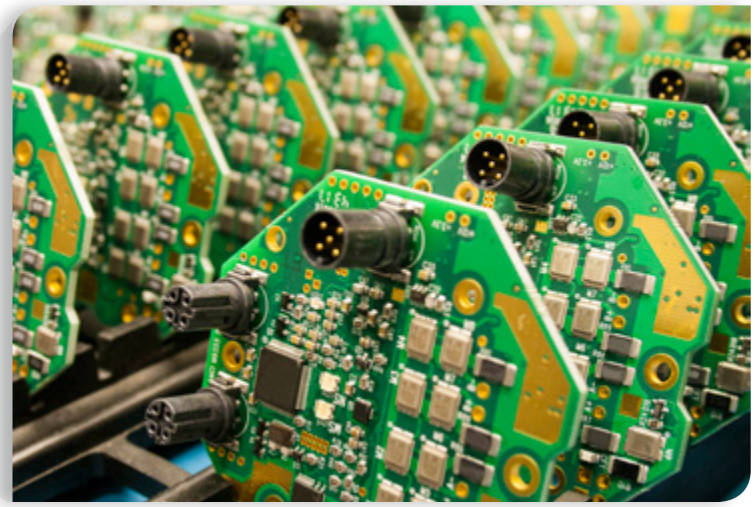
SMD34E2-850



What's Inside the SMD?

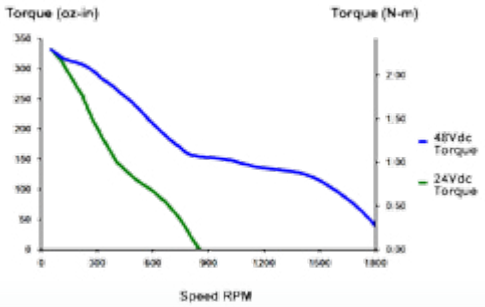
We take the drive and motor out of the cabinet and put them right on the motor, reducing wiring and system costs.



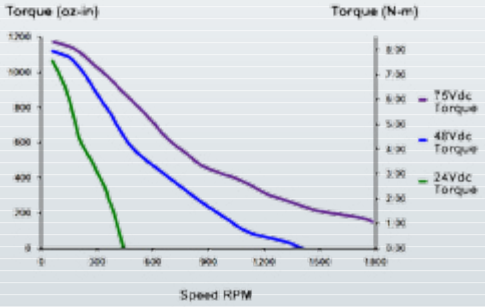


We manufacture and 100% test all SMD Series products in-house to ensure reliability and the fastest turnaround.

SMD24E2-350

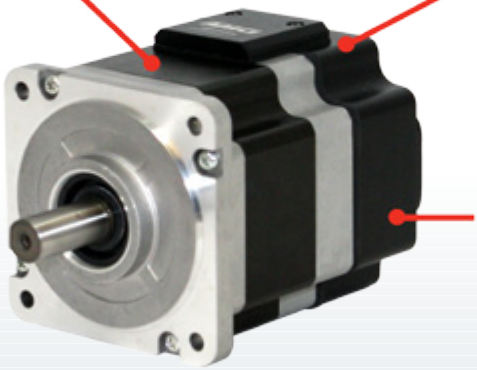


SMD34E2-1100



Stepper Motor
High Torque
NEMA Sizes 17 to 34

Stepper Controller
Fully Programmable



Stepper Drive
DC-Powered
2.0 - 5.4 Amp

E2 Technology

EtherNet/IP

Modbus

PROFINET

Features

All of AMCI's SMD Series packages offer the following options:

- Encoder: Incremental or Absolute Multi-turn
- Connector: M12
- Protection: IP50, IP64, or IP67
- Embedded Switch
  - EtherNet/IP supports Device Level Ring (DLR)
  - Profinet supports Media Redundancy Protocol (MRP)

Compact Size

Integrated motors provide a single compact unit for measurable space savings that can reduce the size of your machine footprint.

Industries

Integrated motors benefit many different industries including:

- Medical
- Pharmaceutical
- Life Sciences
- Lab Automation
- Imaging
- Printing
- Packaging
- Material handling
- Labeling

Benefits

- full torque at rest
- no tuning required
- smooth motion
- cost effective
- real time control
- excellent repeatability
- low maintenance

Application Examples

Rapid Changeover

The low cost of the SMD Series provides a path for automating manual operations without the high cost of other motion solutions.

Packaging

The SMD Series is a great choice for the simple, repetitive motion profiles of packaging applications. Plus, benefit from plug and play PLC integration that cannot be matched.

Vision Systems

The SMD Series' microstepping delivers precise positioning and full torque at rest. This eliminates the dither present in other motion solutions for crisp, repeatable imaging.

Medical Equipment

The SMD Series supplies loads of power for tight spaces. The compact design eliminates the separate drive and controller reducing cabinet space.

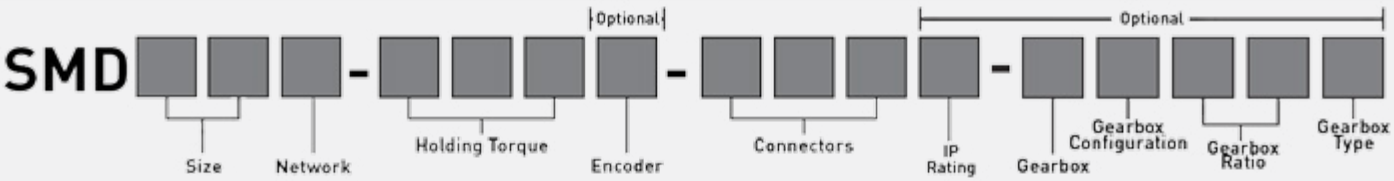
Delivering a Complete Solution

AMCI's selection of gearboxes, connectors, and approved cord sets simplify the ordering process and guarantee 100% compatibility.

Available Accessories:

- Gearboxes (not avail with NEMA 17)
- Cord sets
- Connectors

Ordering Information



Part Number Character	SMD Series Integrated Stepper Motor Package	
Size	**17** = NEMA size 17 **23** = NEMA size 23	**24** = NEMA size 24 **34** = NEMA size 34
Network	**E2** = EtherNet/IP, Modbus-TCP, and Profinet w/Embedded Switch	
Holding Torque	**80** = 80 oz-in torque rating (NEMA 17) **130** = 130 oz-in torque rating (NEMA 23) **240** = 240 oz-in torque rating (NEMA 23) **350** = 350 oz-in torque rating (NEMA 24)	**450** = 450 oz-in torque rating (NEMA 34) **850** = 850 oz-in torque rating (NEMA 34) **1100** = 1100 oz-in torque rating (NEMA 34)
Encoder	**E** = Incremental encoder **A** = Absolute multi-turn encoder *blank = no encoder*	
Connectors	**M12** = M12 connectors	
IP Rating	**P** = IP67 rating **S** = IP64 rating *blank = IP50 rating* (not available with NEMA 34)	
Gearbox	**G** = Gearbox (not available with NEMA 17) *blank = no gearbox*	
Gearbox Configuration:	**B =** Straight (NEMA 23 or 24) **R =** Right angle (NEMA 23 or 24)	**C** = Straight (NEMA 34) **T** = Right angle (NEMA 34)
Gearbox Ratio:	**5** = 5:1 Ratio **10** = 10:1 Ratio *other ratios available upon request*	
Gearbox Type:	**A** = Standard **C** = Corrosion resistant	

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