Integrated Motor Packages
3-in-1 Motor + Drive + Controllers
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.

Network Features

**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).

**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 by 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
- Tighest integration available

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...
Integrated Motors At-A-Glance

Advances in motor and drive technology have enabled smarter, more affordable PLC-based automation. AMCI’s integrated stepper and servo motor packages 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.

We manufacture and 100% test all integrated motors in-house to ensure reliability and the fastest turnaround.
Integrated Stepper Motors

**SMD17X**
- **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

**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

**SMD34X**
- **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
What’s Inside Our Integrated Motors?

We take the drive and motor out of the cabinet and put them right on the motor, reducing wiring and system costs.
Integrated motors benefit many different industries including:

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

### Features

All of AMCI’s integrated motor packages offer the following options:

- Encoder: Incremental* or Absolute Multi-turn
- Connector: M12
- Protection: IP50, IP64, or IP67*  
  *only available with integrated stepper (not servo)
- 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
- smooth motion
- cost effective
- real time control
- excellent repeatability
- low maintenance

### Application Examples

#### Rapid Changeover

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

#### 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.

#### Packaging

Integrated motors are a great choice for the simple, repetitive motion profiles of packaging applications. Plus, benefit from plug and play PLC integration that cannot be matched.

#### Medical Equipment

Integrated motors supply loads of power for tight spaces. The compact design eliminates the separate drive and controller reducing cabinet space.
What’s New At AMCI

Transform your factory with AMCI’s space-saving, energy-improving integrated motors paired with linear actuators that provide guaranteed compatibility.

L3 Series Actuator

**Input Voltage:** 48 Vdc

**Actuator Pitch**
Coarse Pitch: 10mm | Fine Pitch: 3mm

SMD17X-80-L3
Force (N) vs Speed (mm/s)

SMD23X-240-L3
Force (N) vs Speed (mm/s)

SV160X-L3
Force (N) vs Speed (mm/s)

L4 Series Actuator

**Input Voltage:** 48 Vdc

**Actuator Pitch**
Coarse Pitch: 12.7mm | Fine Pitch: 5mm

SMD34X-450-L4
Force (N) vs Speed (mm/s)

SV160X-L4
Force (N) vs Speed (mm/s)

SV400X-L4
Force (N) vs Speed (mm/s)
Delivering a Complete Solution

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

Available Accessories:
- Linear Actuators
- Gearboxes
- Cord sets
- Connectors

Ordering Information

### Stepper

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<thead>
<tr>
<th>Motor Type</th>
<th>SMD = Integrated Stepper Motor Package</th>
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<tbody>
<tr>
<td>Size</td>
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<tr>
<td>17</td>
<td>17 = NEMA size 17</td>
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<td>A = Absolute multi-turn encoder</td>
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<tr>
<td>S</td>
<td>S = IP64 rating</td>
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<tr>
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<td>blank = IP50 rating (not available with NEMA 34)</td>
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### Servo

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<th>Motor Type</th>
<th>SV = Integrated Servo Motor Package</th>
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<tr>
<td>Size</td>
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<tr>
<td>400</td>
<td>400 = 400 watt</td>
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<tr>
<td>Network</td>
<td>E2 = EtherNet/IP, Modbus-TCP, and Profinet w/Embedded Switch</td>
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</tbody>
</table>

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