

# AKD PDMM™ Integrated Servo Drive and Automation Controller

Kollmorgen Automation Suite™ Programmability in an AKD™ Drive with Multi-Axis Master Controller



**KOLLMORGEN**®

*Because Motion Matters™*

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# Build Simpler and Better with Drive-Resident Machine and Motion Control

Extend your design options. Control as many as eight axes or more without the need for a PLC or PAC. Reduce cabinet space and wiring requirements. Program perfect machine and motion control for any project using a single, fully integrated programming environment. Build a better machine at a lower cost.

Our new addition to the AKD™ drive family combines one servo axis, a master controller that supports multiple additional axes, and the full automation capability of Kollmorgen Automation Suite™—all in a single, compact package.

Welcome to the AKD PDMM™ programmable drive, multi-axis master.

## Performance Specifications

120/240 VAC 1- and 3-Phase	Continuous Current (Arms)	Peak Current (Arms)	H (mm/inches)	W (mm/inches)	D (mm/inches)
AKD-M00306-MCEC-0000	3	9	168 / 6.61	89 / 3.50	156 / 6.14
AKD-M00606-MCEC-0000	6	18	168 / 6.61	89 / 3.50	156 / 6.14
AKD-M01206-MCEC-0000	12	30	196 / 7.72	107 / 4.22	187 / 7.36
240/400/480 VAC 3-Phase	Continuous Current (Arms)	Peak Current (Arms)	H (mm/inches)	W (mm/inches)	D (mm/inches)
AKD-M00307-MCEC-0000	3	9	256 / 10.08	99 / 3.90	185 / 7.28
AKD-M00607-MCEC-0000	6	18	256 / 10.08	99 / 3.90	185 / 7.28
AKD-M01207-MCEC-0000	12	30	256 / 10.08	99 / 3.90	185 / 7.28

## Features

- Kollmorgen Automation Suite™ provides fully integrated programming, testing, setup and commissioning
- Embedded web server utility simplifies service
- Control 8 axes or more\* while reducing machine footprint
  - EtherCAT multi-axis master motion controller integrated with a standard AKD™ drive axis
  - Full IEC61131-3 soft PLC for machine control, with support for all 5 programming languages
  - Choice of PLCopen for motion or Pipe Network™ for programming motion control
  - 32 kB non-volatile memory stores machine data to eliminate scrap upon restart after power failure
  - SD Card slot simplifies backup and commissioning, with no PC required
  - Onboard I/O includes 13 digital inputs, 4 digital outputs, 1 analog input, 1 analog output (expandable with AKT series of remote I/O)
- Works with Kollmorgen Visualization Builder for programming AKI human-machine interface panels



K O L L M O R G E N

\*Maximum axis count depends on motion/automation complexity and performance (8 axes nominal based on medium complexity at 4 kHz network update rate)

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# Reduce Cabinet Space, Wiring Costs and Development Time

AKD PDMM™ combines a high-performance AKD™ servo drive with multi-axis machine and motion control in a single, compact package that can be programmed, tuned and commissioned using Kollmorgen Automation Suite™.

AKD PDMM has one built-in AKD servo drive and serves as a master machine and motion controller for up to 7 or more additional AKD drives. So you can build a machine that incorporates multiple high-performance axes, complete I/O connectivity and an HMI interface—all without the need for a separate PLC or PAC. And you can program your new machine using the same scalable, integrated development environment you use for larger PAC-based machines up to 128 axes.

The result: AKD PDMM simplifies your machine, shortens your development cycles and gives you an agile platform for creating truly differentiated solutions that win new business.

**Reduce panel space, wiring costs and build time.** AKD PDMM provides a complete servo drive and programmable machine and motion controller in a single package, eliminating the need for a separate controller in many applications.

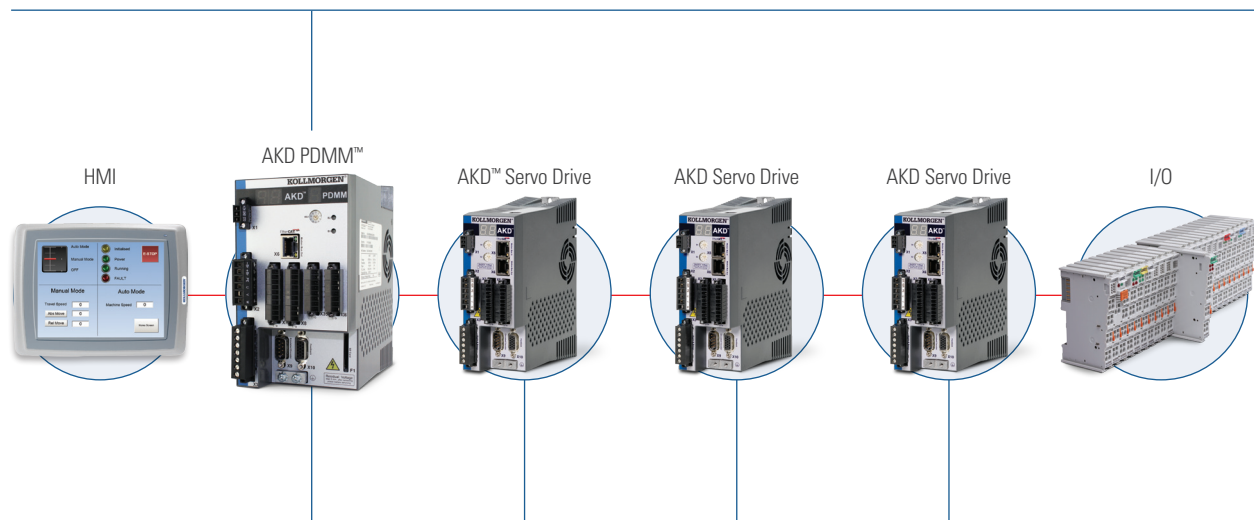
**Accelerate design time and simplify integration.** Use a single graphical development environment to program AKD PDMM as well as PAC-based applications up to 128 axes.

**Proven to minimize risk, maximize performance.** AKD PDMM combines the proven architecture of Kollmorgen Automation Suite with our industry-leading AKD drive hardware.

**Co-engineer a measurable difference.** When your customers want more than a standard solution, deliver an irrefutable advantage with Pipe Network™ and Kollmorgen co-engineering.

**Control multiple high-performance axes without a separate controller.** AKD PDMM acts as a master for as many as 7 or more additional AKD drives to control up to 8 or more Kollmorgen servomotors of any type.

**Build a complete system with optimal performance.** AKD PDMM works with AKT™ I/O modules and AKI™ human interface panels for a complete solution from a single supplier.



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# Co-Engineer a Better Solution with the Motion Leader

Through technical co-engineering, we can modify and mass-produce products that perfectly fit your machine's unique requirements and constraints—without the cost and risk of a custom solution.

Through commercial co-engineering, we apply kanban-inspired principles and kaizen-driven methods to enhance your business and manufacturing processes—fostering continuous improvement and extending profitability.

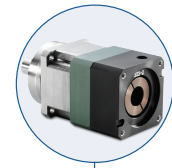
Kollmorgen's own success is built on our expertise in creating products and processes that endure, adapt and advance. Kollmorgen co-engineering delivers the same advantages for your company—and helps you, in turn, co-engineer a better solution for your own customers.

## Count on a Reliable Supplier with a Global Reach

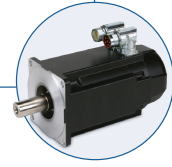
Co-engineered product modification is part of our normal manufacturing process. We deliver perfect-fit products in the quantities you need, on your schedule, at a price comparable to off-the-shelf products. And with engineering, service and support centers across North America, Europe and Asia, we can reliably deliver the same quality and value wherever you and your customers operate.

## Differentiate Your Machine with AKD PDMM™

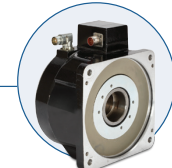
Our new AKD PDMM™ multi-axis master drive/controller family puts our most advanced technologies and co-engineering capabilities at your command. To learn more about AKD PDMM and what it can do for your machine, and your business, contact your Kollmorgen representative today.



TRUE Planetary™ Gearheads



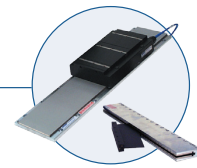
AKM™ Servomotors



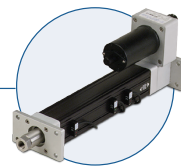
Kollmorgen Cartridge DDR™ Motors



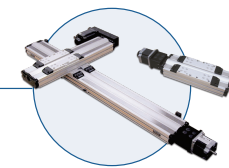
Housed DDR Motors



Direct Drive Linear Motors



Linear Positioners



Multi-Axis Precision Tables

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## A Single, Scalable Development Suite

Kollmorgen Automation Suite™ simplifies and accelerates development through a unified system of software, hardware, and collaborative co-engineering. This scalable solution provides a fully integrated development environment for any application, whether you're programming a single axis of motion, a multi-axis AKD PDMM™ system, or a PAC-based system up to 128 axes. Kollmorgen Automation Suite has been proven to:

- Improve product throughput by up to 25% with industry-leading motion bandwidth
- Reduce scrap by up to 50% with world-class servo accuracy, seamless power-failure recovery and highly dynamic changeovers
- Increase precision for better quality, reduced waste and less downtime using EtherCAT—the field bus with motion bus performance
- Enable more adaptable, sustainable and innovative machines that measurably improve marketability and profitability

### A Single Family of Servo Drives

Kollmorgen AKD™ servo drives deliver cutting-edge performance in a compact footprint. From basic torque-and-velocity applications, to indexing, to multi-axis programmable motion, these feature-rich drives offer:

- Plug-and-play compatibility with your servomotor
- All the advantages of Kollmorgen's breadth of motor platforms including AKM™, CDDR™, and other direct-drive technologies
- The fastest velocity and position loop updates
- Full-frequency autotuning for perfect motion across the performance spectrum
- Real-time feedback from a wide variety of devices

### Our Best Drive and Automation Solution in a Single Package

The new AKD PDMM programmable drive, multi-axis master combines our AKD drive platform with the full feature set of Kollmorgen Automation Suite in a single package—providing complete machine and motion control for up to eight axes or more.

You need only one development suite and one drive family for all your projects. And you can rely on one source for all the motion components and co-engineering expertise you need to build a better machine.

With AKD PDMM, the best in machine engineering has never been easier, faster or more cost-effective.

