

## 3-In-1: Motion Controller, PLC and Servo Drive in One

**AKD PDMM combines all functions in a single compact device, and delivers high performance in the smallest of spaces**

- ▶ **Integrated motion controller and PLC without additional components**
- ▶ **Less hardware, smaller footprint, faster installation**
- ▶ **Versatile use thanks to extensive choice of analog and digital interfaces**
- ▶ **Significantly less development effort through visual programming with the Pipe Network**

### Precision Drives for Demanding Applications

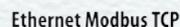
- Ideal solution for complex multi-axis applications
- Precision multi-axis control with by 250 µs bus cycle rates
- Efficient Power-PC-Architecture also controls complex motion profiles

### Simple System Design, Rapid System Integration

- Motion and machine programming with the Pipe Network, IEC61131-1 and PLCopen languages
- Short learning curve
- Shorter and faster commissioning at test phase with system simulation
- Complete integration of KAS Kollmorgen Automation Suite™
- Storage of all relevant drive data to SD card

### Scalable and Flexible Drive Control

- With EtherCAT® system bus
- Available with PROFINET®, EtherNet/IP™, Modbus TCP/IP communication bus
- Plug-and-Play compatible with all Kollmorgen motors
- Supports Kollmorgen Single-Cable solutions
- Possibility to connect an operator panel for machine operation (eg. Kollmorgen AKI series)
- Scalable axis performance with 3A, 6A, 12A, and 24A through AKD slave
- Integrated web server for remote access service



The AKD PDMM is a central multi-axis controller that is ideal for the control of demanding single- and multi-axis drives and requires 20% fewer components and up to 30% less space. Despite the compact design, there is no compromise on the performance: for example, the Power-PC-Architecture operates at 250 µs bus cycle rates via EtherCAT® for systems of up to eight axes. This extreme precision is available even for complex motion profiles. Furthermore, the handling is crucial. KAS Kollmorgen Automation Suite™ provides all the tools for the design, programming, debugging, and the off-line simulation; whilst the Kollmorgen Pipe Network graphical programming language allows machine builders to design powerful drive systems without a profound programming knowledge. During day-to-day operation the Kollmorgen Automation Suite™ Workbench allows the operator ultimate access to all parameters and axis functions.

# A Single Tool for Project Engineering

AKD PDMM reduces costs, saves time and money for programming and commissioning



## Versatile and Scalable Drive Solutions

The AKD PDMM is equipped with a single AKD servo drive for direct connection to a servo motor and controls further AKD drive axes over its integrated EtherCAT® system bus at cycle times of 250 µs, for extremely precise control.

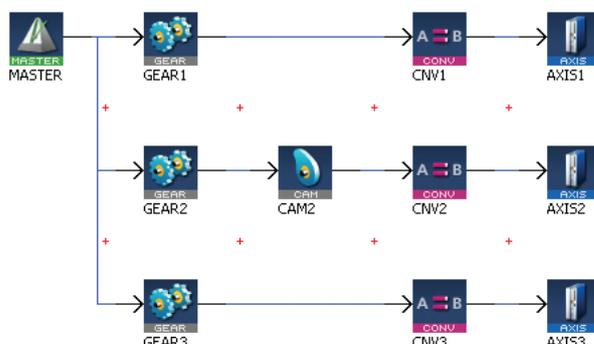
For machine operation, an optional control panel with one of the standard communication protocols can be connected. The AKD PDMM supports all leading communication bus systems, opening up almost unlimited control.

With the plug-and-play concept, almost any number of axes can be controlled

## Simple and Intuitive Programming with the Pipe Network

With the Kollmorgen Pipe Network, programming has been made easy. Rather than writing cryptic code, you use the KAS Kollmorgen Automation Suite™ with graphical function blocks to model the drive. A variety of pre-written fabricated function blocks is included with many configurable features and parameters. Naturally the Pipe Network supports, the IEC61131 and PLCopen languages

In simulation mode, you can test the behavior of the entire system offline and remove design error or known risks, even from the early development phase.



User-friendly: Kollmorgen Automation Suite provides all the tools for the design, programming, configuration and drive management.