

Powerful Motion Controller in Small and Simple Package

From complete manufacturing lines to small, automated desktop machines, OEMs want a controls platform that scales to meet a broad range of requirements. The PCMM™ programmable motion controller delivers a small yet powerful and cost-effective hardware platform ideally suited for modular or stand-alone machines that want the maximum in flexibility and performance.

The PCMM controller is programmed using Kollmorgen Automation Suite's (KAS) Integrated Development Environment (IDE) and is plug-and-play compatible with Kollmorgen's broad range of motion control solutions.

KAS will help you reduce development time through easy-to-use and programming interface, built in utilities and configuration screens, and single-click simulation.

PCMM™ Features and Integration

Hardware Features

- Up to 1.2GHz CPU meets the performance requirements for a broad range of machines
- Up to 32 axes of synchronized path control and 128 axes of coordinated motion
- 100BaseT connection supporting TCP/IP, MODBUS, EthernetIP®, Profinet® to host PLC, computer, or network to easily interface with most manufacturing systems
- Cycle times as low as 250 µs
- Alphanumeric display for fast diagnostics and system troubleshooting
- Removable SD memory card for simple backup/restore and file storage
- On-board digital I/O with support for expansion I/O via EtherCAT
- Compact size reduces cabinet space and cost

Software Features

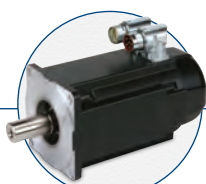
- IEC 61131-3 programmable automation and motion controller
- EtherCAT master for high-performance motion and device synchronization
- PipeNetwork™ motion engine for visual programming
- Embedded RTOS for guaranteed performance and stability
- Integrated webserver for remote diagnostics and status checking
- Ideal design for modular machines and flexible manufacturing systems

System Integration

- Seamless integration with Kollmorgen's AKD® servo drives, AKM® rotary servomotors, AKI® HMIs, and AKT® fieldbus I/O modules for complete automation solution
- Network communication via OPC, MODBUS, TCP/IP, UDP, and common fieldbus for fast integration into your machine or factory
- Intuitive EtherCAT configuration tools built into KAS IDE simplifies network configuration
- Integrated Kollmorgen Workbench® for rapid servo tuning and machine optimization



HMI



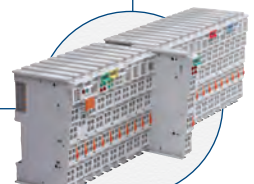
AKM® Servo Motor



AKD®-N Servo Drive



AKD® Servo Drive

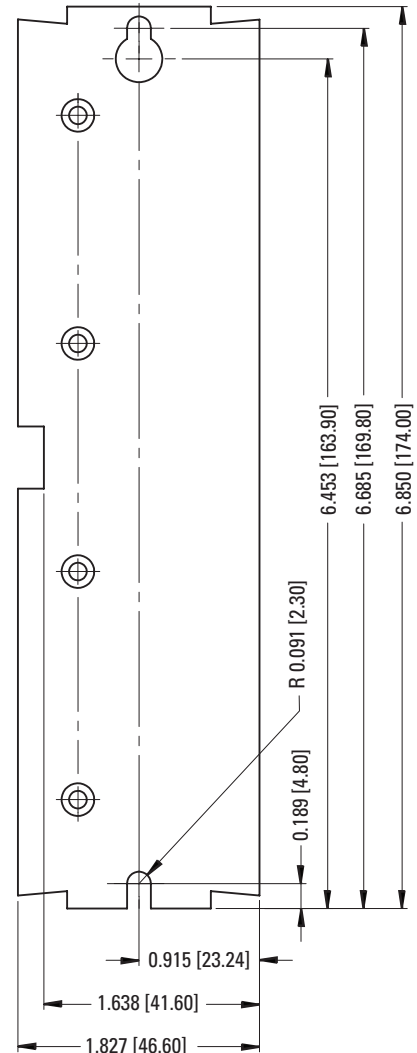


I/O



General Features and Specifications

| | |
|-----------------------|--|
| Processor | Available with 1.2GHz or 800MHz CPU |
| Internal Memory | 64 MB Flash memory for program storage |
| External Memory | Removable SD card (not included) |
| Input Power | 24 Vdc @ 1.25 A |
| Operating Temperature | 0 °C - 40 °C |
| Sealing | IP20 |
| Local I/O | 6 digital inputs, 2 digital outputs |
| Motion Network | EtherCAT, max 4kHz update rate |
| PLC Programming | IEC-61131-3, support for all 5 languages |
| Motion Programming | PLCopen or PipeNetwork® |
| HMI Programming | KVB programming for AKI panels |
| Dimensions | 174mm (H) x 46.6mm (W) x 111.5mm (D) |
| Certifications | CE / UL (planned) |



Dimensions in inches [mm]

PCMM™ Nomenclature

AKC – PCM – M1-120 – 00N – 00 – E00

① ② ③ ④ ⑤ ⑥

| | | | |
|-----------------|---|---------------|--------------|
| ① Family | AKC = Advanced Kollmorgen Controller | | |
| ② Model | PCM = PCMM | | |
| ③ Processor | MC-080 = 800 MHz Standard Multi-axis Controller | | |
| | M1-120 = 1.2 GHz High Performance Multi-axis Controller | | |
| ④ Hardware | 00N = No HW options | | |
| ⑤ Options | 00 = (reserved) | | |
| ⑥ Documentation | 000 = Standard | E00 = English | D00 = German |

Software: Programming and Utilities

KAS IDE is the all-in-one programming, configuration, and diagnostic tool.

- Embedded web-server provides secure remote access from any web-browser for quick diagnostics, machine status-checking and application start/stop/resume/download
- Launch Kollmorgen Visualization Builder (KVB) from KAS IDE to create custom HMI screens for machine operation
- Integrated AKD® Workbench for easy drive commissioning and tuning
- Multichannel digital scope for machine verification and troubleshooting
- One-click simulation for easy software test and validation

