KOLLMORGEN ®

Because Motion Matters™

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 UDP, HTTP, Modbus® TCP, Ethernet/IP™, and PROFINET® communication to host PLC, computer, or network to easily interface with most manufacturing systems
- Industry-leading 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
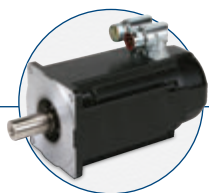- Compact size reduces cabinet space and cost

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 UDP, HTTP, Modbus® TCP, Ethernet/IP™, and PROFINET® for fast integration into your machine or factory
- Intuitive EtherCAT configuration tools built into KAS IDE simplifies network configuration
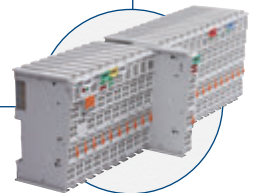- Integrated Kollmorgen Workbench® for rapid servo tuning and machine optimization

| HMI | AKM® Servo Motor | AKD®-N Servo Drive | AKD® Servo Drive | I/O |

General Features and Specifications
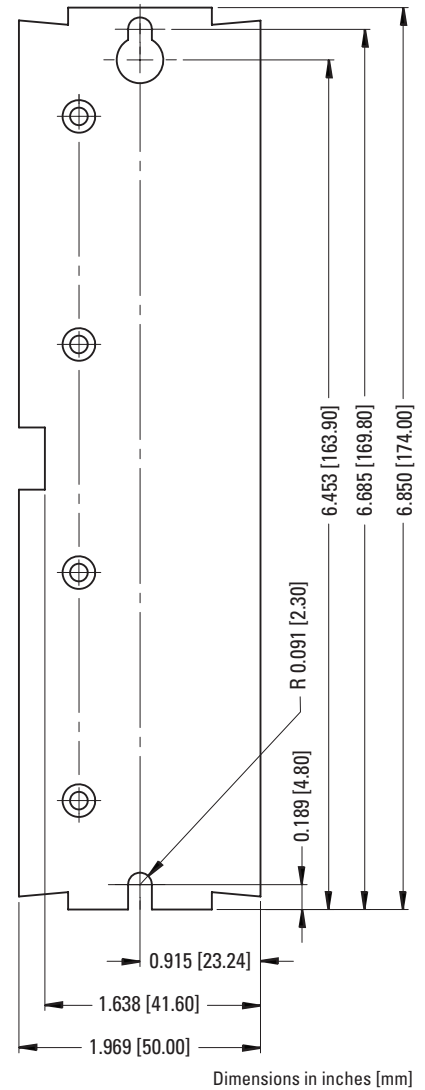
Processor	Available with 1.2GHz or 800MHz CPU
Internal Memory	64 MB Flash memory for program storage
External Memory	Removable SD card slot (SD card not included)
Input Power	24 Vdc @ 1.25 A
Operating Temperature	0 °C - 55 °C
Sealing	IP20
Local I/O	6 digital inputs, 2 digital outputs
Motion Network	EtherCAT, 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	174 mm (H) x 50 mm (W) x 111.5 mm (D)
Certifications	CE / UL

PCMM™ Nomenclature

AKC – PCM – M1-120 – 00N – 00 – E00
❶   ❷   ❸   ❹   ❺   ❻

❶ Family		AKC = Advanced Kollmorgen Controller		
❷ Model		PCM = PCMM		
❸ Processor		MC-080 = 800 MHz Standard Multi-axis Controller		
		M1-120 = 1.2 GHz High Performance Multi-axis Controller		
❹ Hardware		00N = No HW options		
❺ Options		00 = (reserved)		
❻ Documentation	000 = Standard	E00 = English		D00 = German

Dimensions in inches [mm]

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