



MOTION CONTROLLERS – THE A-SERIES

Compact. Scalable. Powerful.

NAVIGATE INTO THE FUTURE WITH THE A-SERIES BY AMK.

The A-series motion controllers are your compact, fully scalable all in one solution.
The system kit includes everything you need to control your individual machines and systems.
From hardware to programming software and diagnostics.

Control cabinet controller



smartPanel version:
A unit comprised of a controller
and touch display

Four interface versions for the right connections.



MOO

- Ethernet LAN
- USB
- EtherCAT Master
- CANopen Master



MC0 with cross-communication

- Ethernet LAN
- USB
- EtherCAT Master
- CANopen Master

**The following
slave options
are available:**

- EtherCAT
- Profinet IO
- Ethernet IP
- CANopen
- Profibus DP



MOE with I/Os

- Ethernet LAN
- USB
- EtherCAT Master
- CANopen Master
- I/Os in 1- or 3-wire technology



MCE with cross-communication and I/Os

- Ethernet LAN
- USB
- EtherCAT Master
- CANopen Master
- I/Os in 1- or 3-wire technology

**The following
slave options
are available:**

- EtherCAT
- Profinet IO
- Ethernet IP
- CANopen
- Profibus DP

PRECISELY SCALE THE A-SERIES FOR YOUR TASKS.

You can choose between control cabinet controller and smartPanel version, which are each available in two different performance classes. In addition, we offer you four interface versions with I/Os for direct connection and with a fieldbus master and slaves for modular machines and systems.

Two performance classes to meet your requirements.

	A4	A6
Processor	ARM11 with 532 MHz	Dual-Core Atom with 2 x 1.6 GHz
RAM	256 MByte	2 GByte
Flash memory	256 MByte	4 GByte
Non-volatile memory	128 KByte	128 KByte
Output	50.000 instructions/ms	600.000 instructions/ms
	ARM processor with 532 MHz as a smartPanel version with a resistive 7" display	Dual-Core Atom processor with 2 x 1.6 GHz as a smartPanel version with a 7" or 15" glass display

Overview of the highlights:

- Freely programmable with CODESYS according to IEC 61131-3 • High-precision synchronization of multiple axes with only a single controller
- Cross-communication in real-time across several levels, synchronized with high precision • EtherCAT master and slave (optional)
- Data exchange with other programs via OPC server, connection to the ERP system • Real-time-Linux
- Non-volatile: Process data memory without battery • No UPS necessary • No rotating components

The smartPanel versions for both performance classes.

			
	A4D-Mxx-07T	A6D-Mxx-07P	A6D-Mxx-15P
Types	A4D-M00-07T A4D-MC0-07T A4D-M0E-07T A4D-MCE-07T	A6D-M00-07P A6D-MC0-07P A6D-M0E-07P A6D-MCE-07P	A6D-M00-15P A6D-MC0-15P A6D-M0E-15P A6D-MCE-15P
Display data	7" color TFT Diagonal: 17,8 cm WVGA 800 x 480	7" color TFT Diagonal: 17,8 cm WVGA 800 x 480 P-CAP Touch	15" color TFT Diagonal: 38,1 cm WVGA 1024 x 768 P-CAP Touch
Protection class for front	IP65/IP20	IP65 and IP69K/IP20	IP65 and IP69K/IP20
Visualization	WebVisu: integrated Optional: QT	WebVisu: integrated Optional: QT and Windows Visualization	WebVisu: integrated Optional: QT and Windows Visualization
Dimensions	220 x 160 x 81 mm	220 x 160 x 81 mm	410 x 310 x 84 mm
Weight	1.2 kg	1.7 kg	4.5 kg



THE DECENTRALIZED VERSION: AMKASMART iSA

The decentralized iSA controller gives you the option of designing your entire machine without any control cabinets. This controller also has a three-phase connection, which provides an integrated DC-BUS power supply to all decentralized AMK drives.

The iSA, a powerful motion controller with a Linux operating system, provides decentralized PLC intelligence. Cross-communication between various fieldbuses enables master/slave operation. EtherCAT is used as the fieldbus master. The fieldbus slave version is available with EtherCAT, Ethernet IP, Profinet IO, Profibus DP or CANopen. This lets users easily perform gateway functions in the field.

	iSA
Processor	ARM11 with 532 MHz
RAM	256 MByte
Flash memory	256 MByte
Non-volatile memory	32 KByte
Ethernet	1 x 10/100 Mbits/s
Fieldbus master	EtherCAT
Fieldbus slave (optional)	EtherCAT, Profinet IO, Ethernet IP, Profibus DP, CANopen
I/Os	4 digital I/Os
Programming	IEC 61131-3, CODESYS, optional PLCopen
Performance	50,000 instructions/ms
Visualization	iSA-VIS for WebVisu or QT
Protection class	IP65
Ambient temperature	0 - 50°C
Power supply	Integrated power supply
Input voltage in network	3 x 400 to 480 V AC \pm 10%, 47 to 63 Hz
DC-BUS voltage transfer	300 - 720 V DC
DC-BUS cut-off threshold	850 V DC
DC-BUS rated current	8 A
Dimensions	293 x 100 x 75.6 mm
Weight	2.2 kg



AMK Arnold Müller GmbH & Co. KG
Drives & Controls

PO Box 13 55
73221 Kirchheim/Teck, Germany

Gaußstraße 37-39
73230 Kirchheim/Teck, Germany

Phone: +49 70 21/50 05-0

Fax: +49 70 21/50 05-199

info@amk-group.com
www.amk-group.com