



## SPECIFICATIONS

# AMC3

## ADVANCED MACHINE CONTROLLER

### Multi-axis motion controller/ machine controller with stepper drives

#### Description

The AMC3 stepper controller is capable of controlling the motion of up to 3 stepper axes as well as having an integral PLC and analog output functionality. The AMC3 can be supplied with internal drive amplifiers in a single enclosure, combined with a fully functional front panel interface.

Stepper controllers are ideally suited to a range of applications requiring the positioning of light to medium loads at moderate speeds, where the cutting forces on the controlled tool head are low and not particularly variable.

Typical applications for the AMC3 stepper controller are plotting tables, routing/engraving tables where the amount of material being removed in a single pass is limited, liquid dispensing, data acquisition, pick and place and point-to-point applications.



A simple, intuitive menu structure allows all of the many features of the AMC3 to be selected using three soft keys. In addition the graphic display is used for job verification and status reporting.

#### Benefits

- Increased machine productivity.
- Can be used as part of a reliable PC based machine control system.
- Configurable features support numerous applications.
- Precise high speed control of 3 stepper axes.
- A programmable analogue output for spindle speed control, or laser power control, or dispense rate control.
- Integral PLC with 8 inputs and 4 outputs.
- Programmable event subroutines automatically control external devices including cutters, dispensers, part loading and unloading.
- 21 key keyboard gives immediate access to machine functions.
- 4 pressure sensitive machine jog keys make precise manual machine positioning simple.
- 2 line alphanumeric display gives access to the numerous system features via menus and soft keys.
- Menus can be displayed in English, Spanish, German or French.
- WinAMC compatible - control can be driven remotely by custom PC based virtual control panels.
- Job programs are accepted in G&M code, HPGL, ESSI, and GPS protocols at baud rates up to 115K via an RS232 interface.
- One small rugged enclosure designed for use in harsh industrial environments.
- Integrated machine and controller test features.
- Plug in cards make maintenance simple.
- Reliable, reduced down-time.

# Technical Specifications

## AMC3 ADVANCED MACHINE CONTROLLER

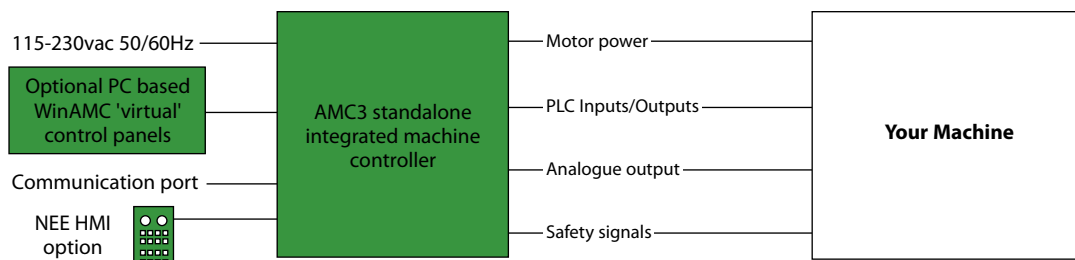
Max. No. of Axes	3
Max. internal drive power	600W
Max. steps per sec.	400,000 per axis
RS232 ports	1 (2*)
Total user inputs	8
2 Wire Proximity. Inputs (9 volt)	4
User Inputs (500 µS)	4
Total user outputs	4
60V 1A relay	2
User Outputs 24VDC	2 at 0.5 Amp for high speed solenoid
Analogue Output – 8 bit isolated	1
Internal Drive options	1.75 to 5amp 60V micro-stepping
Control Panel/Display & System STOP switch	21 Keys + 4 pressure sensitive jog keys, 2 line alpha display
Enclosure size (cm)	45 x 16 x 26
System weight	17 kg
Custom units to your specification	Yes
14 MHz processor	Yes
150 Kb Job memory	Yes (1.5 Mb*)
Extra 24 Inputs, 24 Outputs	Yes*

\* Extra cost option

HMI Interface	Yes
Integral Drive power supply	Yes
0.5 HP DC spindle drive	Yes*
Logic and Opto power supply	Yes
Control panel PCB set only	No
Cased system	Yes

Firmware options	
WinAMC Interface	Yes*
3D Capability	Yes*
Tangential axes	1*
Teach mode (digitise)	Yes*
Tool length/cutter diameter offsets	Yes*
Backup and Skip	Yes*
Customer specific menu structure	Yes*
Closed loop spindle control	Yes*
Laser pulse triggering based on distanced moved	Yes*
Error Compensation Mapping	Yes*

## Typical System



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