

# SPECIFICATIONS

# AMC-B

## ADVANCED MACHINE CONTROLLER

Smooth high speed motion - Cost effective high performance solution  
 Suitable for stepper or servo motors from one controller - Bookcase mounting

### Description

The AMC-B series of controllers deliver the same high level of performance and features as the other AMC controllers in the range. However, they are supplied in a driveless bookcase style enclosure and provided as a machine control module for integration into a complete motion control system.

The AMC-B controller can be purchased as either a fixed (factory configured) 3 or 6 axis stepper or servo controller or as a hybrid controller with individually jumper configurable stepper or servo axes.

The AMC-B is supplied in 2 variants with either 3 axes (AMC-B3) or 6 axes (AMC-B6) of motion control. It is ideally suited to system integrators who prefer to use a particular brand of drive module. The controller is supplied with an integrated PLC, analogue output and integrated safety circuit.

Each axis is provided with an individual connector for ease of installation. A screw terminal breakout box is also available for the general I/O connector to further speed up wiring and installation. Connectivity is also provided for the full range of NEE handpad options.



AMC-B6 controller shown with optional drive chassis

AMC-B controllers are open architecture, accepting data in HPGL, ISO G&M code, ESSI and RS274d/word address formats. NEE continually work with many CAD package manufacturers to ensure that they have up to date NEE driver information for their post processors.

### Features

<b>Drive Interface</b>	3 or 6 axes, either factory set to provide either stepper or servo drive signals or individual as jumper configurable axes.
<b>Case</b>	Bookcase style enclosure with mounting brackets for assembly to the front or rear panel, removable side panels for component access.
<b>Front Panel</b>	2 character diagnostic display, indicator LEDs and user connections.
<b>Inputs</b>	20 Inputs, (14 user inputs referenced to 24VI, 6 datum inputs for either 2 or 3 wire detectors.)
<b>Outputs</b>	12 Outputs, all high sided and referenced to 24VO, 24 volt power supply sourcing up to 1.5 Amps for outputs.

<b>Analogue</b>	1 x 11 bit isolated analogue output, with fully floating N/O contact for Analogue On function.
<b>Safety</b>	Connection to 2 channels of normally closed, volt free, switch from Emergency Stop (not supplied) connections for external volt free feedback contact in your safety system and relay system giving dual switched 24VDC output @ 100ma for external safety use.
<b>Memory</b>	5-year battery backed RAM as standard, 150K on B3, 1.5Mb on B6.

# Technical Specifications

## AMC-B ADVANCED MACHINE CONTROLLER

Max. No. of Axes	6
Max. steps/encoder edges per sec.	400,000 stepper per axis 4,000,000 servo per axis
Encoder inputs	3 or 6
Motion DAC's	3 or 6
RS232 ports	1 (3*)
Total user inputs	20 (32*)
2 Wire Proximity. Inputs (9 volt)	6
User Inputs (10 µS)	4
User Inputs (500 µS)	10 (22*)
Total user outputs	12 (20*)
User O/Ps 24VDC @ 0.25 Amp	10 @ 100uSec (18*)
High speed O/Ps 24VDC @0.05 Amp	Option: 2 @ 1uSec RL = 1K0
24VDC User Output Supply	1.5 Amp
Analogue Output – 11 bit isolated	1
Control Panel/Display & System STOP switch	Connectors for a range of NEE HMIs
Enclosure size (cm)	8 x 26 x 26
System weight	4 kg
Custom units to your specification	Yes
1.5 Megabyte Job memory	Standard on B6 (150 Kb B3)
Up to 256 Digital I/O	Yes*
PLC Interface	Yes*
HMI Interface	Yes
Automatic Height Control inputs	4 (requires interface)
Pulsed Laser power control output (160Hz to 10kHz)	Yes*

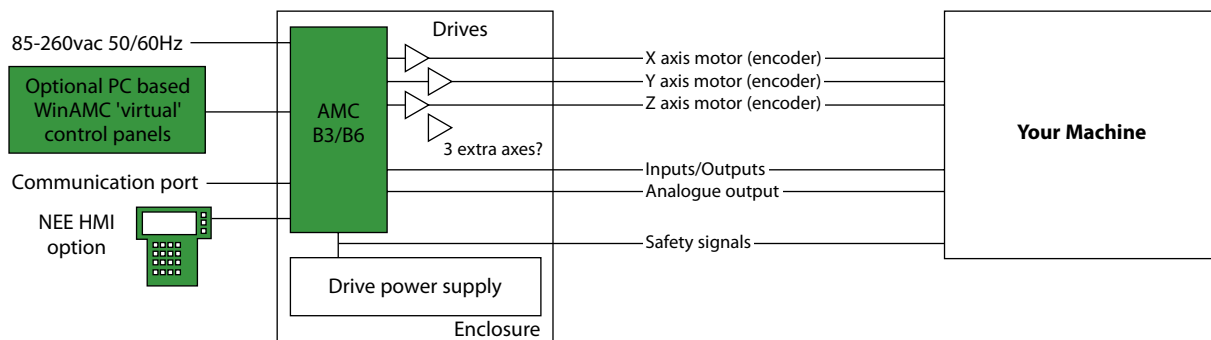
\* Extra cost option

Safety relays (Meets Machine Safety Regulations Cat 3)	Yes*
Remote Keypad + Interface, 'pulse wheel' jog	Yes
Logic and Opto power supply	Yes
Cased system	Yes
PC based servo tuning analysis	Yes (Servo)
Graphic Display (256 x 64 pixels mono)	Yes*

### Firmware options

WinAMC Interface	Yes
3D Capability	Yes*
Tangential axes	4*
Teach mode (digitise)	Yes*
Tool length/diameter offsets	Yes*
Backup and Skip	Yes (requires WinAMC)
PWM Outputs (frequency & duty cycle control)	2*
Encoder Following	Yes (Servo)
Inkjet printer interface	Yes *
Customer specific menu structure	Yes*
Closed loop spindle control	Yes
Laser pulse triggering based on distance moved	Yes*
Error Compensation Mapping	Yes*
Vision Interface	Yes
Automatic Height Control	Yes*

## Typical System



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