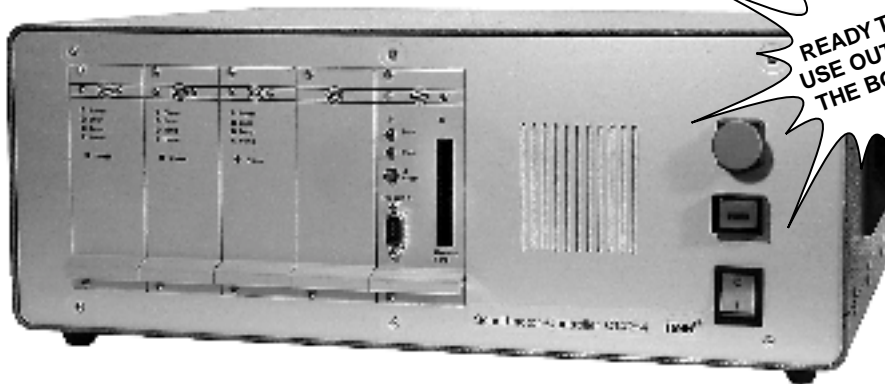




C-Series C142 Machine Controller Eurocard DIN Packaged Systems

FEATURES

- ◆ Available as 2- or 3-axis CNC Controller
- ◆ Remote START/STOP/RESET
- ◆ Bidirectional serial communication at up to 19200 baud
- ◆ 32K of on-board memory, capable of holding over 1200 3-axis motion
- ◆ Built-in forced air ventilation for continuous duty
- ◆ Screw terminal connectors on rear panel for easy I/O hook-up
- ◆ LED status display on front panel
- ◆ Commands can be executed as a "batch program" or each command can be executed in a command-by-command basis
- ◆ All power supplies are built-in & wired up
 - Motor: 70V / 6A for each axis
 - Logic: 5V / 1.5A
 - I/O: 12V / 1A, 24V / 1A
- ◆ Comes fully assembled & **READY TO USE**



**READY TO
USE OUT OF
THE BOX!!!**

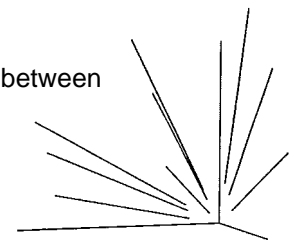
MOTION CAPABILITIES

Linear Interpolation

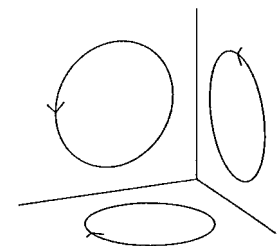
- True step-by-step linear interpolation during acceleration, deceleration & all points in between
- Interpolation on any of 1 through 3 axes at rates up to 10K/sec.
- Motions up to $\pm 8,000,000$ steps
- Switch-selectable acceleration/deceleration
- Can be programmed in both incremental & absolute coordinates

Circular Interpolation

- True step-by-step circular interpolation during acceleration, deceleration and all points in between
- Maximum error of ± 1 step from a true circle for any radius up to 2,000,000 steps
- Continuous arcs without stopping at axis boundaries
- Interpolation on any 2 of 3 axes at pulse rates up to 8K/sec.



Linear Interpolation



Circular Interpolation

INPUTS/OUTPUTS

- 8 optically isolated inputs at up to 24V
- 8 optically isolated outputs at up to 50V / 500mA
- 8 open collector outputs at up to 50V / 500mA

NOTE: This controller is **CE** compliant.



C-Series C142 Machine Controller Eurocard DIN Packaged Systems

STEPPER AMPLIFIERS

- Each Stepper Motor Amplifier (model HL1100M313302) can produce up to 6A at 70V
- Total fault protection against:
 - Short circuit across phases
 - Short circuit to ground
 - Over/under voltage
 - Overtemperature

APPLICATIONS

This system is recommended for full production systems on any machine in our catalog. It is suitable for continuous duty production systems.

The C142 Machine Controller consists of:
 One C142 enclosure
 Two or three stepper drivers, HL1100M313302
 One interface card 5.0 I/O, HL1200M325550
 One serial computer cable, HL1700M2784

Catalog Number	Part Description	Dimensions	Weight, lbs.
HL1300MC142	C142 3-Axis Controller	20.3" x 11" x 6.7"	33
HL1300MC142-2	C142 2-Axis Controller		31

ACCESSORIES

Catalog Number	Part Description
HL1100M313302	Stepper Motor Amplifier Card
H25Z61-DS1235AB	Battery-backed Memory

For memory card and additional accessories, see page 166.

SOFTWARE / PROGRAMMING

- Direct control through simple ASCII codes.
- Can be programmed via many third-party software packages.
- PAL-English like programming system (included).

