



**Computer Weld  
Technology, Inc.**

# MSC-1000™ MICRO-STEP CONTROLLER

## MSC-1000™

The MSC-1000™ Micro-Step Controller is a microprocessor based Stepper Motor Controller designed to operate with Computer Weld Technology's HSA-2000™ and /or VSA-2000™ precision slide assemblies. The "Micro-Step Controller" can be used to interface other stepper motor driven components with the appropriate mechanical and electrical specifications to the WSC-1000™ Weld Sequence Control. When used with the "Weld Sequence Control" the MSC-1000™ receives position and velocity command data from the WSC-1000™ by means of a Local area Network (LAN) making the unit convenient and easy to install and simple to use.



Computer Weld Technology's "Micro-Step Controller" can be used as a stand-alone control when programmed directly from a personal computer or terminal, and has the ability to store up to 50 move and / or velocity commands.

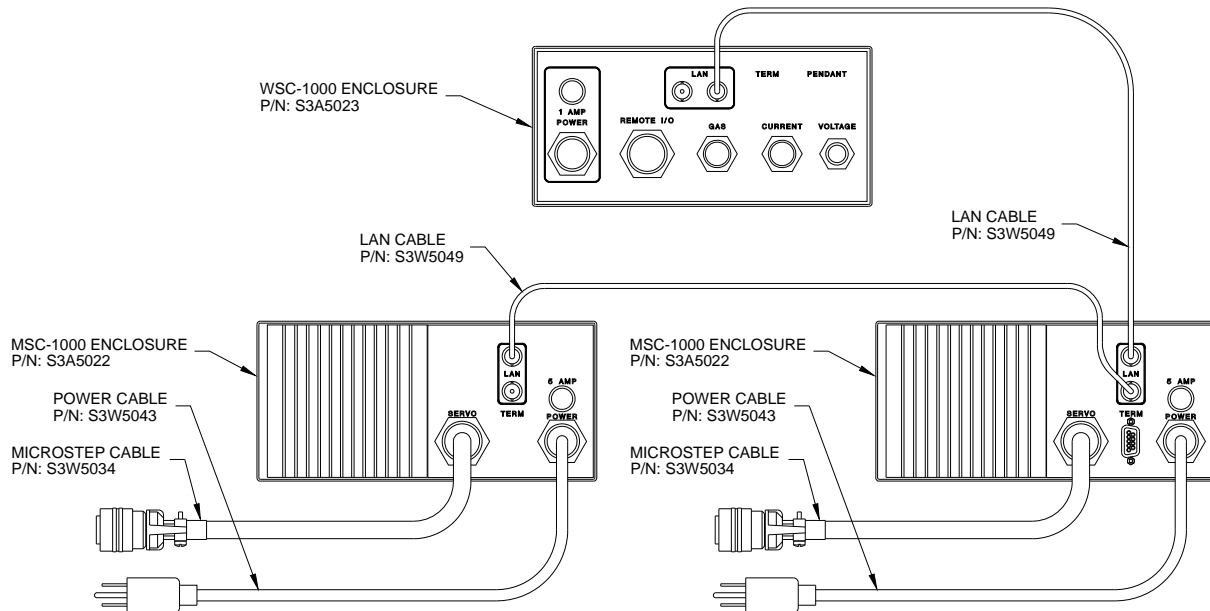
## FEATURES

- Compact / Lightweight design
- RS-232 Serial Port
- On board storage for up to 50 move commands
- Flexible design
- Operates on Computer Weld Technology's LAN system

## BENEFITS

- Usable in confined areas
- Permits off-line programming, system configuration and remote control
- Off-line programmable
- Provides expanded operational capability
- Can be interfaced with other manufacturer's equipment
- Facilitates ease of installation and operation

# MSC-1000™ SPECIFICATIONS



## MECHANICAL SPECIFICATIONS

### General Specifications

<b>Dimensions:</b>	4.0" H x 8.5" W x 11" L (102mm x 165mm x 280mm)
<b>Mounting Dimensions:</b>	7.50" W x 8.50" L 4 ea. 10-32 blind hole fasteners
<b>Weight:</b>	12 lbs. (5.44 kg)
<b>Power Input:</b>	120 ± 10% vac 50 / 60 hz @ 5.0 amps
<b>Operating Temperature:</b>	-10°F to +140°F (-23°C to +60°C)

### Control Specifications

<b>Motor Output Current:</b>	1.0 - 7.0 amps peak each phase
<b>Motor Output Voltage:</b>	1.5 - 10.0 volts peak each phase
<b>Current Profile:</b>	Sine / Cosine or Parabolic Sine / Cosine
<b>Limit with Inputs:</b>	CW and CCW 5.0 vdc active low inputs with internal 4.7K ohm pull up resistor
<b>Step Resolutions:</b>	10 steps / step; 1 / 4 step or 1 / 2 step (user definable)
<b>Velocity:</b>	10 - 5000 steps / sec
<b>Acceleration:</b>	10 - 10000 steps / sec <sup>2</sup>
<b>Index step count:</b>	1 - 65535 steps (user scalable)
<b>Communications:</b>	RS-232-C 9 pin serial port 2 WSC-LAN BNC serial ports

Note: Specifications subject to change without notice.