



**Computer Weld  
Technology, Inc.**

# DMC-500™

## D C MOTOR CONTROL

### DMC-500™

The DMC-500™ D C Motor Controller is a SCR motor speed controller using an embedded micro controller to provide motor speed regulation and torque compensation. The controller can be used to control permanent magnet (PM) or shunt wound field motors up to 1/4 hp and is designed to be used with the WSC-1000™ Weld Sequence Controller to control linear DC drive motors for wire feed and or travel speed functions. The DMC-500™ provides speed and torque regulation using an optical encoder or phase sampled Back EMF. The embedded controller provides precise motor braking and anti-plugging features to extend motor life.



Computer Weld Technology's DMC-500™ D C Motor Controller can be used as a stand-alone control, or with the WSC-1000™ Thru-Arc™ System providing motor control functions for DC motors from 1/10 h.p. to 1/4 h.p.

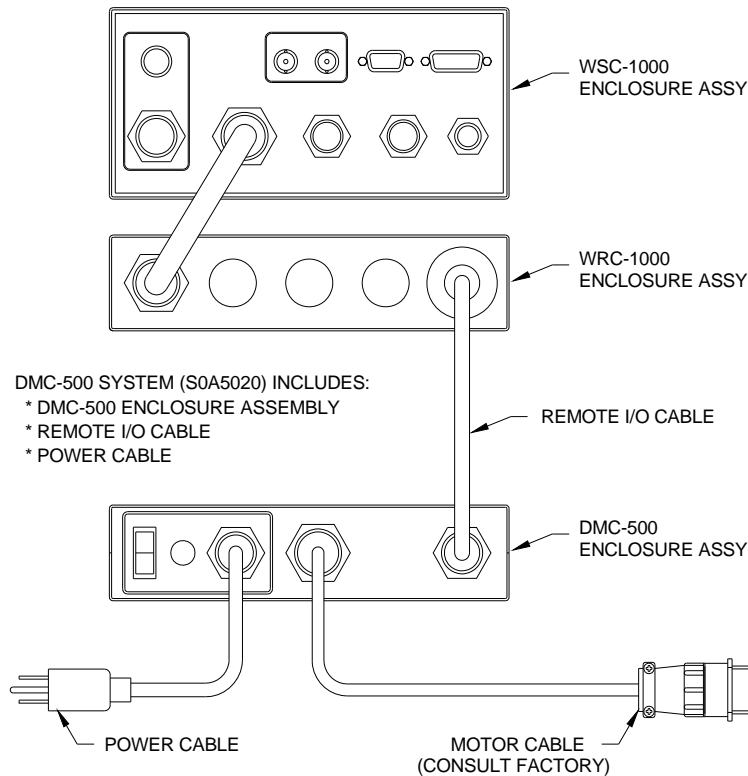
### FEATURES

- Embedded micro-controller
- Compact / lightweight design
- Flexible design
- Operates with WSC-1000™
- Unique anti-plugging feature
- Precise motor braking

### BENEFITS

- Provides precise motor control function
- Usable in confined areas
- Can be interfaced with other manufacturer's equipment
- Facilitates ease of installation and operation
- Eliminates wire sticking in weld puddle
- Provides extended motor life

# DMC-500™ SPECIFICATIONS



## MECHANICAL SPECIFICATIONS

### General Specifications

<b>Dimensions:</b>	2.0" H x 8.5" W x 11" L (51mm 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>	5 lbs. (2.27 kg)
<b>Operating Temperature:</b>	-10°F to +140°F (-23°C to +60°C)

### Electrical Specifications

<b>Power Input:</b>	120 VAC $\pm$ 10% @ 5.0 amps
<b>Armature Current:</b>	0.5 - 3.0 amps
<b>Armature Voltage:</b>	0 - 100 vdc
<b>Field Current:</b>	2.0 amps maximum
<b>Field Voltage:</b>	110 vdc nominal
<b>Encoder Input:</b>	5 vdc or 15 vdc optical encoder 60 lines / RPM Max Frequency Input: 3.0 KHz
<b>Encoder Output:</b>	Isolated 24 vdc output pulse
<b>Forward Input:</b>	24 vdc @ 20ma (Active High)
<b>Reverse Input:</b>	24 vdc @ 20ma (Active High)
<b>Speed Input:</b>	0 - 10 vdc @ 0.1 ma

Note: Specifications subject to change without notice.