Add-On Weld Process Controller

The Thermal Arc WC-1, Controller allows a compact packaged micro-processor system to be added onto a Thermal Arc Ultima-150™ or WC-100B Component plasma welding package to provide accurate, and repeatable parameter control over the entire welding system. The Controller provides a full-featured current Pulser to aid in controlling warpage, penetration and the weld puddle. The Sloper function is designed to permit the development of a complete sequence of operation for a specific welding job. Two programmable outputs are featured, one is used to control the Plasma power source and the second, controls a Cold Wire Feed Motor Drive Control. The Controller provides 32 user selectable weld schedules.

WC-1 Add-On Microprocess Controller

Features:

• 32 Weld Schedules
• Program/Run key lock switch
• 8 status LED’s
• 9 Optically isolated inputs
• 5 solid-state isolated relay outputs
• Easy Three button programming
• Large LCD back light Display View screen
• RS232 Port for Computer programming interface
• Controlled Weld Pulse Rate up to 500 Pulses/Sec

• Plasma Welding    • Plasma Brazing
• Plasma Overlaying

WC-1 Weld Processor Controller for Ultima-150 or WC100B packages
Specifications Information:

**WC-1 Microprocessor**

**Power Requirements:** 115/240 vac 50/60Hz @ 0.2kw

**Operating Temp:** 10 Degrees F to +140 Degrees F
(-23C to +60C)

**Dimensions:**
- **Height:** 5" (102mm)
- **Width:** 9" (165mm)
- **Depth:** 11" (280mm)

**Relay Outputs:** 115 VAC/VDC 1 amps normally open contact

**Switch Inputs:** 5 — 24 vdc @ 1.0 — 8.0 ma

**Analog Outputs:** 10vdc precision reference output. 10bit resolution (10mv resolution) Maximum output current 10ma. Output is short circuit protected.

**Encoder Input:** Pulse accumulator input 5.0vdc TTL level with 4.7K pull-up. Maximum input frequency 15khz.

Ordering Information:

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>WC-1 Process Controller</td>
<td>Cable Assemblies</td>
</tr>
<tr>
<td>600279</td>
<td>WC-1 to Ultima® 150 or WC100B (required) 9-4129</td>
</tr>
<tr>
<td><strong>Accessories</strong></td>
<td><strong>WF-100 Cold Wire Feed</strong></td>
</tr>
<tr>
<td>600280</td>
<td>For Cold Wire Feed ordering details see the WF-100 catalog pages.</td>
</tr>
</tbody>
</table>