The Advanced Control Systems PMC-328 Programmable Machine Controller is a simple and cost effective solution for the stand-alone control and power of any stepping motor driven machine. The PMC-328’s internal non-volatile memory enables programming for autonomous operation. Control can also be achieved via a host computer using simple ASCII commands, or ACS’s ControlSmartStep graphical programming interface. Up to 26 PMC-328s can be interconnected for multi-axis, multi-motor system integration.

**PMC-328 Features**

- Programmable motor winding current: 0.10 – 3.0 Amps /phase
- Internal Power Supply – 48VDC, 1.8A
- Programmable Resolution – 2,3,4,5, 6 or 8 Ministeps per full motor step
- 8 General purpose I/O lines
- 1 General purpose up/down counter
- 6 Dedicated Control Inputs – 2 Limits, 2 Jogs, Home, Program Run
- Nonvolatile 100 line memory for autonomous operation
- RS-232 serial communication rates up to 115.2k baud
- Addressable and Expandable to 26 PMC-328 Controllers
- ACS ControlSmartStep graphical motion application programming software

**PMC-328 Specifications**

**Electrical**
- Drive Current 0.10 – 3.0 Amps/Phase
- Input Voltage 115 or 230 Vac, 50-60Hz
- AC Power Slow Blow Fuse

**Motor Requirements**
- 2 Phase Bi-polar Stepping Motors, or
- 4-Phase Motors connected as 2 Phase
- 4, 6, or 8 Leads
- 0.10 – 3.0 Amp winding current
- 100% Duty Cycle

**Motor Operating Mode**
- Bi-Polar Chopper Drive
- Full Step or Half Step with Torque Compensation
- 3, 4, 5, 6 or 8 ministeps per full step

**Environmental Requirements**
- Operating Temperature -20°C to 50°C (-4°F to 140°F)
- Storage Temperature -20°C to 70°C (-4°F to 160°F)
- Humidity <95% non-condensing

**Dimensions**
- 2.0 x 3.8 x 8.8” (50.8 x 96.5 x 223.5mm)

**Mass**
- 39 oz (1.1kg)
**ACS ControlSmartStep Programming Software**

The PMC-328 Programmable Machine Controller can be programmed with ACS’s intuitive graphical interface by connecting a PC running Windows 95, 98, NT, 2000 or XP to the PMC-328’s RS-232 Port. ControlSmartStep begins the process with a visual configuration program that is used to set resolution, motor currents, top, constant and jog rates along with the ramp index and limits. The motor control program is easily constructed using the ControlSmartStep’s series of drop down motion commands. Each command to the motor can be tested individually or run as part of the completed program. The on-screen position indicator and counter provide ready position feedback during test or operation. Once complete, up to 100 lines of machine control programming is uploaded to the PMC-328’s nonvolatile memory for autonomous execution.

---

**PMC-328 Dimensions**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Unit</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width</td>
<td>in</td>
<td>3.80 [96.5]</td>
</tr>
<tr>
<td>Height</td>
<td>in</td>
<td>2.00 [50.8]</td>
</tr>
<tr>
<td>Depth</td>
<td>in</td>
<td>8.50 [216]</td>
</tr>
</tbody>
</table>

---

Advanced Control Systems Corporation designs and manufactures stepping motor drivers, integrated driver/controllers and standalone programmable machine controllers for scientific and industrial applications.

Advanced Control Systems Corp.
35 Corporate Park Drive
Pembroke, MA 02359
(781)829-9228 FAX: (781)829-9875
www.ACSMotion.com