Controls for Resistance Welding

EN2000

Dual Schedule/Dual Sequence S2H Controls

- Simple to Program
- Direct Reading Digital Data Display
- Simplified Design

Quality Tested to Performance Extremes
Each unit is tested to its maximum capability to assure performance at customary operating levels. ENTRON is the only resistance welding controls with the excellent performance history.

Dedicated Dual Schedule/Dual Sequence Controls
Designed for use with single phase welding machines, rocker arm, press type welders, robotic equipment, and special machines.

Features
- Spot Sequence
- Dual Weld/Dual Current Sequence
- External Schedule Select
- Error Outputs
- LED Status Indicators
- All Functions Displayed Simultaneously

Capabilities
- Two Schedules
- Repeat & Non-Repeat
- Weld & Valve Control Relays
- One Valve Output
- Dual Weld Programming
- Easily Programmed

Exclusive ENTRON two year warranty
**Advantages**

- **Design Simplicity**
  Design simplicity is the key to our ability to manufacture the highest quality weld control with the best delivery, least maintenance, and lowest out-of-warranty service in the industry.

- **Field Expandable**
  ENTRON can provide retrofit controls suitable for any manufacturer’s controls of any age, type or sequence for installation in the field.

- **Vault Closing Door Mechanism**
  D & T cabinet doors equipped with vault locking mechanism to ensure security.

- **Applications**
  EN2000 Single Contactor Controls can be applied to spot welders, special machines, or robotic equipment for welding.

- **Multiple Cabinet Options**
  Available in D & T cabinet styles with front or side-mounted control panels.
EN2000 Series Controls
Dual Schedule/Dual Sequence S2H Controls

Date: April 2006       Supercedes: March 2001

**SPECIFICATIONS**

**Absolute Count:** Push Button Data Entry with Simultaneous Digital Display
- Squeeze Count: 0 to 99 cyc, 50/60 Hz
- Weld Count: 0 to 99 cyc, 50/60 Hz
- Hold Count: 0 to 99 cyc, 50/60 Hz
- Off Count: 0 to 99 cyc, 50/60 Hz

Digital Phase Shift Current Control, 10 to 99% in 1% current steps,
all weld current functions
Dual Weld Count/Dual Percent Current Adjust –
  Front Panel and External Select
Non-Repeat: Single Schedule upon initiation
Repeat: Single Schedule repeated with pilot circuit held closed

**Additional Features**
- 87° First Half Cycle Delayed Firing, Anti-Saturation Circuit
- Dynamic Automatic Power Factor Equalization
- Dynamic Automatic Voltage Compensation, ±20% of Nominal Line
- Emergency Stop Circuit
- Interlocking Pressure Switch Circuit
- Single Stage Pilot/2 Stage Pilot
- Indicator Lights for all functions on display panel
- Valve Transformer: 150VA 230/460-115V, E, D & T Cabinets
  50VA 230/460-115V, S Cabinets
- One Valve output standard, all controls

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EN2000 Series Controls
Dual Schedule/Dual Sequence S2H Controls

The EN2000 Series Control is ideal for programming schedules for most welding applications for ferrous and some non-ferrous metals, multiple thickness of materials and special part configurations.

- Store Two Schedules
  Every parameter of each schedule individually accessible
  Each schedule can store 5 distinct and totally different parameters
  All schedules retained in memory with power off

- Single contactor circuit
  Single valve circuit
  Contactor failed detection

- Control can be INTERFACED with external Programmable Logic Control (PLC)

<table>
<thead>
<tr>
<th>CABINET STYLE &amp; DIMENSIONS</th>
<th>CONTACTOR STYLE &amp; RATINGS</th>
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<tbody>
<tr>
<td>STYLE</td>
<td>H</td>
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<td>-------</td>
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<tr>
<td>FP</td>
<td>279 mm 11”</td>
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<tr>
<td>S</td>
<td>222 mm 8-3/4”</td>
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<tr>
<td>E</td>
<td>533 mm 21”</td>
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<tr>
<td>D or T</td>
<td>610 mm 24”</td>
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All SCR contactors complete with temperature limit switch, except 150 ampere contractors.
Circuit Breakers available in D and T cabinets only. Consult factory for Circuit Breaker pricing. 100, 200 and 400 ampere Circuit Breakers are available in D and T cabinets with right hand, flange mounted operator installed within the cabinet. Consult factory for availability of 600 ampere Circuit Breakers.
See COMPREHENSIVE PRICE LIST for a complete list of Options, Circuit Breakers, Accessories and Special Features.