Controls for Resistance Welding

EN1001

Constant Current/Multiple Sequence Controls

**Features**
- Spot Sequence
- Pulsation Sequence
- Seam Sequence
- Up & Down-Slope
- Chained & Successive Modes
- External Schedule Select
- Process & Error Outputs
- Five Programmable Stepper Counters
- 50 Schedules
- Repeat / Non Repeat
- 3 Valve Outputs
- Schedule to Schedule copy

**Capabilities**
- Extended Functions accessible via the Front Panel make Board-mounted dipswitches virtually obsolete
- Front Panel layout permits quick access to all needed parameters
- Program only functions required
- Multiple weld programs
- Multiple current sequence
- Pre-Heat / Post Heat
- Multiple job schedule storage
- Quench and Temper
- Flash / Butt Welding
- Diverse schedule capabilities provide maximum application versatility

**Current Sensors:**
Secondary Flexible Rogowski Coil or Primary Coil.

Secondary Flexible Rogowski Coil permits direct secondary kilo-Ampere programming and reading. Monitoring with High and Low limits.

Automatic Tap Up/Range Down or Tap Down/Range Up indicator.

Toggle function displays kilo-Ampere or Percent Current. Function helps avoid setups in very low or very high percent phase shifts.

All sensors permit Current Monitoring with High and Low limits.

Simple secondary range setting requires no setup. Secondary operating range of 2kA to 100kA.

Quick primary setup. Control learns and adapts to any machine size when primary sensing is used.

Welding Transformer ratio measurements not required for proper Constant Current Operation in percent mode with primary sensor.

Secondary ampere programming is available when a primary sensor is used and transformer ratio is provided.

Exclusive ENTRON two year warranty
Expanded Capabilities
(Requires additional hardware)

• **Schedule Select 49 [S49] Option.** Allows direct binary selection and initiation of any of 50 schedules in Spot Mode. Switch Weld Current on the fly to any of 50 currents in Seam Mode.

• **IPSC Options**
  - **Integrated Pressure Control [IPC].** Weld Control stores an independent value of Pressure or Force in each of 50 Schedules. Associates Pressure with Squeeze time for concurrent valve actuation.
  - **Integrated Pressure Sensing [IPS].** Weld Control stores an independent value of Pressure or Force in each of 50 Schedules. Associates sensed Pressure with Pressure Switch input for Pressure/Force level weld triggering.
  - **Integrated Pressure Sense and Control [IPSC].** Weld control combines the previous two options into a full pressure control and monitoring system.

• **RS485 Communication.** Control can be networked along with 63 other units for remote programming and monitoring. Up to 32 Masters allow for grouping within a network. Up to 32 PC hosts allow for programming or statistical data collection or error monitoring.

• **RS232** provides Serial communication.

• **ENLINK for WINDOWS**
  Communication software provides PC and Laptop interface for remote programming and monitoring of EN1001 series controls. ENLINK for WINDOWS Communication software is included with RS485 option.

• **Memory Module [MM2]** is designed as a backup device for any EN1001 series control or as Copy/Download device for all Data from one Control to another.

• **Valve Select 1 of 7 [VS].** This option provides 7 additional decoded outputs from the 3 standard EN1001 series controls.

Distributed by:

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