



EN1000 Series Controls

Multiple Schedule/Multiple Sequence Controls

Date: April 2014 Supersedes: November 2012

SPECIFICATIONS

Absolute Count: Push Button Data Entry with Display

Squeeze Count:	0 to 99 cycles, 50/60 Hz
Weld Count/Heat Count:	0 to 99 cycles, 50/60 Hz
Cool Count:	0 to 99 cycles, 50/60 Hz
Hold Count:	0 to 99 cycles, 50/60 Hz
Off Count:	0 to 99 cycles, 50/60 Hz
Weld Impulse Counter:	1 to 99 Impulses
Slope Control/Up and Down Slope:	0 to 99 cycles, 50/60 Hz
Digital Phase Shift Current Control, 10 to 99% in 1% current steps, all weld current functions	
It is NOT necessary to program functions NOT required, program only functions required	



Standard RWMA/NEMA Programmable Functions

Including the following as examples:

- Up Slope and Down Slope
- Quench/Temper
- Pulsation Sequence
- Multi-Weld Count/Multi-Current Select
- Pre-Heat/Post-Heat
- Forge Delay
- Seam Weld (Continuous and Intermittent)

4 Cycle Modes

- Non-Repeat: Single Schedule upon initiation
- Repeat: Single Schedule repeated with pilot circuit held closed
- Successive: Upon each initiation, unique successive schedules are automatically selected
- Chained: Multiple schedules can be linked to operate sequentially upon a single initiation

Additional Features

- Error Code/Fault Outputs
- 87° First Half Cycle Delayed Firing, Anti-Saturation Circuit
- Dynamic Automatic Power Factor Equalization
- Dynamic Automatic Voltage Compensation, $\pm 20\%$ of Nominal Line
- Emergency Stop Circuit
- Interlocking Pressure Switch Circuit
- Single Stage Pilot/2 Stage Pilot, Beat/Non-Beat Operation
- Operational Lights: Power On
Weld Current
- Indicator Lights for all functions on display panel
- Valve Transformer: 150VA 230/460-115V, E, D & T Cabinets
50VA 230/460-115V, S Cabinet
- 3 Valve outputs standard, all controls
Valve select 1 of 7, optional

Exclusive ENTRON two year warranty

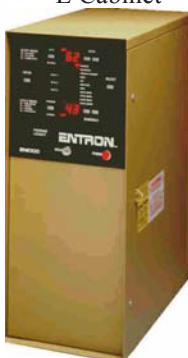
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D Cabinet



E Cabinet



T Cabinet



S Cabinet

The EN1000 Series Control is ideal for programming schedules for welding coated materials, aluminum, other non-ferrous metals, special alloys, multiple thickness of materials and many special part configurations.

- Store up to 50 UNIQUE SCHEDULES
 - Every parameter of each schedule individually accessible
 - Each schedule can store 11 distinct and totally different parameters
 - All schedules retained in memory with power off
 - It is NOT NECESSARY to program functions not required
 - Four Cycle Modes can be programmed for complex welding schedules
 - Select and Program up to 3 VALVE CIRCUITS, STANDARD
 - Independently selectable and programmable
 - Single contactor circuitry
 - Process control outputs
 - Additional Standard Features:
 - External Schedule Select
 - Contactor Failed Detection (Circuit breaker with shunt trip, optional)
 - Control can be INTERFACED with external Programmable Logic Control (PLC); Advanced interfaces available
- OPTIONS:**
- RS485 implemented with 2 wire ENBUS using non-proprietary protocol; Controls can be networked through remote terminals (RT4jr.) or use PC compatible ENLINK software to download, store or edit weld control data
 - RS232 Single point communications
 - IPS, IPC, IPSC, Integrated Pressure Sense, Control or Sense and Control Program 50 Unique Pressures, or Trigger Levels
 - MM2, Memory Module provides backup for all data of EN1000 Series Controls
 - S49, External Binary Select, allows remote binary selection of any of 50 schedules
 - Valve Select 1 of 7
 - Shunt Trip Breaker
 - Ground Fault Detection

CABINET STYLE & DIMENSIONS				CONTACTOR STYLE & RATINGS					
STYLE	H	W	D	AIR COOLED		WATER COOLED			
FP	279 mm • 11O	279 mm • 11O		PLEASE CONTACT FACTORY					
B	222 mm • 8-3/4O	222 mm • 8-3/4O	296 mm • 11-3/4O	150A	300A				
S	222 mm • 8-3/4O	222 mm • 8-3/4O	419 mm • 16-1/2O	150A	300A	1200A			
E	533 mm • 21O	222 mm • 8-3/4O	419 mm • 16-1/2O		300A	1200A	1800A	2200A	3200A
C	508 mm • 20O	406 mm • 16O	254 mm • 10O		300A	1200A			
D or T	610 mm • 24O	645 mm • 25-3/8O	254 mm • 10O			1200A	1800A	2200A	3200A
L	914 mm • 36O	797 mm • 31-3/8O	254 mm • 10O					2200A	3200A

All SCR contactors complete with temperature limit switch.

Consult factory for Circuit Breaker pricing. 100, 200 and 400 ampere Circuit Breakers are available in D & T cabinets with right-hand, flange mounted operator installed within the cabinet. Consult factory for availability of 600 and 800 ampere Circuit Breaker.

See COMPREHENSIVE PRICE LIST for a complete list of Options, Circuit Breakers, Accessories and Special Features.

Contact your ENTRON Controls
Representative or Your Local Resistance
Welding Equipment Source

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