



EN1003 Series Controls

Multiple Schedule/Multiple Sequence 3 Phase DC Controls

Date: April 2014

Supersedes: April 2006

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 Impluses
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
- Selectable 50/60 Hz. operation
- 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: 3) Power On
3) Weld Current
- Indicator Lights for all functions on display panel
- Indicator LEDs for pilot inputs and diagnostics
- Valve Transformer: 150VA 230/460-115V, All Cabinets
- 3 Valve outputs standard, all controls
- Weld Stepper



Exclusive ENTRON two year warranty

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EN1003

Style L Cabinet

914 mm x 797 mm x 254 mm
360x 31-3/80x 100

The **EN1003 Series Control** is ideal for machines that require either large secondary currents or, by design, have high power losses caused by ferrous metals in the throat of the welder, such as parts of the machine and/or welded parts.

- 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

- Process control outputs • External Schedule Select •

- Anti-Tiedown Initiations • Forge Delay • Versatile Weld Stepper •

- Control can be **INTERFACED** with external Programmable Logic Control (PLC); Advanced interfaces available

- Selected Heat used **SIMULTANEOUSLY** on 3 Contactor Outputs.

- Transformers can be connected in an outside delta, inside delta, or “Y” configurations.

- Optional Functions:

- Program Lockout Switch • Schedule Select • RS232 Port Interface •

- Remote Date Entry • Valve Select (One of Seven) Option •

CABINET STYLE & DIMENSIONS				CONTACTOR STYLE & RATINGS			
STYLE	H	W	D	AIR COOLED	WATER COOLED		
D or T	610 mm 240	645 mm 25-3/80	254 mm 100	Firing Circuit or 300 A	1200A		
LS or LF	914 mm 360	797 mm 31-3/80	254 mm 100	Firing Circuit or 300A	1200A	1800A	
HS or HF	1067 mm 420	949 mm 37-3/80	254 mm 100	300A	1200A	1800A	2200A

All SCR contactors complete with temperature limit switch.

Circuit Breakers available in L and H cabinets only. Consult factory for Circuit Breaker pricing. 100, 200 and 400 ampere

Circuit Breakers are available in L and H cabinets with right hand, flange mounted operator installed within the cabinet. Consult factory for availability of 600 and 800 ampere Circuit Breakers.

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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