

Controls for Resistance Welding EN1701

Mid Frequency Inverter Constant Current Controls



Features

- · Millisecond control of weld time
- Spot, Pulsation or Seam Sequence
- RS232 Port
- Programmable options: Slope, Pre-Heat, Quench, Temper, Post Heat
- Linked Programs
- External Schedule Select
- Event & Error Outputs
- 64 Programs
- Repeat / Non Repeat
- Earth Leakage Detection with Shunt Trip Breaker
- Isolation Contactor Timer
- Single/Dual Gun
- Programming in phase angle, kA or %

- Measurement Log
- 24 VDC flexible I/O (19 in 16 out); some mapable between weld functions, events and simple I/O sequences
- Dual Gun Stepper with Presets and Tip Dress Counter
- Diverse schedule capabilities provide maximum application versatility
- I/O Sequencer
- 4-20 mA or 0-10 V analog inputs and outputs provided for pressure sensing and control
- Program Select

Constant Current

- Control adjusts current output every millisecond.
- No setup necessary for constant current operation.
- Compensation is still available without secondary coil.
- When optional secondary coil is used, secondary amps are directly displayed.
- Primary current sensors built in.
- High, Low and Pre limits.
- Manual calibration via 2 set points for secondary coil.
- Pop-up current meter to assist programming.
- Maximum primary Amp limit.
- Auto secondary coil test.
- Control uses a dual loop feedback system to optimize its performance in terms of both speed and accuracy.
- Results of last weld available immediately.

Options

- Detachable 4 x 20 LCD Program Pendant (RPP1) with data backup
- ENLINK 1701
- Ethernet port
- Secondary coils
- Program Lockout
- Pressure Sensors
- Proportional Valve
- Isolation Contactor
- GFI for portable guns
- · Water Flow Switch

Expanded Capabilities (Requires additional software and/or hardware)

TO PROGRAM, YOU WILL NEED:

Program Pendant (RPP1)

Detachable, hand-held pendant provides access to all programmable variables and



displays current and status.

- OR -

ENLINK 1701

Communication software provides PC interface for



remote programming and monitoring of the EN1701 control.

OPTIONAL:

• Ethernet Card Provides ability to network multiple controls using ENLINK 1701.



• Pressure Sense and Control Hardware

Using provided analog I/O, add differential sensors, single-ended sensors, or ½" and 1¼" port proportional controllers.







• Secondary Rogowski Coils Available in 3", 6" or 12" diameters. Provides actual secondary amperage measurements.

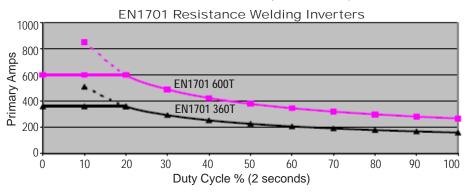
• GFI for portable guns

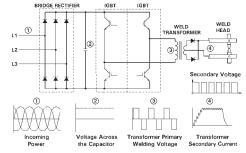


Specifications

	EN1701-360T	EN1701-600T	
Maximum output power @ 20% duty	234 kVA	390 kVA	
Maximum line input voltage	480 VAC @ 50/60 Hz	480 VAC @ 50/60 Hz	
Maximum output current	360 A	600 A	
Maximum continuous output current	161 A	268 A	
Maximum line input current per phase	209 A	347 A	
Continuous rms line current per phase @ 20% duty	93 A	155 A	
Breaker (standard) *	100 Amp 3 pole *	200 Amp 3 pole *	
Power factor	leading	leading	
Regulation feedback	secondary or primary	secondary or primary	
Current regulation accuracy	<u>+</u> 2%	<u>+</u> 2%	
Current regulation repeatability	<u>+</u> 1%	<u>+</u> 1%	
Inverter switching frequency	1 kHz	1 kHz	
Maximum averaging time	2 seconds	2 seconds	
Water flow rate	5 l/min	8 1/min	
Maximum water inlet temperature	30° C	30° C	
Transformers			
40 kVA	✓		
56 kVA 70:1	✓	✓	
76 kVA 54:1	✓	✓	
100 kVA 50:1		✓	

* Control must be ordered with 3 pole shunt trip breaker.







One year warranty offered on EN1701 Series Controls

Distributed by:		

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