



# Fine Spot Welder

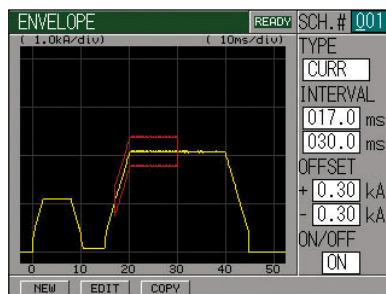
## IPB-5000A-MU

### DC Inverter Welding Power Supply

- Four control modes for process optimization for part manufacturing tolerances
- GOOD / NO GOOD determination signals if weld was successful providing instant feedback
- Displacement measurement indicates the amount of collapse the material exhibits during the weld.
- Envelope feature - allows users to set dynamic profile of limits around a setting.

#### KEY FEATURES

- **Control Modes** - Optimum control modes for obtaining ideal weld quality and consistency can be chosen from; constant current control, constant voltage control, combination of constant current and constant voltage control, and constant power control.
- **GOOD/NO GOOD determination** - The comparator feature allows to set upper and lower limits around the measured value of up to four parameters; which are current, voltage, power and resistance. When those values reach out of the limits, an error signal or a caution signal alarms.
- **Displacement Measurement** - Measures how much an electrode moves down because of material collapse during weld. Weld to displacement (option) - stops welding when displacement value reaches the set value.
- **Envelope** - The envelope feature allows dynamic limits to be set around a monitored waveform to ensure the same resistance change occurs at the same rate for every weld.

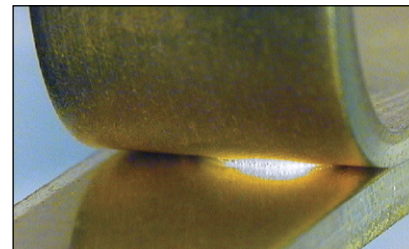


Red: envelope Yellow: current

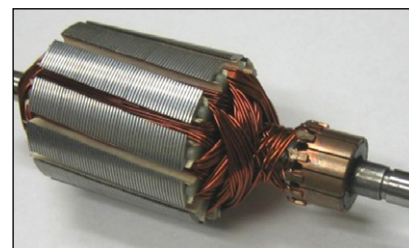
#### TYPICAL APPLICATIONS



Automotive sensor



Electrical busbar



Motor armature

## TECHNICAL SPECIFICATIONS

<b>Model</b>	<b>IPB-5000A-MU</b>	
<b>Power requirements</b>	Three phase, 200-240 VAC/380-480 VAC, 50/60 Hz	
<b>Primary frequency</b>	5 kHz	
<b>Primary current</b>	200 A	
<b>Feedback modes (Secondary supply)</b>	Constant current, constant voltage, Combination of constant current and constant voltage control, constant power	
<b>Time setting</b>	<b>Number of weld schedules</b>	127
	<b>Squeeze delay</b>	0000 – 9999 ms (1 ms increments)
	<b>Squeeze</b>	0000 – 9999 ms (1 ms increments)
	<b>Pre-check weld</b>	00.0 – 10.0 ms (0.2 ms increments)
	<b>Pre-check</b>	1 ms (fixed)
	<b>Upslope</b>	000.0 – 500.0 ms (0.2 ms increments)
	<b>Weld 1</b>	000.0 – 500.0 ms (0.2 ms increments)
	<b>Downslope</b>	000.0 – 500.0 ms (0.2 ms increments)
	<b>Pause</b>	00.0 – 99.8 ms (0.2 ms increments)
	<b>Upslope</b>	000.0 – 500.0 ms (0.2 ms increments)
	<b>Weld 2</b>	000.0 – 500.0 ms (0.2 ms increments)
	<b>Downslope</b>	000.0 – 500.0 ms (0.2 ms increments)
	<b>Hold</b>	000 – 999 ms (1ms increments)
<b>Current setting range</b>	0.40 – 6.00 kA	
<b>Current monitor</b>	0.00 – 9.99 kA	
<b>Displacement monitor</b>	-29.999 mm to 29.999 mm	

## TECHNICAL SPECIFICATIONS - TRANSFORMERS

<b>Model</b>	<b>ITD-360B6</b>	<b>ITB-780B6</b>
<b>Rated capacity</b>	10.2 kVA	17.4 kVA
<b>Rated primary voltage</b>	600/300 V (Rear Panel Jumper selection) See user Manual	
<b>Secondary voltage, no load</b>	9 V	13 V
<b>Maximum secondary current (Maximum duty cycle)</b>	4000 A (4%)*	6000 A (2.5%) @480 VAC * 4000 A (2.5%) @240 VAC *
<b>Cooling method</b>	Forced air cooling	
<b>Frequency</b>	5 kHz	
<b>Turns ratio of transformers</b>	66:1 @480 VAC 33:1 @ 240 VAC	46:1 @480 VAC 23:1 @ 240 VAC

\* Max secondary current dependent on secondary impedance.

## WEIGHT &amp; DIMENSIONS

	<b>IPB-5000A-MU</b>	<b>ITD-360B6</b>	<b>ITB-780B6</b>
<b>Dimensions (L x W x H)</b>	5.35 in x 6.77 in x 10.59 in (390 mm x 172 mm x 269 mm)	12.72 in x 7.32 in x 7.20 in (323 mm x 186 mm x 183 mm)	4.80 in x 7.48 in x 7.20 in (376 mm x 190 mm x 183 mm)
<b>Weight</b>	33 lb (15 kg)	24 lb (11 kg)	28 lb (13 kg)



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