

DC Inverter Spot Welding / Fusing Power Supply (IPB-5000A)



IPB-5000A

Weld stability has been much improved!

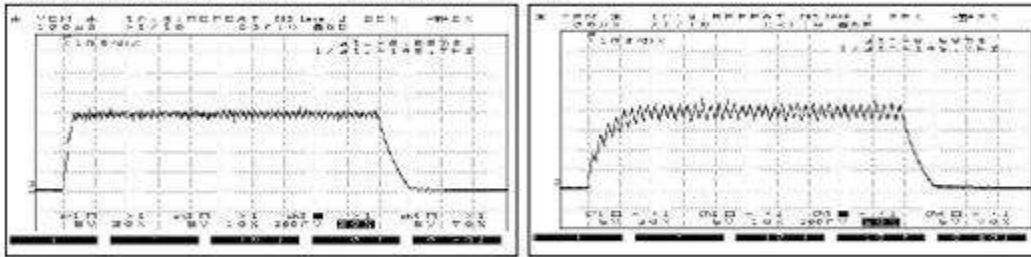


Features

- Four kinds of control
Secondary current, constant voltage, constant power, and combination of voltage and current can be selected to optimize weld conditions.
- Weld stop
With an optional displacement monitor, it is possible to weld with uniform penetration amount all the time.
- Communication
Weld condition setting and monitoring can be done with a PC through RS-232C/RS-485.
- Faster rise in welding current
The welding current rises 6 times faster than that with the conventional welders*.
- *Compared to the conventional model, IP-217A
- Transformer switching feature
Five welders can be controlled by one power supply connecting an external transformer switch.
Maximum welding current of 4000A
Due to the fast current rise, this power supply support for short-time/large-current welding applications.
- Universal power utilities
The welding transformer supports 3-phase 200-240V or 380-480V (configured at the factory), so that it can take different power spec world wide.
- Reduced welding current ripple
Current ripple is reduced to 1/3 of that with the conventional model.* With the same effective current, this model can suppress the peak current in low value unlike the conventional models.

Comparison of welding power supply waveform

● Welding current: 4000A ● Weld time = 10ms



IPB-5000A/ITD-360B6 (Current rise time = 0.3ms)

[Conventional mode] IP-217A/IT-510B (Current rise time = 1.8ms)

Envelope feature

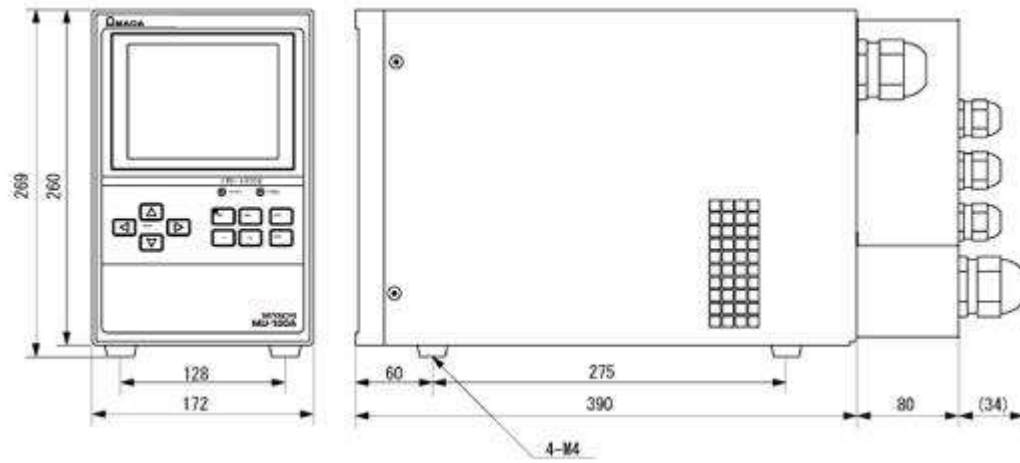
With this function, the actual wave form is judged good/bad comparing with an "envelope" waveform, which provides the permissible range. The envelope waveform is determined based either on a standard waveform (average welding waveform) or on a monitored waveforms.

Specifications

Model	IPB-5000A	
Power requirements	200 to 240VAC / 380 to 480VAC, 50/60Hz, Three phase	
Control frequency	5kHz	
Maximum output current	200A	
Maximum weld current	4000A (with ITB-780A8)	
Rated capacity	17.4kVA (with ITB-780A8)	
Control method	Secondary current / Constant voltage / Constant power / Constant current & voltage	
Number of weld schedule	127	
Timer	Squeeze	0000 to 9999ms
	RISE 1, 2	000 to 500ms
	WELD 1, 2	000 to 500ms
	COOL	00 to 99.8ms
	HOLD	000 to 999ms
Mass	15kg	



External view



Corresponding transformer

Power requirements	220VAC		440VAC	
	ITD-360B6	ITB-780B6	ITD-360B6	ITB-780B6
Rated capacity	10.2kVA	17.4kVA	10.2kVA	17.4kVA
Rated primary voltage	300V		600V	
No-load secondary voltage	9V	13V	9V	13V
Input frequency	5kHz			
Maximum output current	4000A			
Duty factor (@100ms)	4%	2.5%	4%	2.5%
Cooling method	Air cooling			
Dimensions and mass	183W x 323D x 186H mm / 11kg	190W x 376D x 183H mm / 13kg	183W x 323D x 186H mm / 11kg	190W x 376D x 183H mm / 13kg

