



## Transistor Power Supply

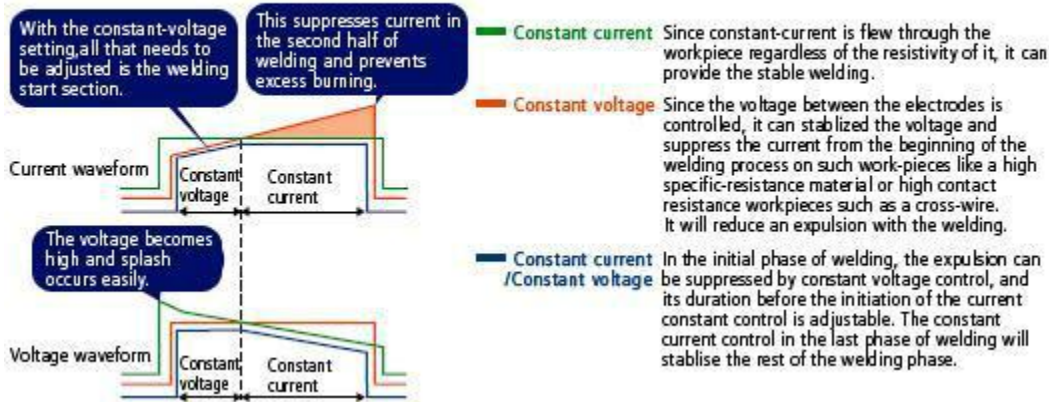


**Standard: MDA-8000B  
MDA-4000B MDA-1000B**  
**Polarity switchable:  
MDB-4000B MDB-2000B**  
**Two channels:  
MDC-2000B**  
**Clean fine finish in a short  
time of welding.**



## Features

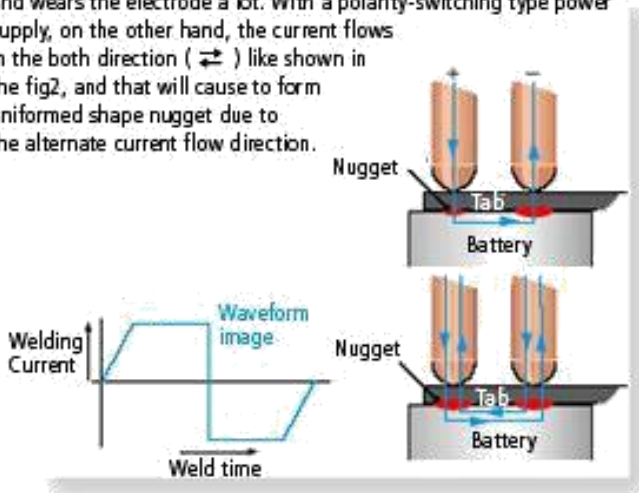
Features three types of control:  
constant current, constant voltage, and constant current and voltage



## Polarity switching type and Two-channel type features

### Polarity switching type: MDB series

In a series-welding case such as tab-welding, the weld current flows only in a certain direction, as shown in the fig.1 ("→" mark) if standard or two-channel type power supply is used. The one-way current flow would cause only one of the electrode to be heated up by Peltier (Polarity) effect, which results in uneven nugget shape and wears the electrode a lot. With a polarity-switching type power supply, on the other hand, the current flows in the both direction (↔) like shown in the fig2, and that will cause to form uniformed shape nugget due to the alternate current flow direction.



### Two-channel type MD C-2000B

Since two welding heads can be connected at the same time to one power supply, this is suitable for cases such as welding two pieces of work.



- Fast current rises.

Since the welding current rises 4.5 times faster than that with the \*conventional welders, high quality welding can be accomplished in a short period of time on small work pieces.

\*Compared with the conventional model MD-1500E

- No welding transformer needed

The welding current is directly controlled with fast switching by transistor, so no welding transformer is required.

- Three control types to choose from

You can choose from three types of control - "constant current," "constant voltage," or "constant voltage and current" - to suit the workpieces.

- Built-in pre-check function

Applying current on the workpiece before the main current, it is possible to judge whether or not there is a workpiece set on the electrodes, and to evaluate the status of workpiece.

- Polarity switchable type

This can eliminate the Peltier effect (polarity effect) and provide uniform nugget diameters on series welding.

- Two-channel type

With this type, it can reduce the cast and save some spaces for time difference welding.

## Specifications

Model		MDA-8000B	MDA-4000B	MDA-1000B
Type		Standard type		
Power requirements		Single-phase, 100 to 120VAC or single-phase, 200 to 240VAC 50/60Hz		
Maximum power consumption		350W	300W	300W
Maximum weld current		9990A	5000A	1500A
Maximum weld voltage		30V		
Control method		Constant current control / constant voltage control / constant current and voltage control		
Timer setting (31 schedules)	Squeeze	000 - 999ms / 000 - 999ms X 10	000 - 999ms	
	Precheck welding	0.00 - 1.00ms		
	Precheck evaluation time	2ms (Fixed)		
	Upslope	0.00 - 9.99ms (Included in weld) *1 (Included in weld 1) *2		
	Weld (1-step welding mode) / Weld 1.2 (2-step welding mode)	0.00 - 9.99ms		
	Cool (for 2-step welding mode only)	0.00 - 9.99ms		
	Downslope	0.00 - 9.99ms (Included in weld) *1 (Included in weld 2) *2		
	Hold	000 - 999ms		
Dimensions (mm) *5		172(W) X 390(D) X 400(H)	172(W) X 390(D) X 269(H)	
Mass		28kg	18kg	15kg

\*1: 1-step welding mode

\*2: 2-step welding mode

Specifications subject to change without notice.

Model	MDB-4000B	MDB-2000B	MDC-2000B
Type	Polarity switching type		Two-channel type
Power requirements	Single-phase, 100 to 120VAC or single-phase, 200 to 240VAC 50/60Hz		
Maximum power consumption	350W	300W	
Maximum weld current	5000A	3000A	
Maximum weld voltage	30V		
Control method	Constant current control type / constant voltage control type / constant current and voltage control type		
Timer setting (31 schedules)	Squeeze	000 - 999ms / 000 - 999ms X 10	000 - 999ms
	Precheck welding	0.00 - 1.00ms	
	Precheck evaluation time	2ms (Fixed)	
	Upslope	0.00 - 9.99ms (Included in weld) *1 (Included in weld 1) *2	
	Weld (1-step welding mode) / Weld 1,2 (2-step welding mode)	0.00 - 9.99ms	
	Cool (for 2-step welding mode only)	0.00 - 9.99ms	
	Downslope	0.00 - 9.99ms (Included in weld) *1 (Included in weld 2) *2	
	Hold	000 - 999ms	
Monitor display	Weld 1 and 2 (Average current / average voltage), weld 1 and 2 (Peak current / peak voltage), weld 1 and 2 (Average power / average resistance), current, voltage, power, resistance waveform, schedule number		
Dimensions (mm) *5	172(W) X 390(D) X 400(H)	172(W) X 390(D) X 269(H)	
Mass	28kg	18kg	

\*1: 1-step welding mode

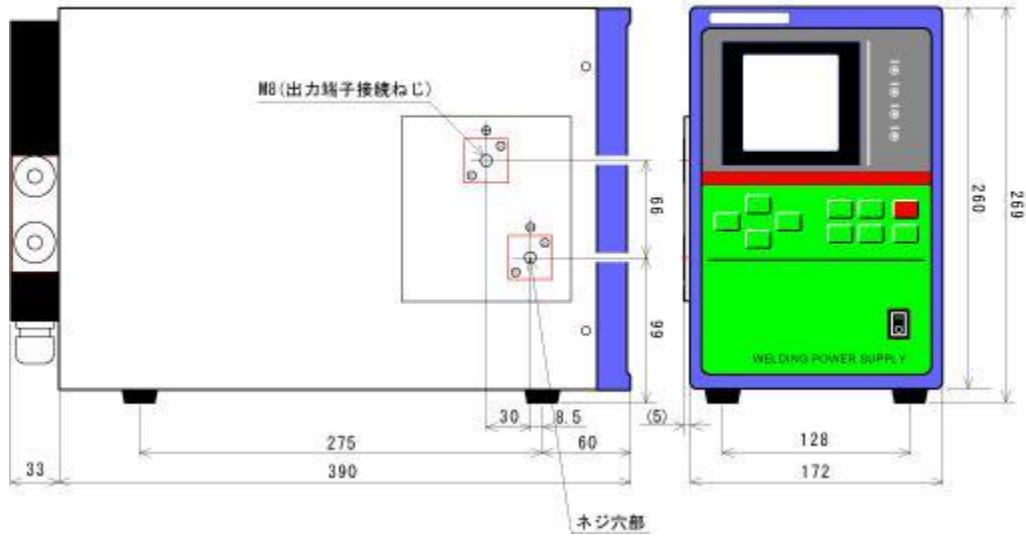
\*2: 2-step welding mode

Specifications subject to change without notice.



## External view

MDA-4000B MDA-1000B MDB-2000B MDC-2000B



MDA-8000B MDB-4000B

