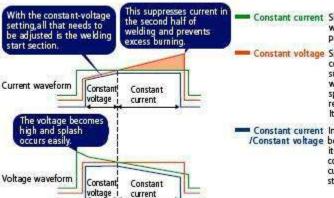
Transistor Power Supply



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

Features

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



Constant current Since constant-current is flew through the workpiece regardless of the resistivity of it, it can provide the stable welding.

time of welding.

Constant voltage Since the voltage between the electrodes is controlled, it can stablized the voltage and suppress the current from the beginning of the welding process on such work-pieces like a high specific-resistance material or high contact resistance workpieces such as a cross-wire. It will reduce an expulsion with the welding.

* Constant current: In the initial phase of welding, the expulsion can /Constant voltage be suppressed by constant voltage control, and its duration before the initiation of the current constant control is adjustable. The constant current control in the last phase of welding will stablise the rest of the welding phase.



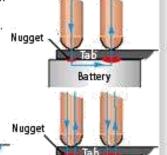
Polarity switching type and Two-channel type features

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 causes 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

supply, on the other hand, the current flow 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.



Since the welding **current** ses 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

Waveform

image

- 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

Welding'

Current

Fast current rises.

- 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
Туре		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		
	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		
Timer setting (31 schedules)	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.

	odel	MDB-4000B	MDB-2000B	MDC-2000B
Туре		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-	0.00 - 9.99ms		





	step welding mode) / Weld 1,2 (2-step welding mode)		
	Cool (for 2-step welding mode only)	0.00 - 9.99ms	
	Downslope	0.00 - 9.99ms (Included in we	eld) *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

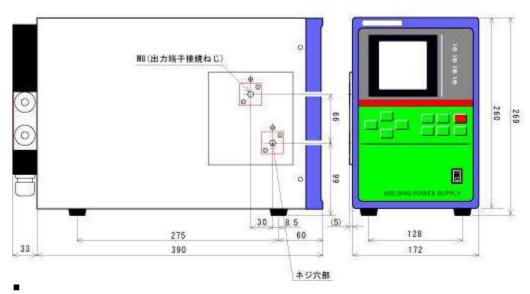
- *1: 1-step welding mode
- *2: 2-step welding mode

Specifications subject to change without notice.



External view

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



MDA-8000B MDB-4000B

