m1 series



Compact DC Resistance Welding Power Supplies

The m1 series is a compact, lightweight resistance welding power supply range that blends leading edge power technology with affordable pricing.

The range offers high speed closed loop adaptive feedback control with embedded monitoring, making it the ideal tool for a wide range of joining applications where quality is crucial.

The m1-10 unit offers precision linear technology for low current applications.

The m1-40 uses a hybrid fast response twin loop HFDC system for higher current application

All *m1* series products feature:

- Very high speed closed loop output control for consistent welding process definition and control.
- Constant Current, Voltage and Power modes with programmable double pulse combinations.
- Advanced component conditioning functions.
- Simple to use, intuitive menu.
- Compact, high performance and low cost
- Single phase 95VAC to 265VAC operation





- Built in graphical process monitoring with Pass/Fail limit checking and trend plotting/data logging.
- Programmable part & weld checking.

m1-10: 1000 Amp Precision Linear DC Welding power supply



A versatile Linear supply for precision joining below 1000 Amps

Typical Applications

- Gold ribbon welding
- Micro circuit welding
- Solar cell assembly
- Sensor and component welding
- Detonator and bridge wire welding

m1-10 product features

- Precision control, ultra fast response for low current applications
- Ideal replacement for MCW-550 & Unibond™® systems









m1-40: 4000 Amp Hybrid HFDC Welding power supply



A high power HFDC based supply for conductive component

Typical Applications

- Battery and battery pack assembly
- Miniature contact welding
- Automotive electronics
- Wire and lead termination
- Lamp manufacture
- Conductive material welding

m1-40 product features

- Short high current pulse capability for conductive material joining.
- Ideal replacement for capacitor discharge equipment
- Hybrid HFDC for very fast response









m1 series



m1 Standard Specifications

Standard Features

Maximum Output Current (A) Maximum Output Voltage at Full Load Maximum Output Power Duty Cycle at:

- 4000 Amps
- 3000 Amps
- 2000 Amps
- 1000 Amps
- 500 Amps

Control Modes **Output Accuracy**

Programmed Values

Squeeze Time Upslope Time Pulse 1 Peak Time Pulse 1 Downslope Time Pulse 1 Delay Time Between Pulses Upslope Time Pulse 2 Peak Time Pulse 2 Downslope Time Pulse 2 **Process Monitor Limits**

Input Requirements

Input Voltage Control I/O Serial Communications

Dimensions

Width (mm) Height (mm) Depth (mm) Weight (Kg)

M1-10

1000 Amps DC 5 V DC at maximum current

5ms / second 20 ms / second 30 ms / second 10ms / second 70 ms / second

M1-40

4000 Amps DC

95 - 260 VAC

Single phase

Options: RS232,

RS422/485, CAN

4 V DC at maximum current

Current, voltage and power

±1% of set value or ± 20 Amps

50ms / second Current, voltage and power ± 1% of set value or ± 1 Amp

0.1 - 999 ms0.1 - 999 ms0.1 - 999 ms 0.1 - 999 ms 0.1 - 999 ms0.1 - 999 ms0.1 - 999 ms0.1 - 999 ms0.1 – 999 m 0.1 - 999 ms0.1 - 999 msVoltage and Current Voltage and Current

95 - 260 VAC Single phase Options: RS232, RS422/485, CAN

170 mm 170 mm 275 mm 275 mm 470 mm 470 mm 16.5Kg 16.5kg













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Approval Certificate N0:910599 Design and manufacture of precision welding equipment and sub-contract micro-welding

BENELUX OFFICE

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