

# High Frequency Inverter RMF – DUO 1

## Impulsion Welding and Medium / High Frequency Welding in 1 Unit

### DUO 1- 500 A / DUO 1- 1000 A / DUO 1- 2000 A / DUO 1 - 4000 A

for Micro-Spot Welding, Projection Welding, Gap Welding, Strand Welding

#### Capacitor Discharge Welding Mode:

Programmable:

- High Peak Energy with fast rise times. Ideal for highly conductive materials.
- Prea-heat and post-weld heating function.
- Welding capacity in kW / Weld Time in ms.
- Energy content in Ws.

Fusing of: Different metals and alloys, brass, copper, steel, titanium and many others.

#### High Frequency Inverter 10(20) kHz Mode:

Accurate and consistent monitoring of weld energy with high speed closed loop feedback.

- External Voltage and Power measuring.
- Current, Voltage or Power controlled.
- 4 Power Classes 500/1000/2000/4000 A
- 50 storable welding programs of different modes: Single or Multi pulse welding.
- Prea-heat and post-weld heating function.
- Monitor showing real time trace of weld current, voltage, power and resistance with numerical peak and average values.

External access on 2 welding programs  
For realisation of a budget priced unit, we dispense a control system to measure and record the path length and external analysis. The current is controlled.

Internal data storage of 1 point, data transfer to PC or PLC possible, especially for test and optimizing (transfer rate not more then 1/s).

#### Joining Applications:

Medical \* Battery \* Watch \* Electrical \* Semi-Conductors \* Electronic Components \* Solar-Industries

#### Different Special Weld Heads



#### Characteristic Features

Current range, on dependent of type: 25-500A / 50-1000A / 100-2000 A / 200-4000A (600 Ws) by max. 20ms welding time; 2.5 kA by 32ms; 1.5 kA until 1000 ms

Capacitor discharge curves until max. 20ms

Duty ration: 1 point/s by welding time over 100 ms; 2 points/s by 20ms; 5 points/s by 8ms

Welding voltage 12V (7 V on load)

Inverter / transformer / controller in 1 case

Unit cooled by forced air, ventilator controlled by temperature / water cooling as option

Regulation digital

1 magnetic – valve can be controlled (24V DC)

INPUT: Start / pressure / fault-confirmation

OUTPUT: MV1 / ready / finish contact FK / fault

Option: external measuring voltage

No path length control

Counter total and individual

Locking by PIN and Super PIN

No date and clock

Net 400V 50/60 Hz; fuse protection 16A;

Case IP21

Current outgoing on unit front, data IN/OUT on unit backside

Dimension: 410x220x222mm (LxWxH)

Weight approx. 16 kg

Technical details are Subject to change

For customised solution - please contact us.