## **MULTIFUNCTION WELDING**

## **MICROCONTROLLER**











Synchronous drive for silicon controlled rectifiers with phase cut off current regulation. Regulation speed within 2 cycles for the first welding spot and then within ½ cycle.

Four operation modes are available:

- · Voltage percentage V%
- · Current percentage I% (Feed Forward mode)
- · Constant current IK (1.0 99.0 KA)
- Adaptive

Single and three phase's transformer (Star and triangle) drive capability.

Suitable for spot and roll welding machines.

Welding time control resolution is 1/2 period.

Display of RMS welding current and of the first period positive and negative half wave.

Inlets and outlets are galvanic insulated.

Selection and running of 64 programs that can be called from external inlets; internally or under association to start cycle IC1, start cycle IC2 or sequential mode.

Compensation of line voltage fluctuations is available in I% and V%.

Point to point serial communication RS232 for connection to a printer or to a personal computer.

Serial network communication RS 485.

Communication Extension: Profibus - DeviceNet - CANopen - CC/Link

Modbus/RTU - Profinet/IO - EtherNet/IP - EtherCAT - Modbus/TCP.

Start cycle with contemporary: Twin hand buttons or foot switch.

Monitoring of welding current limits and ignition angle for a qualitative control in Spot welding mode and by IK and 1% Welding current limits control and control of phase cut off angle.

Programmable function for continuous self increase of the welding current to compensate the consumption

of the welding electrodes. The current curve is adjustable for four pair of electrodes.

Welding counter with warning and locking function.

The delay of first welding current and the delay of first welding current after a pause can be programmed independently.

Four solenoid valve drive capability that can be associated to program in pre squeeze and squeeze sequences.

Galvanic Isolated outlet for proportional valve.

Range limit for proportional valve (99%) can be set: 5-10 Volt.

Forging solenoid valve. Pre stroke solenoid valve.

Possible pressure link in: pre-squeeze, squeeze, pre-heat, weld, forge, phases via proportional valve (pressure cycle)

Automatic line frequency recognition.

Self Calibration or manual set-up of machine max current.

Triple Language setting, other languages on request.

PLC drive.

Secondary current reading via Rogowski ring or primary current reading via current transformer C.T. Available also in cabinet mounting version, without diplay and keyboard - CS 6000 SA - Stand Alone. L x H x P: 360 x 133 x 91.

