ELECTRONIC TIMERS
FOR RESISTANCE WELDING

SERRATRON-300

300dp ProfiBus · 300net DeviceNet · 300ib InterBus

- FIELD BUS FOR USE AS I/O
- ETHERNET WITH TCP/IP
- 3 SIMULTANEOUS WELDS
- PLC FUNCTIONS

New Electronic Standards For New Welding Procedures.

S6 SERRA

NEW ELECTRONIC STANDARDS FOR NEW WELDING PROCEDURES

FIELD BUSES FOR I/O

Profibus DP, DeviceNet or Interbus for use as Input / Output interfaces.

ETHERNET

Ethernet 10 base T interface with TCP/IP networking for centralized programming.

3 SIMULTANEOUS WELDS

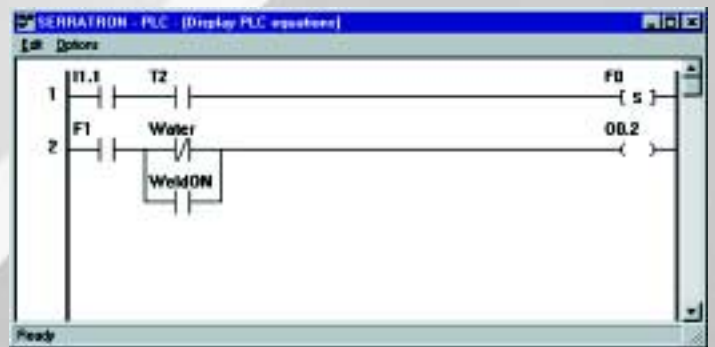Simultaneous operation of up to 3 independent welding groups.

PLC FUNCTIONS

The easy-to-use integrated PLC functions allow a total control of the welding machine, with no need of external PLCs.

ADVANCED PROGRAMMING FUNCTIONS:

- Different working modes: for robots, multiwelders, DC welding machines and Medium Frequency Inverters.

- Program selection by Spot Number.

- Tip dressing management and electrode wear compensation.

- 1/2 wave welding function.

WIDE RANGE OF SERRA ELECTRONIC PRODUCTS.

The great family of SERRA electronic products meets any industrial demand for welding and automation: electric cabinets, power units, standard software and hardware and dedicated products according to specific needs and applications.

TECHNICAL DATA

SERRATRON-300	300dp	300ib	300net
BÁSICS FUNCTIONS			
PROFIBUS DP field bus for I/O	●	–	–
DEVICENET field bus for I/O	–	●	–
INTERBUS field bus for I/O	–	–	●
PLC functions	●	●	●
Spot, projection and seam welding	●	●	●
Welding units simultaneously controlled	3	3	3
Inputs 24V	36	36	36
Outputs 24V 0,7 A	32	32	32
Maximum number of weld programs	192	192	192
Weld current programmable in kA	●	●	●
Electrode wear compensation by predefined curves	●	●	●
Squeeze force between electrodes programmable in kN	●	●	●
Operation in Phase shifting, Current Monitoring or Constant Current mode	●	●	●
Proportional control of weld force	●	●	●
Welding sequences: single spot, repeated spot and seam welding	●	●	●
Tip-dressing management	●	●	●
1/2 wave welding function	●	●	●
Log of the latest welds (nr)	32	32	32
Log of the latest fault events (nr)	128	128	128
Real time clock and date	●	●	●
WORKING MODES			
MUX Mode (multiwelders, robots and portable welders)			
Weld programs	3 x 64	3 x 64	3 x 64
I/O interface by field bus or discrete 24 Vdc	●	●	●
PLC Mode (automated welding machines)			
Weld programs	3 x 64	3 x 64	3 x 64
I/O extension by means of MES 16x16 module	148/144	148/144	148/144
MFI Mode (Medium Frequency Inverters)			
Weld programs	64	64	64
Number of inverters	1	1	1
I/O interface by field bus or discrete 24 Vdc	●	●	●
DCW Mode (DC welding machines)			
Weld programs	64	64	64
I/O extension by means of MES 16x16 module	148/144	148/144	148/144
PROGRAMMING MODES			
Programming software	CPC-300dp	CPC-300net	CPC-300ib
Centralized programming via Ethernet with TCP/IP networking interface	●	●	●
Lap top via port V24/RS-232	●	●	●
Programming terminal TP-10 via RS-232	●	●	●

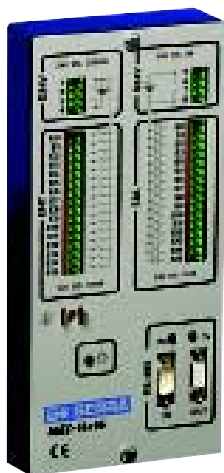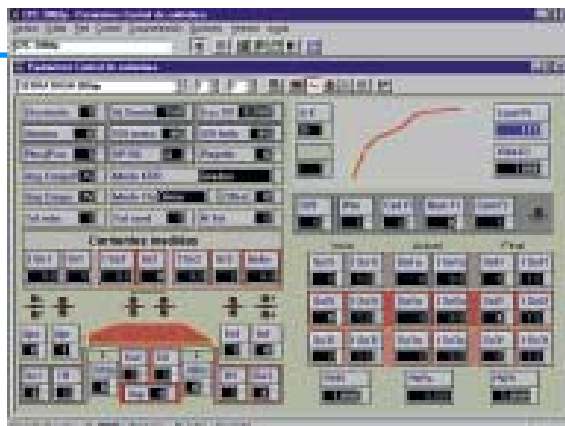| **ELECTRICAL AND MECHANICAL CHARACTERISTICS**	
Power supply frequency (automatic switching)	50/60Hz
Power supply synchronisation	24 Vcc ±25%
Inputs 24 Vdc (individual LED)	36
Outputs 24 Vdc/0,7A (individual LED) short circuit protected	32
Operating temperature	0 to 60° Celsius
Dimensions H x W x L	342 x 235 x 35 mm
Weight	2,4 Kg

PROGRAMMING TERMINAL TP-10

Can be used for programming, displaying weld parameters, counters, measured currents, error messages, etc. The ergonomic design assures easy handling.

SOFTWARE CPC-300

Offers a quick and complete programming and monitoring interface under Windows®. Can be used in a lap top via port V24 or in a PC connected to an Ethernet network.

MES 16x16 EXTENSION MODULE

External module that expands the number of Inputs / Outputs to be controlled by the Serratron in the PLC mode.

PRODUCT REFERENCES TO BE USED FOR ORDERING

Please use the references listed below when ordering. It help us to process your order correctly and quickly.

PRODUCT	REFERENCE	DESCRIPTION
SERRATRON 300dp	CSP-300DP	Timer with field bus Profibus DP
SERRATRON 300net	CSP-300NET	Timer with field bus Devicenet
SERRATRON 300ib	CSP-300IB	Timer with field bus Interbus
CPC-300dp/V24	SOFT CPC-300dp/V24	Serratron 300dp programming software for lap top
CPC-300dp/RED	SOFT CPC-300dp/RED	Serratron 300dp programming software for networking
CPC-300net/V24	SOFT CPC-300net/V24	Serratron 300net programming software for lap top
CPC-300net/RED	SOFT CPC-300net/RED	Serratron 300net programming software for networking
CPC-300ib/V24	SOFT CPC-300ib/V24	Serratron 300ib programming software for lap top
CPC-300ib/RED	SOFT CPC-300ib/RED	Serratron 300ib programming software for networking
MES 16x16	MES-16X16	External I/O extension module
TP-10	TP-10	Programming terminal