RESISTANCE WELD CONTROLLER
AC or Medium Frequency DC Inverter

SERRATRON-100

- Integrated PLC Functions
- Ethernet Networking for Centralized Programming
- Optional Field Buses
  - Profinet™
  - InterBus™
  - DeviceNet™

Full control and connectivity in small format
Operating modes:
- **MUX**: One thyristor group (AC single phase welding). Up to 3 thyristor groups with external module MUX-3.
- **MFI**: Medium Frequency Inverter (Three-Phase network, DC welding).

127 weld programs
- 3 welding times sequence + pulsations + up / down slope.
- Operation in phase shifting, Current Monitoring or Constant Current Mode.
- Voltage changes compensation function.
- 1/2 wave welding function.

Electrode Wear Compensation
- Predefined curves (can be edited).
- Easy tuning, few parameters to be adjusted.

Tip Dressing Function

Field Bus for robot applications
- InterBus-S™ (SERRATRON 100ib).
- DeviceNet™ (SERRATRON 100net).
- ProfiBus-DP™ (SERRATRON 100dp).

Programming network interface
- Ethernet 10BaseT (Standard).
- Ethernet 10BaseFL (Optical Fiber) (Under request).
- TPC/IP Protocol.

V24/RS-232 Serial Programming Port
- For programming unit TP-10 or lap-top with software CPC-100®.

Built-in PLC for full automation in welding applications
- 20 Inputs - 16 Outputs 0,7 A (short circuit protected).
- Up to 516 I/O using expansion modules MES 32 (Bus IOEX).
- General purpose: counters, marks, flip-flops, timers...
- Embedded welding functions.
- User interface TP-10: messages and commands managed by PLC program.
- Ladder mode programming (up to 990 equations).

Analogue Output for Proportional Valve
- 0 - 10 V/4 - 20 mA / 0 - 20 mA.
- Interface for electrically operated welding guns.

Optional Field Buses:
- **100net DeviceNet™**
- **100ib InterBus™**
- **100dp ProfiBus-DP™**

Dimensions: 295 x 182 x 62 mm
Weight: 2,0 kg
SERRATRON 100

**IOEX Field Bus for I/O Expansion**
- Up to 15 I/O modules
- Up to 4 MF inverters
- Up to 4 weld guns

**Ethernet Network**
- **Weld Controller**
  - Programming / Configuration
  - Weld data logging
  - Fault diagnosis

**SERRATRON 100**

- **PC**
- **10 baseT (10 baseFL)**
- **Field Bus**
- **IOEX**
- **I/O Module [from 1]**
- **I/O Module [up to 15]**
- **UMF [from 1]**
- **UMF [up to 4]**
- **Electrical weld gun [from 1]**
- **Electrical weld gun [up to 4]**

**Software CPC-100**

- Control Cabinet
- AS-6/100-UTP AC Current
- AS-6/100-UMF Medium Frequency
OPTIONALS

SOFTWARE CPC-100

Quick, complete and friendly programming and monitoring under Windows®. Can be used in a lap-top via port V24 or in a PC connected to an Ethernet network.

SEPI-1

Air valve safety relays module for suspended machines

MES 32 EXTENSION MODULE

Up to 32 Inputs / Outputs monitored by PLC software. Any choice of 4 groups of 8 Inputs or 8 Outputs.

PRODUCT REFERENCES TO BE USED FOR ORDERING

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

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<td>MES-32</td>
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<td>Thyristor multiplexer module for 3 thyristors group</td>
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<td>SERRA CARD</td>
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<td>Memory Card</td>
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CERTIFIED ISO 9001

Precision and quality are one of our main aims.