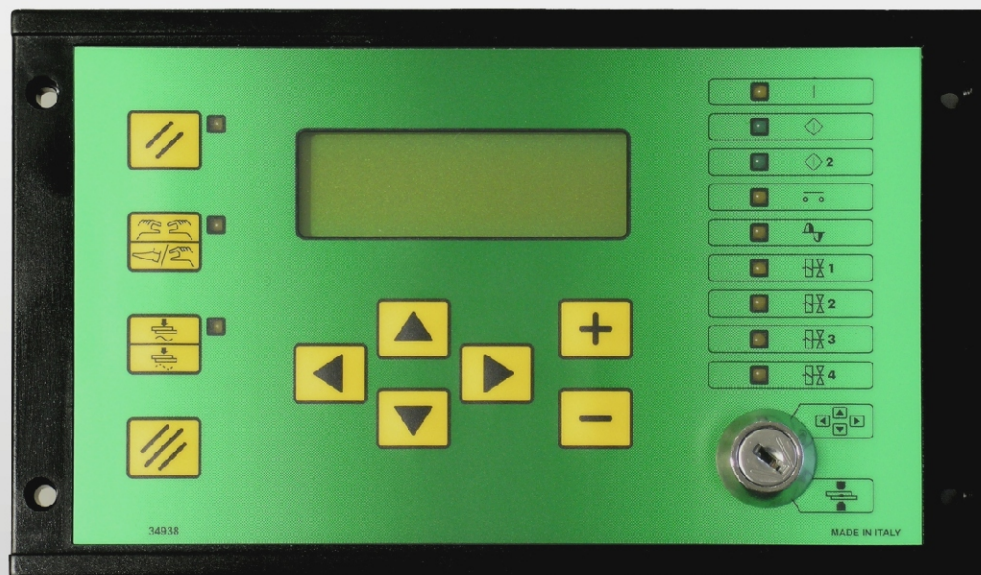


TE550



The **TE550** is a microprocessor-based welding control unit for resistance welders. The task of the welding control unit is to manage the welder components, in particular the controlled diodes that carry out the welding current adjustment.

The **TE550** is a particularly versatile welding control unit as it may be adjusted to different types of welders; it may be installed not only on spot and projection welders but on seam welders and on serial spot-welding machines too. Moreover, it may work with power adjustment: both in constant current and in constant energy (optional).

The number of inlets and outlets may be increased so to better adjust the welding control unit to automatic machines.

It is possible to store up to 250 different welding programs, *127 of which are recalled directly from an external device. Each program comprises several programmable parameters that describe the work cycle. In addition to the plain 4-stage welding cycle, the control unit allows the running of welding processes with pre-welding current, post-welding current, slope and pulses.

MAIN TECHNICAL FEATURES

- Simplified programming via 6 keys and a backlit alphanumeric LCD.
- Synchronous control with controlled diodes, phase control current adjustment.
- Storage of 250 welding programs, *127 recallable from the outside.
- Up to 25 programmable parameters for each program.
- Slope, pulses, pre-weld, post-weld functions and adjustment of the welding times in half-periods.
- Display of the RMS welding current measurement in kA and relative angle of conduction.
- 3 operating modes: standard, constant current and constant energy.
- Welding current or angle of conduction limits.
- Double stroke function
- Stepper function to compensate the electrodes wear with programmable curve.
- Secondary current compensation function.
- Single and automatic cycle. WELD and NO-WELD function.
- Adjustment of first insertion delay.
- Control of 5 solenoid valves 24 VDC max. 5 W with self-protected output.
- Self-adjustment at mains frequency 50/60 Hz.
- Serial data transmission by means of optional insulated RS232 or RS485 ports.
- Output for proportional solenoid valve.
- Selectable languages: Italian, English, French, German, Spanish, Hungarian, Dutch, Polish, Swedish and Portuguese.
- Possibility of upgrading the control unit Firmware via appropriate software.
- Activation and control of the electrodes dressing (optional)

OPTIONAL IMPLEMENTATION BOARDS FOR TE550 CONTROL UNIT



OPTION ITEM 50200

The use of this board is particularly suitable when installing this control unit onto automated welding equipment as it allows adding other signals to the ones already present on the control unit: the one for the electrodes dressing, for the external WELD/NO WELD input and for the errors clear.

The board **item 50200** is directly assembled onto the **TE550** control unit board into the proper connection.



OPTION ITEM 50097

This board may be used only if the optional board item 50200 is present too.

By means of this board, it is possible to measure the voltage on the electrodes and, therefore, to activate the energy working mode on the control unit. Furthermore, all the **50200** board's functions are enabled. During welding, the control unit reads the true efficacious welding current RMS, the non-inductive component of the voltage at the electrodes in volts (**$V \times \cos\phi$**) and the welding duration in cycles.

The product of **$I \times V \times \cos\phi \times \text{time}$** gives the thermal energy produced during welding, expressed in joules (**$W \times \text{sec}$**).

The board **item 50097** is supplied together with the bar support **DIN EN50035 EN50022**.

TE550	50275	50200	50097
STANDARD (Constant current)	X		
STANDARD (Constant current) with TIP DRESSING PROGRAM	X	X	
STANDARD (Constant current) with TIP DRESSING PROGRAM and CONSTANT ENERGY	X	X	X

The TE550 control unit integrally replaces the full range of TE500 control units. The overall dimensions, the fixing holes inter-axis dimensions and the electric connections remain unvaried.

Specifications subject to change without notice.