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### typical applications

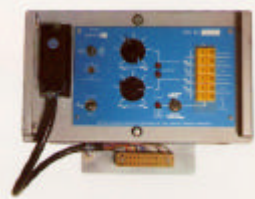
T4SW/1 replacement



S4SW/1 replacement



S6SW/1 replacement



D5SS/1 replacement



# T1SW/1 welding control

data sheet



## A rugged T4/S4/S6/D5 replacement and more

The T1SW/1 is a robust unit providing basic control for resistance welding. Installation, set-up and operation are quick and simple and the integrated programmer has a water-resistant membrane front panel. The T1SW/1 will mount in the same way as the earlier T4/S4/S6/D5 timers, and as such offers a functional replacement or upgrade. All connections are via a high-quality multi-pole connector, and pre-assembled cable forms are available for easy interfacing.

features	benefits
up to 8 programs	store settings for different material and thicknesses
single/repeat/half-cycle/roll-spot/seam modes	versatile
dual weld + pulsation	can be used for coated materials
380..480V, 50/60 Hz operation	international
counter with optional lock-out	can be used for electrode maintenance
functional replacement for T4/S4/S6/D5	maintain your investment
cross-interlock	load-sharing and safety
400V ac or 24V dc outputs	compatible with old and new equipment
pulse-fired SCR control	precise control of welding current
multi-pole connector	allows enhanced features to be used if required

### options

- interface cable form #90-90-46 or #90-90-46-01
- PR1 pulse firing board to convert anode-fired SCRs
- Dual-gun adapter (24 V only)

### configurations

none

# T1SW/1 welding control

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welding parameters x 8		environmental	
mode	single/repeat	temperature	
heat1	0..99%	- operating	0° to +50°C
heat2	0..99%	- storage	-25° to +70°C
presqueeze	0..99 cycles	humidity	
squeeze	0..99 cycles	- operating	up to 80% (relative)
weld1	0..99 cycles	- storage	10% to 90%
cool1	0..99 cycles		
weld2	0..99 cycles	dimensions	
cool2	0..99 cycles	height	180 mm
pulses	1..9	width	295 mm
hold	0..99 cycles	depth	130 mm + 80 mm for connector
balance	0..60% (seam mode only)	weight	3 kg
off	0..99 cycles		
counter (configuration types 3,5,6,7 and 10 only)		power requirements	
actual count	0..9999	voltage	380..480 V ac
end count	0..9999	frequency	50/60 Hz
at end of count	stop/continue	current	< 500 mA (all outputs off)
configuration		i/o ratings	
type		programs*	
- 00 spot/repeat	simple spot welding with no other functions	8	inputs < 10 mA @ 24 V dc
- 01 spot/repeat with cross-interlock	spot welding with an output that can be used to prevent other machines from welding	4	outputs 1 A @ 480 V ac or 500 mA @ 24 V dc
- 02 spot/repeat with retract	spot welding with an input and output for controlling the gun position	4	SCR drive 5 kHz; 1:10 mark/space; first pulse 24 V; subsequent pulses > 15 V
- 03 spot/repeat with counter	spot welding with an output that activates when the count is reached	4	
- 04 spot/repeat with cross-interlock and retract	a combination of types 01 and 02	2	
- 05 spot/repeat with counter and retract	a combination of types 02 and 03	2	
- 06 spot/repeat with counter and cross-interlock	a combination of types 01 and 03	2	
- 07 spot/repeat with counter, cross-interlock and retract	a combination of types 01, 02 and 03	1	
- 08 half cycle	spot welding using only one half-cycle weld duration	8	
- 09 half cycle with cross interlock	a combination of types 08 and 01	4	
- 10 half cycle with counter	a combination of types 08 and 03	4	
- 11 roll-spot	spot welding with an output to operate motor-driven welding wheels during the OFF time between sequences	8	
- 12 seam	uses seam wheels, a motor drive and continuous or modulated current to provide a seam weld	8	
* denotes externally selectable programs. In all configurations, it is possible to select 8 programs via the keypad.			

Information in the document is subject to change without notice.

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