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typical applications

drum welders



Specialised sequence for drum welding

The WS700D is intended for drum welding applications requiring high quality welding and monitoring. This timer has a specific seam weld sequence with selectable teach/phase angle/constant current modes. A simple to use 4-line LCD and keypad allows up to 64 programs of weld settings to be entered. The timer can be supplied in a combination cabinet with circuit breaker and SCR to suit all machine kVA sizes.

features	benefits
specific drum sequence	accurate positioning and slope control
phase angle/constant current	quality welds
integral programmer	always available
50 or 60 Hz operation	international
64 user-defined programs	store settings for different types of drum
counter function	can be used for electrode maintenance
weld current monitoring	quality welds
pressure monitoring	quality welds
proportional valve control	control the welding force
detailed cycle log	record current, heat and force for every cycle

options

WS98-700D PC software for programming and monitoring
 3PA/2 3-phase adapter
 PM150W/300W/500W

configurations

WS700, cabinet and SCR combinations are shown in document 91-10-00-00-16

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WS700D welding control
data sheet

program parameters x 64

mode	TEACH/PHA/CCR
delay on	0..99 cycles
upslope	0..99 cycles
weld 1	0..99 cycles
weld 2	0..99 cycles
z-correction	+1 to -1 kA/cycle or +9.9 to -9.9 %/cycle
delay off	0..99 cycles
downslope	0..99 cycles
hold	0..99 cycles
pressure	0..10V

environmental

temperature	
- operating	+10° to +50°C
- storage	-25° to +70°C
humidity	
- operating	up to 80% (relative)
- storage	10% to 90%

monitoring parameters x 64

current monitor	on/off
current low limit	0..99%
current high limit	0..99%
pressure monitor	on/off
pressure low limit	0..99%
pressure highlimit	0..99%

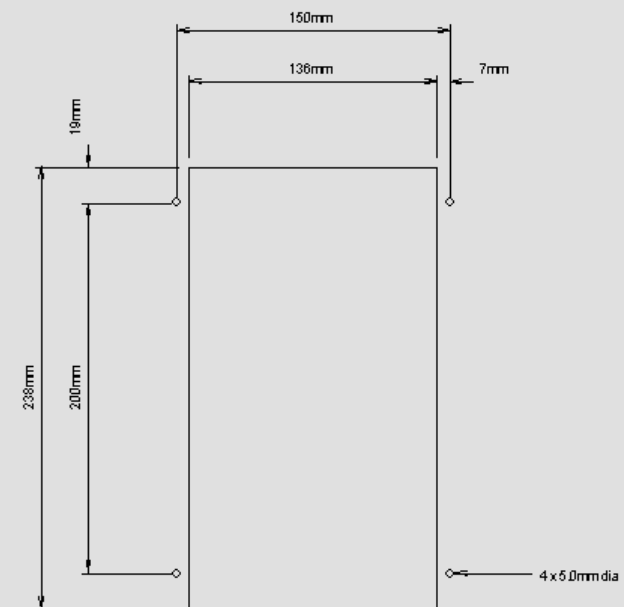
dimensions

height	292mm
width	172mm
depth	38mm

configuration parameters

frequency	50/60 Hz
contactor time	0..200s
toroid test	on/off
sensor	toroid/CT
heat range	high/low

mounting
cut-out dimensions



calibration parameters

toroid sensitivity	100..2000 mV/kA
CT sec:pri ratio	1:1..199:1
CT sec:pri offset	-1kA..+1kA
pressure	2 points, kN/V

power/synchronisation requirements

maximum input current	1 A @ 24 V dc ±20%
line frequency	50/60 Hz ± 1 Hz

counter

actual count	0..9999
end count	0..9999
at end of count	stop/continue

I/O ratings

2 outputs	500 mA @ 24 V dc each
6 outputs	100 mA @ 24 V dc each
12 inputs	10 mA @ 24 V dc each (max)

cycle log

current	each ½ cycle
target	each ½ cycle
heat	each ½ cycle
pressure	each ½ cycle

Information in the document is subject to change without notice.

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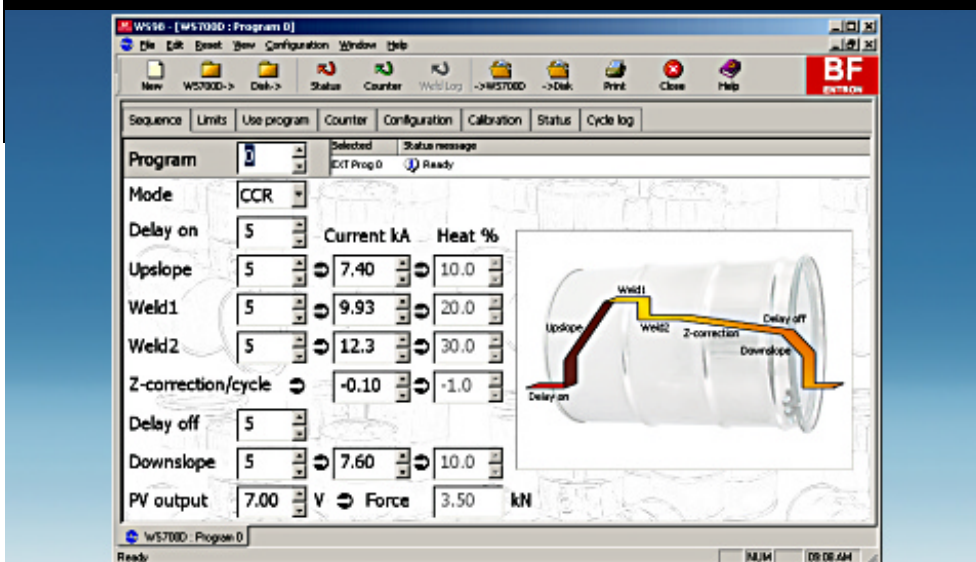
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drum welders



WS98-700D PC software

data sheet



Take control of your welding data

Using all the features of Microsoft® Windows®, WS98-700D allows you to program, monitor and archive the data in your WS700D welding control. Connection to the timer is via a fast but simple RS-232 link (cable supplied) and the settings are displayed in tabbed windows, with each window showing only the parameters relevant to your application. For the WS700D, WS98 is an essential partner.

features	benefits
easy to use	helps you get your work done
programming, configuration and status windows	parameters arranged in functional groups
enhanced tooltips	detailed explanation of all parameters
built-in printing and archiving	record and store all of your settings
multi-document interface	check the settings from disk or WS700D
context-sensitive HTML help	explains all features
detailed cycle log	record current, heat and force for every cycle

options

none

configurations

none

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WS98-700D PC software

data sheet

program and limits display status information ✓ selected program ✓ sequence parameters ✓ monitoring parameters ✓ printing ✓ disk access ✓ status/counter reset ✓ context-sensitive help ✓	status display status information ✓ selected program ✓ results of the last weld ✓ force output and force feedback ✓ counter status ✓ i/o status ✓ printing ✓ disk access ✓ status/counter/log reset ✓ context-sensitive help ✓
use program display status information ✗ selected program ✓ printing ✓ disk access ✓ status/counter reset ✓ context-sensitive help ✓	cycle log display recorded current graph ✓ target current graph ✓ % heat graph ✓ force graph ✓ window zoom ✓ point values ✓ printing ✓ disk access ✓ context-sensitive help ✓
counter display status information ✗ selected program ✓ printing ✓ disk access ✓ status/counter reset ✓ context-sensitive help ✓	system requirements PC with a 486DX or higher running Microsoft Windows 98, 2000, XP or NT4 build 1381:service pack #4. Microsoft Internet Explorer 3 is required for HTML help functions. 5 MB of available hard-disk space 800x600 16-bit colour display Microsoft mouse or compatible pointing device
configuration display status information ✗ selected program ✗ application-specific parameters ✓ printing ✓ disk access ✓ status/counter reset ✓ context-sensitive help ✓	
calibration display status information ✗ selected program ✗ CT, toroid and pressure calibration parameters ✓ printing ✓ disk access ✓ status/counter reset ✓ context-sensitive help ✓	

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