

DT-100 ARC WELDING CONTROL

FOR PLASMA AND TIG WELDING

Schedule 99 1 of 4
 Peak Amps 150.0
 Back Amps 50.0
 Weld Time 12.3

Schedule 99 1 of 4
 Main Speed 10.0
 Main AuxCh 25.0
 Main Outputs 101

Weld Schedule 99
 Pulse/Sec 1000.0
 % on-time 10.0

Weld Schedule 99
 Preflow Speed 0.0
 Preflow AuxCh 0.0
 Preflow Outputs 000

The future of welding and manufacturing efficiency lies in automation and a shift towards greater process control.



BENEFITS

- Improves weld quality and reject rates of welding parts.
- Reduce skill level required for production welding
- Assists in documentation and quality control. Weld programs can be printed
- Enhances weld repeatability and decreases weld set up time
- Aids in automating the weld process
- User-Friendly and easy to program by using standard welding terminology

THE DT-100 WELD PROGRAMMER & CONTROLLER ENHANCES TIG & PLASMA POWER SUPPLIES

TIG POWER SUPPLIES

The DT-100 has been used with the Miller Maxstar 200 LX and 300 LX and the Miller XMT 304.

PLASMA POWER SUPPLIES

The DT-100 has been used with the Oerlikon Plasmaflox 51S, Plasma 50S, the Thermal Ultima 150 and the Thermal PS 3000.

Contact us about the possibility of adding a DT-100 to other modern TIG or Plasma power supplies.

After the DT-100 is installed on a power supply it is easy to upgrade the welding package and add a welding lathe, seamer, positioner, wire feeder or arc voltage control because the DT-100 has the capability to run two other devices while using the power supply.

Ultima 150



Maxstar 200 LX with pull-down door for control panel access



PROCESS WELDING SYSTEMS, INC.

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DT-100 ARC WELDING CONTROL

PROGRAMMER SPECIFICATIONS

PROGRAMMABLE WELD INTERVALS

Preflow time 0-99 seconds

Initial current 0-full scale
Initial time 0-10 seconds

Up to 4 main weld intervals:

Upslope time 0-20 seconds
Peak current 0-full scale
Background current 0-full scale
Main weld time 0-600 seconds
(above 600 the arc stays on continually)

Downslope time 0-30 seconds

Final current 0-full scale
Final time 0-10 seconds

Postflow time 0-99 seconds

PULSING

Programmable pulsing of weld current from 1 to 1000 pulses per second.

Programmable Percent On Time (pulse width) from 1% to 100% for frequencies up to 500 pulses per second. 10% to 90% for frequencies above 500 pulses per second.

PROGRAMMABLE SPEED INTERVALS

Preflow speed % of full scale
Initial speed % of full scale
Main speed % of full scale
Final speed % of full scale
Postflow speed % of full scale

PROGRAMMABLE AUXILIARY INTERVALS

Preflow AuxCh % of full scale
Initial AuxCh % of full scale
Main AuxCh % of full scale
Final AuxCh % of full scale
Postflow AuxCh % of full scale

OUTPUTS

Preflow outputs 1 = on, 0 = off
Initial outputs 1 = on, 0 = off
Main outputs 1 = on, 0 = off
Final outputs 1 = on, 0 = off
Postflow outputs 1 = on, 0 = off

3 outputs available at each output interval

HARDWARE SPECIFICATIONS

OUTPUTS

Weld current control 0-10V DC, Isolated
Speed channel 0-10V DC
Aux channel 0-10V DC
Weld contactor enable Dry relay contact
Speed channel enable 24V DC
Aux channel enable 24V DC
Gas enable Dry relay contact
User bit-1 24V DC programmable
User bit-2 24V DC programmable
User bit-3 24V DC programmable

Serial RS-232 port used for printer, program storage and remote weld schedule selection.

INPUTS

Remote start 24V DC
Remote stop 24V DC
Arc is on 24V DC
Operator editing lockout 24V DC

OPTIONS

Start/Stop push button pendant
Custom pendant
Operator editing lockout key switch

OTHER FEATURES

- 100 weld program storage capability allows exact recall of welding parameters
- Advance to downslope key useful for repair welding
- Optional Start/Stop push button pendant
- Remote selection of welding schedules by computer lessens need for human interface and increases flexibility for automation
- Printer port for weld schedule documentation
- Key lockout isolates weld schedule from unwanted modifications
- Programmable offset for flexibility in power supply calibration
- User configurable outputs for On/Off sequencing of peripheral devices
- Convenient editing keys for rapid program development

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