

# SOLUTION CONTROL TECHNICAL DATA SHEET #8 PRINTER PORT OPTIONS #9181-21A and #9181-21A/4

**THE #9181-21A PRINTER PORT** option allows connection of the SOLUTION control to any 9600 baud RS-232 **SERIAL** printer. Cable length can be up to 50' long..

**THE #9181-21A/4 PRINTER PORT** option is designed for connection to any 9600 BAUD RS-485 line up to 3,000 feet long).

As shown in the TYPICAL PRINTOUT below, as each weld is made the output will send the WELD NUMBER, TIP FORCE (if option 9181-05C is installed) as measured at the END OF HOLD, and the AVERAGE SECONDARY WELDING CURRENT (if option series #9181-22 is installed). With the control set to PRINT FAULTS ONLY, the printer will only print when one or more fault has been detected

The AVERAGE WELDING CURRENT will be measured ONLY during the WELD portion of the schedule. Since this does not record UPSLOPE, DOWNSLOPE, etc., data transmitted can be directly compared to published welding schedule charts for set-up purposes. If this welding current is out of the customer-set window, **I-FAULT** will appear at the end of that line.

The print output will also show the TIP FORCE at the **end** of the weld, and **F-FAULT** if this value is out of the customer-selected window.

When the control is powered up, or when any welding schedule change is made, an output will be sent to the printer to show WELDING PROGRAM NUMBER, as well as all data in the program.

## TYPICAL PRINTOUT

\*\*\* PROGRAM #3 \*\*\*

SQUEEZE TIME 12  
WELD TIME 05  
WELD HEAT 50%  
HOLD TIME 05  
UPSLOPE INIT. 50%  
UPSLOPE TIME 04  
HIGH I = 18,300 A  
LOW I = 17,400 A  
WELDFORCE 0520 LB  
TRANSF. TAP #03

\*\*\*

**HEAT STEPPER ON**  
**AVC IS ON**  
**PRESS. TRANSD. ON**  
**I-READ AND REACT**

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WELD #00345 TIP FORCE = 0532 LB CURRENT = 18,162 A  
WELD #00346 TIP FORCE = 0525 LB CURRENT = 18,156 A  
WELD #00347 TIP FORCE = 0528 LB CURRENT = 17,375 A **\*\*FAULT:CURRENT\*\***  
WELD #00348 TIP FORCE = 0518 LB CURRENT = 18,148 A **\*\*FAULT:TIP FORCE\*\***  
WELD #00349 TIP FORCE = 0530 LB CURRENT = 17,900 A  
WELD #00350 TIP FORCE = 0518 LB CURRENT = 17,380 A **\*\*FAULT: FORCE+CURRENT**  
WELD #00351 TIP FORCE = 0532 LB CURRENT = 18,164 A

# SOLUTION CONTROL

## TECHNICAL DATA SHEET #9

### BUILT-IN PRINTER OPTION #9181-21B

**THE 9181-21B BUILT-IN PRINTER OPTION** incorporates a dot matrix print mechanism to print on a 2¼" wide roll of standard adding machine paper.

The system prints a single 40 column line for each weld with the data as shown in the TYPICAL PRINTOUT below.. The printer uses a standard ribbon, and is factory mounted into the welding control's cabinet.

As shown in the TYPICAL PRINTOUT below, as each weld is made the printer will show the WELD NUMBER, TIP FORCE (if option 9181-05C is installed) as measured at the END OF HOLD, and the AVERAGE SECONDARY WELDING CURRENT (if option series #9181-22 is installed).

With the control set to PRINT FAULTS ONLY, the printer will only print when one or more fault has been detected. Because of the relatively short ribbon life in this printer, **this PRINT FAULTS ONLY mode is recommended for production welding to capture faults.**

The AVERAGE WELDING CURRENT will be measured ONLY during the WELD portion of the schedule. Since this does not record UPSLOPE, DOWNSLOPE, etc., data printed can be directly compared to published welding schedule charts for set-up purposes. If this welding current is out of the customer-set window, **I-FAULT** will appear at the end of that line.

The print output will also show the TIP FORCE at the **end** of the weld, and **F-FAULT** if this value is out of the customer-selected window.

When the control is powered up, or when any welding schedule change is made, the weld program being used along with system settings will be printed as shown below to form a complete document.

#### TYPICAL PRINTOUT

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*** PROGRAM #07 ***
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SQUEEZE TIME    16
WELD TIME       13
WELD HEAT       75%
HOLD TIME       07
HIGH I   =     07,500 A
LOW I    =     06,800 A
FORCE    =     0350 LB
DOWNSLOPE FINAL 45%
DOWNSLOPE TIME  05
***
  AVC IS ON
PRESS. TRANSD. ON
I-READ & REACT
***
#00032,FORCE=0382LB,CUR.=07,252A
#00033,FORCE=0370LB,CUR.=06,780A,I-FAULT
#00034,FORCE=0348LB,CUR.=06,950A,F-FAULT
#00035,FORCE=0378LB,CUR.=06,950A
#00036,FORCE=0382LB,CUR.=07,420A
#00037,FIRCE = 0348LB, CUR.=06,780A,I+F FLT.
```