

# SOLUTION #9480 3Ø DC SECONDARY CONTROL SPECIFICATIONS

STD. FUNCTION	OPERATION	RANGE	APPLICATION
WELDING MODES	SPOT, SEAM, ROLL-SPOT	-	Operates selected welding mode
COUNTER	Counts welds or finished parts	0 - 65,500	Production control
KEYBOARD KEYLOCK	Prevents program changes	-	Eliminates unauthorized changes
RETRACT	Operates RETRACT solenoid	-	Sets large or small electrode opening
DUAL HEAT	Two independent weld schedules from the 75 in memory	-	Welding two thickness combinations in one handling
SQUEEZE TIME	Dwell before firing	0-99 cycles	Fire after electrodes are closed
WELD	Main weld heat	0-99 cycles 0-99% heat	Main heat for all welding programs
HOLD TIME	Dwell after welding	0-99 cycles	Allows nugget to cool
SCHEDULE MEMORY	Instant recall of complete welding schedules	75 complete schedules	Instant setup for welding of common metal combinations
IMPULSATION	Repeats WELD portion of sequence	0-99 pulses 0-99 cool cy	Drive a weld deeper into the each part, used on thicker metal welding
PREHEAT	Heat sequence before weld	0-99 cycles 0-99% heat	Controls heat when welding heavy parts
UPSLOPE	Ramps heat from selected starting point to WELD heat	0-99 cycles 0-99% initial	Helps with poor fit-up of parts and one method for galvanized steel welding.
DOWNSLOPE	Ramps head from WELD heat percent to selected end heat	0-99 cycles 0-99% final	Controlled heat ramp for heavy material welding and controlled cool ramp
POSTHEAT	Heat sequence after weld	0-99 cycles 0-99% heat	Control heat cracking; Smooth transition between impulses
QUENCH & TEMPER	Cool and reheat at end of welding sequence	0-99 cycles 0-99% heat	Reduces brittleness in high carbon steels
REPEAT	Automatic opening & closing of tips while initiation is closed	0-99 cycles	Allows "automatic" operation of welder on long rows of repetitive welds
WATER SAVER DRIVER	Operates water saver solenoid	1 minute	Turns water off 1 minute after last weld
TIP FORCE	Calculate needed pressure	0-9,999 lb	Fast setups for WELD and FORGE
PRECOMPRESSION, POSTCOMPRESSION	Timed high pressure before first heat	0-99 cycles ON 0-99 cy delay	Lowers surface resistance at start of weld for consistency
FORGE DELAY	Timed delay of high pressure	0-99 cycles	Reduces nugget internal cracking

## OPTIONAL FUNCTIONS

OPTIONAL FUNCTION	NUMBER	OPERATION	RANGE	APPLICATION
DIFFERENTIAL PRESSURE TRANSDUCER	9381-05	Starts weld when program-selected TIP FORCE is reached	1-9,999 lb WELD 1-9,999 lb FORGE	Precision TIP FORCE at beginning of each weld. Verification at end of weld
24VDC OUTPUT	9381-30	SUPPLY 24VDC FOR VALVES	-	Drives 24VDC solenoid valves on welder
ELECTRONICALLY-SET PRESSURE REGULATOR	9381-16 (dual) 9181-16 (single)	Keypad set of WELD and FORGE forces from program lines	0-99 psi	Eliminates manual pressure regulator setting
WELD CURRENT MONITOR	9181-22B	Warns each weld if current is out of range. Locks electrodes closed	0-250,000A	Quality control of every weld
PRINTER / COM. PORT	9181-21A 9181-21/4	Serial port for data export	RS-232 RS-485	Data logging of welding current and tip force

## INITIATION MODES

1. Single or Two-level foot switch operation, single or dual schedule select.
2. Dual hand switch anti-tiedown, single or dual schedule select.

## ELECTRICAL SPECIFICATIONS

208 – 575V, 3Ø, 60/50Hz