

# SOLUTION #9380 FREQUENCY CONVERTER 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
TIP ARC CONTACTOR	Shorts transformer windings	-	Eliminates arcing at electrodes
KEYBOARD KEYLOCK	Prevents program changes	-	Eliminates unauthorized changes
RETRACT	Operates RETRACT solenoid	-	Sets large or small electrode opening
KEY LOCK RAM FCTN.	Can operate key locked rams	-	Locks retract head on Sciaky-type welders
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 impulses 0-99% heat 0-99 cool cy.	Main heat for all welding programs
DECAY-WELD	Ramp down of heat after weld	0-99 cycles 0-99% heat	Control heat cracking; Smooth transition between impulses
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
PREHEAT	Heat sequence before weld	0-99 cycles 0-99 impulses 0-99% heat 0-99 cool cy.	Controls heat when welding heavy parts
DECAY-PREHEAT	Dynamic lowering of heat after preheat	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 impulses 0-99% heat 0-99 cool cy.	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	0-150,000A	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, 3 Ø, 60/50Hz