

Model HAC-1000

Programmable AC Welding Controller



The Model HAC-1000 programmable ac welding controller is the latest addition to the Hughes line of ac welding power supplies. Intended for higher power applications or when high repetition rates are required, it's a compact, microprocessor based system designed to control complex welding functions via simple walk-through programming.

Pre-programmable

Four different weld schedules may be pre-programmed. Each sequence may then be activated at the press of a button on the handy front panel membrane switch. For applications that are automated, the programs may be selected or altered through an RS-232 port.

Built-in operation manual

The HAC-1000 power supply is easy to use. A HELP key provides a built-in operation manual, and an OPTIONS key prompts operators through a variety of functions. A backlit liquid crystal display continuously presents the entire weld schedule for a selected program. When changes are necessary, the display shows simple instructions to take operators through the changes step-by-step. For more experienced technicians, lengthy instructions may be replaced by shorter ones.

Wide range of weld sequences

In addition, the HAC-1000 offers a variety of weld sequences including:

- Upslope-weld-downslope
- Squeeze-weld-hold-off
- Weld-quench-temper
- Preheat-weld-postheat
- Roll-spot

Power flexibility

As with all Hughes ac power supplies, the HAC-1000 features adjustable power factor correction and is designed to perform with a variety of transformers and weld heads. It also incorporates automatic line frequency measurement and adaptation, line voltage compensation and internal valve drivers for pneumatic weld heads.

SPECIFICATIONS • Model HAC-1000

Control type	Single phase, absolute count
Input voltage	230 V \pm 15% (460 V optional)
Input frequency	60/50 Hz
Timed periods	
Squeeze time	00 to 99 cycles
Upslope time	00 to 99 cycles
Weld time	1/2, 1 to 99 cycles
Quench time	00 to 99 cycles
Temper time	00 to 99 cycles
Downslope time	00 to 99 cycles
Hold time	00 to 99 cycles
Off time	00 to 99 cycles
Percent current for weld time (top heat, bottom heat, temper time)	20–95% rms
Automatic power factor correction	Standard
Silicon control rectifier (SCR) rating	70 A at 50% duty cycle
Dimensions (H x W x D)	12 x 9 x 16.5 in (305 x 229 x 419 mm)
Weight	30 lb (14 kg)
Power cord	5 ft (1.5 m) terminated with Hubble No. 2321 connector
Output cable	5 ft (1.5 m) 12 AWG cable terminated with MS-3106A-22-9S connector