

MODEL 207 MICROPROCESSOR CONTROLLED POWER SUPPLY



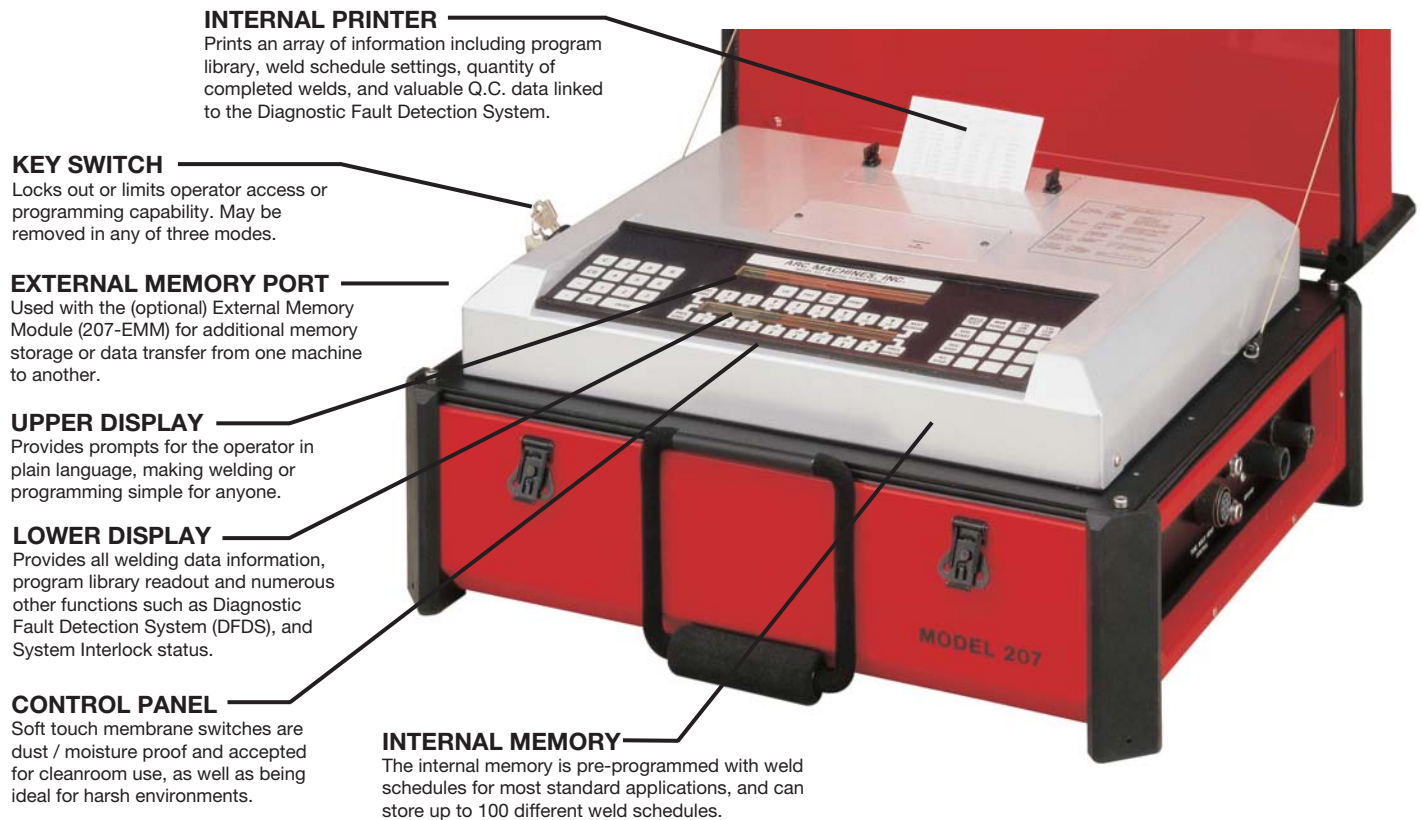
The Arc Machines, Inc. Model 207 is a 100 / 150 amp pre-programmed / programmable power supply and controller capable of welding tubing and thin wall pipe. Welds produced by this machine meet or exceed the specifications required by industries as diverse as: semiconductor, food, dairy, pharmaceutical, aerospace, heat exchanger and nuclear.

Up to 100 different welding schedules may be stored in its memory for rapid access. High-integrity, sanitary welds are easily reproduced at the touch of a button. Some of the many features and benefits of the Model 207 include:



- Ease of operation. Standard software prompts the operator in English, Spanish, French, German, Norwegian, Swedish and Japanese.
- Key switch locks out unauthorized personnel.
- Weld program transfer capability for multiple-system job sites.
- Control panel features soft-touch membrane switches, which are dust / moisture proof and accepted for cleanroom use.
- Compatible with all Arc Machines' orbital fusion weld heads including the high production bench-top Model 4, the family of Models 8 and 9, the (tube-to-tubesheet) Model 96, as well as a fixtured machine torch or a manual torch for hand welding.
- Operates on any voltage from 100 to 240 VAC, single phase, 50 / 60 Hz.
- Optional remote operator's pendant allows welding function overrides and gives the operator access to any four predetermined welding schedules up to 100 feet from the Model 207.
- Only microprocessor-controlled power supply of its kind with a two year warranty.

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INTERNAL PRINTER

Prints an array of information including program library, weld schedule settings, quantity of completed welds, and valuable Q.C. data linked to the Diagnostic Fault Detection System.

KEY SWITCH

Locks out or limits operator access or programming capability. May be removed in any of three modes.

EXTERNAL MEMORY PORT

Used with the (optional) External Memory Module (207-EMM) for additional memory storage or data transfer from one machine to another.

UPPER DISPLAY

Provides prompts for the operator in plain language, making welding or programming simple for anyone.

LOWER DISPLAY

Provides all welding data information, program library readout and numerous other functions such as Diagnostic Fault Detection System (DFDS), and System Interlock status.

CONTROL PANEL

Soft touch membrane switches are dust / moisture proof and accepted for cleanroom use, as well as being ideal for harsh environments.

INTERNAL MEMORY

The internal memory is pre-programmed with weld schedules for most standard applications, and can store up to 100 different weld schedules.

OPERATION IS AS SIMPLE AS ...

Two displays of useful information make operation a snap. The upper display prompts the user in plain language, so even a novice (either operating or programming) will feel comfortable right from the start. The lower display provides the operator with a block of information such as tube diameter, wall, material, etc. The programmed values of 8 different multi-level parameters are also clearly displayed on this screen. Special functions in the standard software include automatic IPM / RPM conversions and tungsten length calculations.

SELECTIVE OPERATOR CONTROLS

During initial programming, software prompts allow the programmer to provide the user with manual overrides. These overrides give the user the freedom to modify the programmed weld schedule to suit his welding needs. The programmer has the option to limit the percentage of override capability of the operator from 0 to 100% of the programmed setting, on all multi-level

functions. The three position key switch enables the key holder to give varied levels of operating or programming capability to the user. The key may be removed in any of the three modes.

Q.C. - HOW EASY CAN IT BE?

Each time the unit is powered up, the Diagnostic Fault Detection System (DFDS) automatically checks the status of five internal functions, including gas flow and input power. Three external interlock sensors may be added to the DFDS. The built-in printer provides a hard copy paper trail of the program library and individual weld schedule parameters. To further enhance Q.C., each successive weld with no DFDS faults may be followed by a printout of the welding parameters and the statement "ALL PARAMETERS PERFORMED AS PROGRAMMED." In the case of a fault, the nature of the fault will be printed out, and must be corrected before another weld can be started. Features like these bring welding Q.C. to a level never before achievable.

ARC MACHINES, INC.

MODEL 207 ACCESSORIES

While the basic Model 207 and an appropriate weld head are all that you need to weld tube or fittings, many desirable options are available:



Remote Operator's Pendant



External Memory Module



Manual Torch and Foot Control



Unitized Water Cooling Unit



Reusable Shipping Case

Additional accessories available, but not shown include:

- Remote Pendant Extension Cables
- Weld Head Extension Cables
- Chart Recorder Interface Cable
- Offline Programming

Technical Data

| | | | |
|---------------------|------------------------------------------------------------|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Welding Process: | GTAW (TIG) | Multi-level Functions: | Primary Amps, Background Amps Primary RPM, Background RPM Primary pulse rate Background pulse rate Current Mode (pulse, on / off) Rotation Mode (on / off / step) |
| Arc Start System: | Injection Pulse Start | Memory Capacity: | Up to 100 weld schedules Up to 100 levels per schedule |
| Current Pulse Rate: | 0.05 to 50 PPS | Dimensions: | Height: 11.00" (20 cm) Width: 22.75" (58 cm) Depth: 18.75" (48 cm) |
| Overrides: | Current, RPM and Pulse Rate: $\pm 100\%$ | | |
| Input Power: | 100 to 240 VAC, $\pm 10\%$ Single phase, 50 / 60 Hz. | | |
| Output Power: | 3 to 100 / 150 amps DCSP, $\pm 0.5\%$, 100% Duty Cycle | | |
| Enclosure: | All metal, self-contained | | |
| Weight: | 79 lbs. (36 Kg) | | |

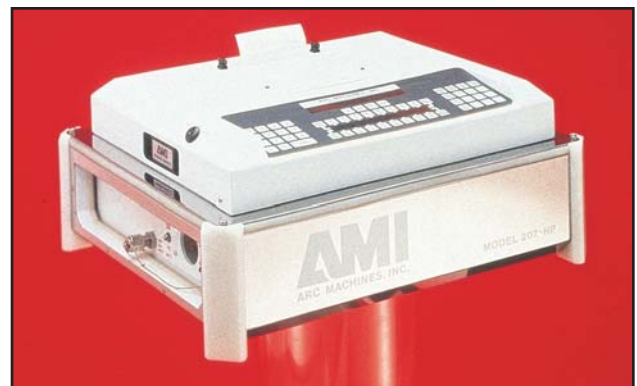
Specifications subject to change without notice.

Complies with all applicable international norms and directives, including: IEC 974-1; ISO/DIS 700; EN 50199; EN 60974-1; NEMA EW-1.

CLEANROOM VERSION

THE MODEL 207-HP is similar to the Model 207, except that it is designed specifically for use in cleanrooms and other areas where particulate shedding is of concern.

See Arc Machines, Inc. Model 207-HP brochure for more information.



ARC MACHINES, INC.®

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