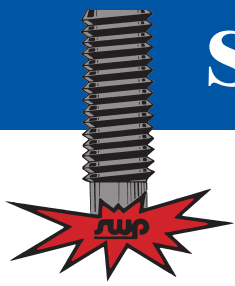


# STUD WELDING PRODUCTS, INC.



## ARC 800

Technical Data Sheet



### ARC 800

**Stud Welding Unit**  
for ARC stud welding  
according to current standards

#### Technical Data

Gas/Automation	Series/Option
Welding range	#4 to 1/2", dia. 14 ga to 3/8" (M3 to MR12, dia. 2 to 10 mm)
Welding material	Mild steel, stainless steel
Welding rate	7 to 17 studs/min (depending on application and stud dia.)
Welding current	800 A
Welding time	5 to 1,000 msec
Primary power	230/460 V or 575 V, 3 phases, 50/60 Hz, 35 AT (alternative input voltages available)
Power source	Transformer/Rectifier
Cooling type	F (temperature controlled cooling fan)
Insulation class	IP 23
Operational and storage conditions	According to current standards
Dimension L x W x H	18.50" x 9.06" x 8.66" (470 x 230 x 220 mm) without handle
Weight	81.57 lbs (37 kg)
Order No.	<b>230/460 V:</b> <b>93-16-0702A (Gas)</b> <b>93-16-0704A (Gas/Automation)</b>
	<b>575V:</b> <b>93-15-0702A (Gas)</b> <b>93-15-0704A (Gas/Automation)</b>

#### General Information

##### Application

- Especially suitable for thicker sheets of about 2 mm or higher

##### Process variants

- **Short cycle drawn arc welding**
- **Drawn arc welding**

##### Special equipment

- **Welding with ceramic ferrule** (series)
- **Welding with shielding gas** (series)
- **Automatic** (optional)

# ARC 800

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## Advantages

### Features

- **Microcontroller** – for precise process times, optimal functional reliability and maximum operating convenience
- **Function monitoring** – automatic function test following power-up; monitoring of all internal system functions
- **Display of error codes** – on digital display
- **Lift test** – for gap welding guns and welding heads

### Structure

- **Extremely easy to operate**
- **Compact**
- **Robust** – metal housing withstands rough treatment in shop and on site

### Safety

- With integrated **mains filter** (protection against voltage peaks)
- **Optimal for construction sites with large mains voltage fluctuations** – use even with critical voltage supply (- 10% + 10%)
- **EMC test**
- **High-voltage test with log**
- **Retriggering lock-out** – prevents welding on a welding element that has already been set
- **Thermal monitoring of transformer** – automatic shutdown in case of overheating
- **Temperature-regulated ventilator** – reduces noise and dust in the stud welding unit (greater system reliability)
- **Consistent separation of transformer and control unit** – protects electronic components against dust and thermal loading
- **Control unit galvanically separated from welding lines** – high degree of functional safety
- **Cooling-air tunnel** – channelling of cooling air to the transformer protects electronic components against dirt and dust
- **Optimal protection against external interferences**
- **Protection class IP 23**
- Also permits operation outdoors

### Welding

- **Display** – infinitely adjustable power setting; easy monitoring of all functions via LED displays; display of welding and gas-preflow time (optional: pneumatic feed time for automation); control and monitoring of all system functions
- **Powerful** – built-in power reserves
- **Trouble-free changing** of welding voltage polarity possible by reconnecting welding current and ground cables

### Suitable stud welding guns/ -heads

- **A 12**
- **PMH-6**
- **CA 08**
- **AI 06**
- **PAH-1 (only suitable for automatic version)**
- **KAH 412 (only suitable for automatic version)**

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(Technical data may change)

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