



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 3 phases, 50/60 Hz, 35 AT or 575 V, 3 phases, 50/60 Hz, 25 AT (alternative input voltages available)						
Power source	Transformer/Rectifier						
Cooling type	F (temperature controlled cooling fan)						
Protection 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.	<table border="0"> <tr> <td>230/460 V:</td> <td>575V:</td> </tr> <tr> <td>93-16-0702A (Gas)</td> <td>93-15-0702A (Gas)</td> </tr> <tr> <td>93-16-0704A (Gas/Automation)</td> <td>93-15-0704A (Gas/Automation)</td> </tr> </table>	230/460 V:	575V:	93-16-0702A (Gas)	93-15-0702A (Gas)	93-16-0704A (Gas/Automation)	93-15-0704A (Gas/Automation)
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General Information

Application

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

Process variants

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

Equipment

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



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, A 16, AI 06**
- **CA 08**
- **PAH-1 (only suitable for automatic version)**
- **KAH 412, KAH 412 LA (only suitable for automatic version)**