



IT 2002
Stud Welding Unit
 for ARC stud welding
 according to current standards

Technical Data

Gas	Option
Welding range	#4 to 1", dia. 14 ga to 1" (M3 to M24, dia. 2 to 25 mm)
Welding material	Mild steel, stainless steel, aluminum
Welding rate	Dia. 7/8" = 7 studs/min (dia. 22 mm = 7 studs/min)
Welding current	2,000 A (max.)
Current adjustment range	300 to 2,000 A (stepless)
Welding time	5 to 1,500 msec (stepless)
Primary power	480/460 V, 3 phases, 50/60 Hz, 63 AT (alternative input voltages available)
Connected load	100 KVA (with 400 V mains), 80 kW
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	23.6" x 19.7" x 32.7 " (600 x 500 x 830 mm) without handle
Weight	209.4 lbs (95 kg)
Order No.	93-66-2201 93-66-2202 (Gas)

General Information

- Application**
- Especially suitable for thicker sheets of about 2 mm or higher
 - Especially suitable for welding of concrete anchors/shear connectors for job site applications
 - Suitable for through deck welding

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

- Equipment**
- **Welding with ceramic ferrule** (series)
 - **Welding with shielding gas** (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
- **Lift test** – for gap welding guns and stud welding heads
- **Library function** – automatic specification of welding current and welding time through selection of stud diameter according to welding range (with and without shielded gas); fine adjustment via arrow keys

Structure

- **Extremely easy to operate**
- **Compact**
- **Mobile** – highly mobile thanks to compact dimensions and low weight (50% weight savings vis-à-vis conventional stud welding units)
- **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)
- **Control unit galvanically separated from welding lines** – high degree of functional safety
- **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; easy operation via membrane keyboard and digital display; setting of welding parameters, programs, shielding gas (optional); digital display of current, welding and gas-preflow time; separate settings for welding current and welding time
- **Powerful** – built-in power reserves
- **Trouble-free changing** of welding voltage polarity possible by reconnecting welding current and ground cables
- **Outstanding welding quality** – very high arc stability even at weak welding currents
- **High process flexibility** – high clock frequency (30 kHz) of stud welding unit allows highly dynamic regulation of welding process

Suitable stud welding guns

- **A 12**
- **A 16**
- **A 22**
- **A 25**
- **AI 06**