



CD 3101

Stud Welding Unit (with digital display)
for CD stud welding (capacitor discharge welding)
according to current standards

Technical Data

Welding range	M4 to M10, dia. 4 to 10 mm
Welding material	Mild steel, stainless steel, aluminum and brass
Welding rate	5 to 20 studs/min (depending on application and stud dia.)
Capacitance	132,000 µF
Welding time	1 to 3 msec
Energy	3,200 Ws
Charging voltage	50 to 220 V (stepless voltage regulation)
Primary power	230/115 V, 50/60 Hz, 10 AT
Power source	Capacitor
Cooling type	F (temperature controlled cooling fan)
Protection class	IP 21
Operational and storage conditions	According to current standards
Dimension L x W x H	510 x 180 x 250 mm (without handle)
Weight	22 kg
Order No.	92-10-0311

General Information

Application

- Especially suitable for thin sheets (at least 0.5 mm)

Process variants

- **Contact welding**
- **Gap welding**

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
- **Library function** – automatic specification of charging voltage through selection of stud diameter according to welding range; fine adjustment via arrow keys



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 (- 25% + 20%)
- **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 and internal temperature of stud welding unit**– automatic shutdown in case of overheating
- **Temperature-regulated ventilator** – reduces noise and dust in the stud welding unit (greater system reliability)
- **Optimal protection against external interferences**
- **Protection class IP 21**

Welding

- **Display** – infinitely adjustable power setting (charge reversal via set-point switch); easy monitoring of all functions via LED displays
- **Powerful** – built-in power reserves
- **Trouble-free changing** of welding voltage polarity possible by reconnecting welding current and ground cables
- **Use of special capacitors** (developed for stud welding)

Suitable stud welding guns

- **C 08**
- **CA 08**

Issue 04/08
(Technical data may change)