



## CD 3101

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

### Technical Data

Welding range	#8 to 7/16", dia. #8 to 3/8" (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	115/230 V, 50/60 Hz, 10 AT
Power source	Capacitor
Cooling type	F (temperature controlled cooling fan)
IP-Code	IP 21
Dimension L x W x H	20.08" x 7.09" x 9.84" (510 x 180 x 250 mm) without handle
Weight	48.50 lbs (22 kg)
<b>Order No.</b>	<b>92-12-0311A</b>

### 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**
- **IP-Code: 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 02/11  
(Technical data may change)