IT 2002

Technical Data Sheet

HBS EFFICIENT TECHNOLOGY

Inverter

Maximum welding quality
Maximum welding rates
Minimum energy consumption
Minimum weight
Maximum efficiency

IT 2002

Stud Welding Unit
for ARC stud welding
according to current standards

Technical Data

Gas	Optional
Welding range	Dia. 14 ga to 1" (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 ms (stepless)
Primary power	480/460 V, 3 phase, 50/60 Hz
Fusing	60 Amp Time Delay Fusing
Cooling type	F (temperature controlled cooling fan)
IP-Code	IP 23
Dimension L x W x H	23.6" x 19.7" x 32.7" (600 x 500 x 830 mm) without handle
Weight	210 lbs
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)

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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
- **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**
- **IP-Code: 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

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(Technical data may change)

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