

# STUD WELDING PRODUCTS, INC.



## STUD WELDING UNIT

Model: IT-3002



### 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)

### 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

FEATURES	WELDING UNIT IT-3002
<b>SIZE</b>	25.6" length, 22" width, 50.8" height (640 x 560 x 1290 mm) without handle
<b>WEIGHT</b>	352.7 lbs. (160 kg)
<b>WELD RANGE</b>	#4 to 1" dia. 14 ga to 1" (M3 to M24, dia. 2 to 25 mm)
<b>WELD MATERIALS</b>	Mild steel, stainless steel, aluminum
<b>WELDING RATE</b>	Dia. 1" = 6 studs/min (dia. 25 mm = 6 studs/min) Through deck welding 3/4" = 12 studs/min (300 feet, AWG 4/0) Industrial application 3/4" = 14 to 15 studs/min
<b>WELDING CURRENT</b>	2,600 A (max.)
<b>CURRENT ADJUSTMENT RANGE</b>	300 TO 2,600 A (stepless)
<b>WELDING TIME</b>	5 to 1,500 msec (stepless)
<b>PRIMARY POWER</b>	480/460 V, 3 phases, 50/60 Hz, 125 AT (alternative input voltages available)
<b>CONNECTED LOAD</b>	150 KVA (with 400 V mains), 120 kw
<b>COOLING TYPE</b>	F (temperature controlled cooling fan)
<b>PROTECTION CLASS</b>	IP 23
<b>OPERATIONAL &amp; STORAGE CONDITIONS</b>	According to current standards
<b>GAS</b>	Option
<b>ORDER NUMBER</b>	93-66-3211 (1 Gun connection)

## 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 22 | • AI 06 |
| • A 16 | • A 25 |         |

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