



## ***PRODUCTION STUD WELDER INVERTER ARC IT 90 AT***



### **DESCRIPTION**

#### **Application**

- Especially suitable for thicker sheets of about 2 mm or higher

#### **Equipment**

- Inverter (2000 A) with options for 4 outputs, process monitoring and shielding gas
- Welding with ceramic ferrule

### **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
- **Process monitoring** – recording and analysis of factors affecting the welding process; after each weld, the reference and actual values are compared; display of the welding energy input; switchable automatic welding stop if limits are exceeded
- **RS232 interface** – for data output; data and time of day are stored; welding parameters of each weld are logged
- **4 gun connections** (optional)

[www.sunbeltstudwelding.com](http://www.sunbeltstudwelding.com)

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## ***PRODUCTION STUD WELDER INVERTER ARC IT 90 AT***

### **ADVANTAGES**

#### **Structure**

- Extremely easy to operate
- Compact / Mobile – highly mobile thanks to compact dimensions and low weight (50% weight savings in relation to 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
- Retriggerring 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 21

#### **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, automation and process monitoring possible; digital display of current, welding and gas-preflow time (optional; pneumatic feed time for automation); 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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# **PRODUCTION STUD WELDER INVERTER ARC IT 90 AT**

| <b>TECHICAL DATA</b>                   |   |
|--|---|
| Welding Process                        | ARC, SC   |
| Welding material                       | Mild steel, stainless steel, aluminum   |
| Technology                             | Inverter  |
| Equipment                              | Welding with ceramic ferrule<br>Welding with shielding gas<br>Process control<br>Automation<br>4 gun/head connections - (optional)  |
| Display                                | Digital   |
| Welding range                          | M3 to M24, dia. 2 to 22 mm /<br>#4 to 1", dia. 14 ga to 7/8"  |
| Welding rate                           | Dia. 22 / 7/8"=6 studs/min  |
| Welding current                        | 2,000 A (max.)  |
| Current adjustment range               | 300 to 2,000 A (stepless)   |
| Welding time                           | 5 to 1500 ms (stepless)   |
| Primary power                          | 400 V*, 3 phase, 50/60 Hz, 63 AT (slow blow)<br>* alternative primary power available - see - Order Number below  |
| Primary plug                           | 63 A (with 400 V mains)   |
| Connected load                         | 100 KVA (with 400 V mains)  |
| Cooling type                           | F (temperature controlled cooling fan)  |
| IP code                                | IP 21   |
| Dimensions - LxWxH<br>(without handle) | 650 x 560 x 1290 mm /<br>25.6" x 22" x 50.8"  |
| Weight                                 | 145 kg / 319.67 lbs (1 gun conn.)<br>165 kg / 363.76 lbs (4 gun conn.)  |
| Order number                           | 93-60-12096 (400 V - 1 gun connection)<br>93-60-42096 (400 V - 4 gun connection)<br>93-66-12096 (480/460 V - 1 gun connection)<br>93-66-42096 (480/460 V - 4 gun connection)<br>93-40-019 (Ground cable, 2 pcs., 5 m, 70 mm 2, 1 vice grip 10") |

| <b>SUITABLE STUD WELDING GUNS</b>     |  |
|---------------------------------------|--|
| PAH-1 (Tripod)                        | PAH-1 (centering device dia. 30 mm)      |
| KAH 412 - Automatic Stud Welding Head | KAH 412 LA - Automatic Stud Welding Head |

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