

ADVANTAGE

► More Power

30% more output current with the same input current allows welding with up to 4.0mm electrode from a 16A input.

► Portable Everywhere

Lightweight, easy to handle, can operate with up to 100m mains extension cables and suitable to use from a generator.

► Robust Design, Industrial Use

Electrical safety (IP23), potted PC boards and optimum airflow reduces contamination to extend the equipments life in the harshest environmental conditions.

► Excellent Welding Experience

Good arc ignition with a smooth stable arc, Soft and Crisp mode, Auto Adaptive Arc Force an optimum choice for welding with every type of electrode.

► Cellulosic Capability

No electrode is too difficult to weld with. Suitable for small diameter pipe welding.

► Extended Input Voltage Range

Smart switching input power allows use from either a single-phase 115v or 230v mains supply

► Green Welding Initiative

PFC gives low current consumption, energy saving, low current harmonics and reduction of the total CO₂ produced by the welding process.



Professional Performance Industrial Innovation

At Lincoln Electric we understand the significant impact that engineering knowledge has on every large or small welding project. The Invertec® 160SX is built to perform: rugged and robust on one hand, portable in another. The Invertec® 160SX is lightweight and easy to handle in a wide variety of applications and is ideal for professional industrial maintenance and small industrial projects, both on site and in workshops. The Invertec® 160SX is also suitable for use with motor generators.

The Invertec® 160SX is equipped with Power Factor Correction (PFC) which corrects the input current waveform. As a result, for the same input current almost 30% more output can be obtained, allowing the use of larger diameter electrodes thus reducing energy demands and costs.

In addition PFC reduces the power dissipation on input cables by up to 50% with consistent money saving. The Perfect Sinusoidal input current waveform reduces harmonics and allows compliance with the latest European standard EN 61000-3-12. The Invertec® 160SX is a real "Green Initiative" welding machine.

Select the Stick Soft, Stick Crisp or TIG process option and set the welding current for a greater welding experience.

The Invertec® 160SX defines a new standard for the professional welder; an efficient and affordable way to weld.



TECHNICAL SPECIFICATIONS

| Product | Item Number | Primary Voltage | Fuse Size | Weight (kg) | Dimensions HxWxD (mm) | Protection/ Insulation Class | Compliance |
|---------|-------------|------------------------------|-----------|-------------|-----------------------|------------------------------|--|
| 160SX | K12050-1 | 115/230V/1/50-60Hz +/-15% | 16A | 9 | 224 x 148 x 385 | IP23 / H | EN60974-1 EN61000-3-12 CE - ROHS |

WELDING OUTPUT

| Process | Input voltage | Current range | O.C.V. | Rated output (40°C) |
|---------|---------------|---------------|--------|---|
| STICK | 230V AC | 5-160A | 80V | 160A / 26.4V @ 30% 100A / 24V @ 100% |
| | 115V AC | 5-100A | | 100A / 24V @ 30% 70A / 22.8V @ 100% |
| TIG | 230V AC | 5-160A | 12V | 160A / 16.4V @ 30% 100A / 14V @ 100% |
| | 115V AC | 5-150A | | 150A / 16V @ 30% 100A / 14V @ 100% |

INPUT POWER

| Process | Input voltage | Input Current I _{max} /I _{eff} | Input Power (P _{max}) | Rated output (40°C) |
|---------|---------------|--|---------------------------------|---|
| STICK | 230V AC | 21.5A/11.8A 12.5A/12.5A | 5.0kVA 2.9kVA | 160A / 26.4V @ 30% 100A / 24V @ 100% |
| | 115V AC | 26.3A/14.4A 16.2A/16.2A | 3.0kVA 1.9kVA | 100A / 24V @ 30% 70A / 22.8V @ 100% |

CONTROL PANEL



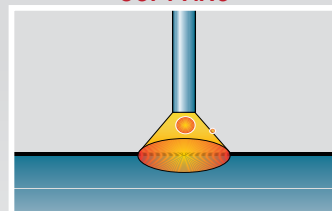
1. Amps Display shows set current at idle and real measured current while welding
2. Status LEDs control equipment electronics functioning and error status
3. Mode Push button and LEDs allow the best process setting: Soft Stick, Crisp Stick or Lift TIG
4. Current setting dial
5. Large connections (35mm²) for professional welding
6. Rubber feet and metal case. No compromise, robust construction

ACCESSORIES

| Item Number | Description |
|----------------|---|
| KIT-200A-25-3M | KIT Power Cable/Electrode Holder 200A, 25mm ² , 3m |
| KIT-200A-35-5M | KIT Power Cable/Electrode Holder 200A, 35mm ² , 5m |
| K10513-17-4V | TIG torch LT17 GV, 4m |
| K10513-17-8V | TIG torch LT17 GV, 8m |

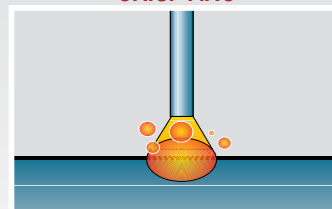
STICK WELDING

SOFT ARC



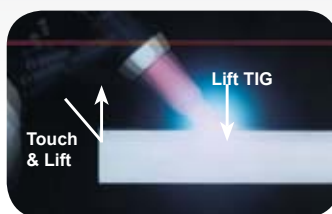
Provides a lower arc force level to deliver a smooth arc with reduced spatter. It provides a clean flat fillet weld with excellent wetting and bead appearance. For stainless electrodes, rutile and low hydrogen electrodes.

CRISP ARC



Provides a more dynamic arc characteristic for welding in all positions. Ideal for cellulosic electrodes

TIG WELDING



The machine has a low open circuit voltage in TIG mode to reduce tungsten contamination. Simply touch the tungsten to the work piece and lift off. The machine will instantly ramp up the voltage and current to establish the arc without the use of high frequency.

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