

STH 160

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TIG/Stick Welding
Power Source



Quick Specs



Light Industrial Applications

Process Pipe
Maintenance Repair
Restaurant/Kitchen Repair
Experimental Aircraft
Dairy Industry
Food/Beverage Industry
Shipboard Installation/Repair

Processes

TIG (GTAW)
Pulsed TIG (GTAW-P)
Stick (SMAW)

Input Power

230 VAC, 1-Phase

Amperage Range 4–160 A

Rated Output 100 A at 100% Duty Cycle
160 A at 20% Duty Cycle

Max. Open-Circuit Voltage 70 V

Weight 6.0 Kg (13.2 lb)

The Power of Blue.®

Inverter-based, DC power source has a **simple-to-use operator interface** providing only the necessary controls in a compact machine.

Best-in-class TIG and Stick arc characteristics for those demanding jobs.

Portable in the shop or at the job site—at 6.0 kg (13.2 lb) the shoulder strap allows the end user to easily move from location to location.

Built-in pulsing capabilities allow the operator to select from four fixed pulse frequencies to satisfy the application.

HF start for non-contact arc starting that eliminates tungsten or material contamination.

Dual fan technology. An optimised power source cooling system which enables the machine to operate at a lower temperature, thus increasing its performance and life cycle.

Thermal overload protection with indicator light helps prevent machine damage if the duty cycle is exceeded or airflow is blocked.

VRD function is a simple design that reduces the open-circuit voltage to 20 volts when the welding power source is not in use.



Digital meter with presetting. Shows preset current before welding and actual value during welding.

Lift-Arc™ start provides TIG arc starting without the use of high frequency or the risk of tungsten contamination.

Adjustable Hot Start™ for Stick arc starts. Adjust the optimal start current for the application. The current automatically increases the output amperage at the start of a weld.

Adjustable Arc force™ prevents sticking. Adjust the optimal arc force value. Adjustable arc force supports positional welding by increasing the output amperage.

Selectable trigger configuration allows the operator to choose standard or 2T trigger method.

Built-in gas solenoid eliminates the need for a bulky torch with gas valve.

Full-function remote control connector for precise amperage control for critical welds on thin materials.

Built-in upslope/downslope function helps provide better arc starts and reduces craters.

Adjustable preflow and postflow gives operator better control of the gas parameters affecting weld zone.

STH 160 with P-CASE comes complete with:

- STH 160 power source
- 3 m (10 ft) power cord
- P-CASE for protection in transport and storage
- 4 m (13 ft) Stick electrode holder with 25 mm Dinse connector
- 4 m (13 ft) work clamp with 25 mm Dinse connector
- Shoulder strap

See page 2 for ordering information.



Welding machine is warranted for 3 years, parts and labour.



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Specifications (Subject to change without notice.)



| Input Power | Welding Amperage Range | Rated Welding Output at 40°C (104°F) | Amps Input at Rated Output, 50/60 Hz | KVA at Duty Cycle | KW | Max. Open-Circuit Voltage | Dimensions | Weight |
|---------------|------------------------|--------------------------------------|--------------------------------------|-------------------|-----|---------------------------|-------------------------------------------------------------------|---------------------|
| 230 VAC Stick | 4–150 A | 100 A at 24.0 VDC, 100% Duty Cycle | 20 | 4.5 | 2.8 | 70 V (20 V*) | H: 245 mm (9-5/8 in) W: 145 mm (5-3/4 in) D: 380 mm (15 in) | 6.0 kg (13.2 lb) |
| | | 150 A at 26.0 VDC, 25% Duty Cycle | 30 | 7.0 | 4.8 | | | |
| 230 VAC TIG | 4–160 A | 100 A at 14.0 VDC, 100% Duty Cycle | 13 | 3.0 | 2.0 | 70 V (20 V*) | H: 245 mm (9-5/8 in) W: 145 mm (5-3/4 in) D: 380 mm (15 in) | 6.0 kg (13.2 lb) |
| | | 160 A at 16.4 VDC, 20% Duty Cycle | 22 | 5.1 | 3.5 | | | |

*VRD voltage.

Ordering Information

| Power Source and Options | Stock No. | Description | Qty. | Price |
|----------------------------------------------|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------|
| STH 160 (machine only) | #059 016 013 | HF TIG with Pulse/Stick inverter, single-phase, 230 VAC, 50/60 Hz. Includes shoulder strap and 3 m (10 ft) power cord | | |
| STH 160 with P-CASE (protective case) | #029 083 084 | HF TIG with Pulse/Stick inverter, single-phase, 230 VAC, 50/60 Hz. Includes protective case, 4 m (13 ft) electrode holder with cable, 4 m (13 ft) work clamp with cable, shoulder strap and 3 m (10 ft) power cord | | |
| Accessories | | | | |
| P-CASE | #656 161 007 | Protective carrying case | | |
| Stick Welding Kit | #058 066 079 | 3 m (10 ft) electrode holder with cable and 3 m (10 ft) work clamp with cable | | |
| RCCS-6M | #195 184 #195 503 | 4 m (13 ft) remote fingertip control 8 m (26 ft), remote fingertip control | | |
| RFCS-6M | #195 183 #195 504 | 4 m (13 ft) remote foot control 6 m (20 ft) remote foot control | | |
| RMS-6M | #195 269 | 8 m (26 ft) remote on/off control | | |
| Dinse-Style Flow Thru Adapter | #195 234 | 25 mm adapter for TIG torch connection | | |
| 6-Pin Remote Plug | #217 796 | 6-pin remote plug to add to an existing remote | | |
| TIG Torches | | | | |
| Gas Hose | | | | |
| Gas Regulators | | | | |

Date:

Total Quoted Price:



Distributed by: