

# STH 160

Issued December 2010 • Index No. DC/27.25 UK

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  
150 A at 30% Duty Cycle

**Max. Open-Circuit Voltage** 70

**Weight** 7.0 kg (15.4 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 7.0 kg (15.4 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.

**Remote control connector** for optional remote control.

**Optional full-function remote control.** Provides precise amperage control for critical welds on thin materials (6-pin fingertip or foot control available.)

### 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	15–160 A	100 A at 24.0 VDC, 100% Duty Cycle	13.1	3.0	2.8	85 V (20 V*)	H: 248 mm (9-3/4 in) W: 144 mm (5-5/8 in) D: 385 mm (15-1/8 in)	Si: 5.2 kg (11.5 lb) STi: 6.0 kg (13.2 lb)
		150 A at 26.0 VDC, 30% Duty Cycle	21.6	4.9	4.7			
230 VAC TIG	4–160 A	100 A at 14.0 VDC, 100% Duty Cycle	8.3	2.0	1.9	70 (20 V*)		
		150 A at 16.0 VDC, 30% Duty Cycle	14.2	3.2	3.1			

\*VRD voltage.

## Ordering Information

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

Date: Total Quoted Price:



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