TIG
AC/DC - HF
SINGLE-PHASE

3 → 230 A

TITANIUM 231 AC/DC FV

Ref. 086944 (without accessories)
Ref. 086951 (with accessories)

INVEST IN THE FUTURE

The TITANIUM 231 AC/DC is a compact, high-performance AC/DC TIG power source that combines power, precision and reliability. Designed for professional users who expect the most from their equipment, it offers a wide range of welding processes (AC and DC TIG, MMA) and delivers consistently high levels of performance on all materials: mild steel, stainless steel, aluminium, copper, titanium. The Pulse mode optimises arc control and minimises workpiece deformation, producing immaculate results, even on thin materials. Featuring an intuitive XL digital interface, the TITANIUM 231 AC/DC provides quick and easy access to all welding parameters. Combining advanced technology with professional ergonomic design, it represents the new benchmark for premium TIG welding machines.

PATENTED TIG WIZARD SOLUTION

- Advanced synergic mode for maximum productivity when tacking and welding aluminium, steel, stainless steel and copper parts, with or without filler metal.
- **5 Types of joint:** Butt joint (BW), Lap joint (FW), Inside corner (BP), Outside corner, and wire splicing.
- Wizard Lab for creating custom welding cycles (developer mode).



Supplied with	TIG PRO 26 - 8 m	4 m - 25 mm²
086951	√	√
086944	without accessories	

7 ADVANCED TIG WELDING MODES

DC

DC Standard: DC welding on most ferrous materials.

DC Pulse: used to limit the amount of heat transfered to the workpiece during welding, which reduces deformation.

FastPulse: pulses up to 20 kHz, retains the benefits of pulse TIG welding whilst reducing noise levels.

PulseInPulse: double-pulse welding for enhanced precision on high-grade materials (Titanium, Inconel, Duplex).

AC

AC Standard: for welding aluminium and aluminium alloys (Al, AlSi, AlMg, AlMn, etc.).

AC Pulse: used to limit the amount of heat transfered to the workpiece during welding, which reduces deformation.

AC Mix: alternates between AC and DC current, to increase welding speed.

\+ MMA, MMA AC and MMA Pulse modes (electrodes up to Ø 8 mm).

EXPERT TIG SETTINGS

- **4 modes for spot welding:**
  - Spot / Multi Spot: traditional spot welding method prior to welding.
  - Tack / Multi Tack: ultra-precise, oxidation-free spot welding, which reduces the risk of deformation on thin sheet material.
- **3 types of ignition :** Lift, HF, and Touch.HF (timed high-frequency ignition).
- **4 trigger modes:** 2T, 4T-Start, 4T-Weld, and 4T-LOG
- **E-TIG Mode:** ensures consistent weld penetration regardless of the arc length (welding energy control).
- **Adjustable offset:** to minimise electrode wear.
- Variable waveforms to customise the welding experience *(noise reduction, weld pool management, position)*
- **There are numerous synergies available for a variety of materials:** Fe, FeNiCr, Al99, AlSi, AlMg.



- XL 5-inch colour display: intuitive, multilingual and customisable.
- 3 user interface levels: Easy, Pro and Expert

MAXIMUM CONNECTIVITY

- Traceability of all welds, in accordance with standard EN 3834.
- Calibration mode for welding accessories (refines the energy calculation).
- Tool for customising the interface – free and available online.
- Save up to 500 user JOBs as well as machine configuration settings to a USB stick.
- Compatible with lever-style switch torches, single and double-button torches, potentiometer torches, and Up & Down torches.
- Full update of the machine software and synergies via USB stick.
- Remote controls available.
- Optional liquid cooling.
- VRD (Voltage Reduction Device) can be activated to reduce the open-circuit output voltage to < 35 V.

ACCESSORIES *(options)*

Torches



TIG 450W B - 8 m
Pro - 084193

Cooling units

Thermal protection	■	■
Coolant flow sensor	■	
Coolant level sensor	■	
Noise reduction	■	■
	KOOLWELD 1 070820	KOOLWELD 4 087293



1000 W
3 L

Trolley



Sack truck 10m³
076341

Remote controls



RC-FA2 - 5 m
083356



RC-HD3
079700



RC-HD4
082076

50/60 Hz	AM	I_2 TIG AC/DC A	I_2 MMA A	INTEGRATED TECHNOLOGY TIG DC PULSE	TIG AC PULSE	MMA PULSE	TIG AC/DC EN 60974-1 (40°C) X% (I2max)	IA (60%)	100%	MMA EN 60974-1 (40°C) X% (I2max)	IA (60%)	100%	U_0 V	U_R V	mm²	cm	kg	IP	Protected & compatible power generator (+/-15%)
110 V - 1~	25	3 → 140	5 → 120	0.1 → 20 kHz	0.1 → 500 Hz	0.4 → 800 Hz	35	155 A	130 A	45	95 A	75 A	60	25.6	35/50	58 x 26 x 44	20.1	IP 23	8.5 kW
230 V - 1~	16	3 → 230	5 → 230				40	205 A	170 A	20	155 A	130 A							

CE - EN 60974-1

Made in France

www.gys.fr