MULTIFUNCTION / 0241



Quick specs

CE

Light industrial Application: Metal fabrication workshops Shipyards and offshore industry Stick (SMAW) Maintenance and Repair Pipe welding outside Auto Body Light Industry

Process: DC TIG (GTAW) **Plasma Cutting**

Input Power: 230V, 1-Phase Amperage Range: 10-200A Rated Output at40 C (104 F):

MMA:170A at 28V @60% Duty Cycle TIG: 200A at 18V @60% Duty Cycle CUT: 50A at 100V @60% Duty Cycle Weight: 15KG

For TIG, Plasma and Stick Welding

A total solution of precise DC TIG welding and plasma cutting machine

O241 is the ideal DC TIG welding and Air Plasma Cutting solution for installation, repair and maintenance applications.

O241 is built on the base of the DIGITAL system, offers precise and efficient TIG welding process with full DC pulse TIG functions whatever you need. Accurate and refined HF ignition and the necessary control, power and work capacity to reliably complete a variety of professional welding tasks.

O241 also comes with a 50A@60% heavy duty cycle plasma cutting power source. What you need for any metal welding or cutting works, you just get this combi machine and it's all you needs.

Easy operation and full functions: From the control panel allowing fast adjustment of all necessary controls for DC TIG welding with either HF or contact ignition. It's also very convenient to store or take out the welding parameters from the memory.

Specialist Features

Precision Arc Performance:

Pulse control:

Built in pulsing functions help to minimize heat input on thin materials, and provide for a faster freezing weld puddle for uphill welding on curved surfaces such as process piping. The TIG pulse also helps moderate filler metal deposition for consistent bead appearance.

High-frequency TIG starting:

Makes it easy to establish an arc under a variety of conditions. Enhances quality by minimizing the potential for weld contamination created by tungsten inclusions in the weld.

- Refined arc ignition from 5A (optional 3A).
- Pilot Arc for superior arc performance and easy start.
- HF or Non-HF Arc ignition: reliable plasma arc initiation without high frequency.
- Continuous Output Control: focus the arc for different material



thickness.

• Rapid Arc Restrike: fast cutting through gaps, even expanded metal.

Powerful with heavy duty: 50A @60%.

 Hot Start Function reliably ignites the electrode and melts perfectly to ensure the best quality even at the start of the seam.

• Arc Force makes it easier to weld large-drop melting electrode types at low current strengths with a short arc in particular.

• Fast Spot Arc system simply controls the spot arc parameter and offers a stable arc.

• 4T Trigger Hold allows to hold the present current by user until press the trigger again.

- Fast, precise, clean arc ignition and arc ending.
- 10 channels memory capacity

Outstanding Quality:

• Newly designed using the latest power electronic technology for improved reliability.

CE Certified.

3 Years Warranty on parts , 5 Years Warranty on Transformer

Technical specifications

Description	VECTOR DIGITAL 0241 MULTIFUNCTION
Weight	15 kg
Power Source Dimensions	L390mmxW150mmxH300mm
Cooling	Fan Cooled
Welder Type	Inverter Power Source
European Standards	EN 60974-1 / IEC 60974-1



Number of Phases	1
Nominal Supply Voltage	230V +/- 15%
Nominal Supply Frequency	50/60Hz
Welding Current Range (STICK Mode)	10 - 200A
Welding Current Range (TIG Mode)	10 - 200A
Welding Current Range (CUT Mode)	10 - 50A
Effective Input Current /STICK /TIG	32.3A
Maximum Input Current/STICK/ TIG	41.7A
Single Phase Generator Requirement	9.5KVA
STICK (MMA) Welding Output, 40oC, 10 min.	170A @ 60%, 28V / 145A @ 100%, 26.2V
TIG (GTAW) Welding Output, 40oC, 10 min.	200A @ 40%, 18V / 155A @ 100%, 26.2V
Welding Output, 40oC, 10 min.	50A @ 60%, 100V / 31A @ 100%, 92.4V
Open circuit voltage	70.0-80.0V DC
Protection Class	IP23S

General View of Control Panel



Control Panel Parameter Values

- 1. Digital Ammeter
- 2. Current Indicator
- 7. Frequency Indicator (Hz)
- 8. Programming Parameter Indicators
- 9. Hot Start/ Arcforce Correction
- 13. Process Selection Button
- 14. Pulse Button
- 15. Negative Control

- 3. percentage indicator (%)
- 4. Power Indicator
- 5. Thermal Overload Indicator
- 6. Time Indicator (s)

10. JOB

16. Positive Control

- 11. SAVE
- 12. Trigger Mode Control Button (HF
- TIG and LIFT TIG Mode only)

General View of Contrl Panel(Continued)



DC TIG-Pulse

- High Speed DC TIG-Pulse Controls
- PPS Pulses per second (Hz): DC=0.1- 5,000 PPS

- % ON-% Peak Time: 5-95% (Controls the amount of time during each pulse cycle at the PEAK amperage.)
- Background Amps: 5-99% (Sets the low-pulse amperage value as a % of the Peak Amps.)



heating and cooling effect also produces a distinct ripple pattern in the weld bead. The relationship between pulse frequency and travel speed determines the distance between the ripples. Slow pulsing can also be coordinated with filler metal addition and increase overall control of the weld puddle

audible than visible-causing increased puddle agitation for a better as-welded microstructure. Pulsing the weld current at high speeds- between a high Peak and a low Background amperage can also constrict and focus the arc. This results in maximum arc stability, increased penetration and increased travel speeds (Common Range: 100-500 PPS). The Arc-Sharpening effects of high speed pulsing are expanded to new dimensions. The ability to pulse at

5,000 PPS further enhances arc stability and concentration potential which is extremely

Hot Start

Hot Start Function reliably ignites the electrode and melts perfectly to ensure the best quality even at the start of the seam. this solution makes lack of fusion and cold welds a thing of the past and significantly reduces weld reinforcement. Adjust the hot start current here and the time here.



Arcforce correction (welding characteristics)

During the welding process, arcforce prevents the electrode sticking in the weld pool with increases in current. this makes it easier to weld large-drop melting electrode types at low current strengths with a short arc in particular.



Accessories

For Standard accessories



TIG torch: WP-26 Gas connector: M16 Cable length 3M 5-pin control coupler

Electrode holder with cable 3M/200A

AG 60-Torch/4.5M

cable 3m

Earth clamp with Reducing valve AW2000

For Optional accessories



Argon gas regular



Water-cooling unit: wc-100 Operating Voltage:230V 50/60Hz Rated Power:260W Cooling Power:1.5KW(1L/MIN) Tank Volume:6.5L



26 Cooling Method: Air-Cooled Rating: DC 200A AC 125A Duty Cycle: 35% **Electrode Size:** 1.0-4.0



Trolley



Foot Pedal Trolley: 5-pin aviation plug