# **SPARTUS®**



### ProTIG 401P AC/DC

# INDUSTRIAL POWER AND PRECISION - RELIABLE TIG AC/DC PULSE

■ The SPARTUS® ProTIG 401P AC/DC is a modern inverter welder designed for versatility and performance. It supports

TIG AC/DC and MMA AC/DC welding with a maximum output of 400A, powered by a three-phase 400V supply.

#### TIG WELDING

The SPARTUS® ProTIG 401P AC/DC provides full control over the TIG AC/DC welding process. The operator can choose between convenient HF ignition and the Lift method, depending on the working conditions. The TIG Pulse function ensures stable welding of demanding materials – from thin sheets to aluminum components – while maintaining maximum precision.

The key adjustment options include:

- AC waveform shape selection from three characteristics (square, sine, and triangular), allowing the arc energy to be matched to the material type and weld thickness.
- Advanced parameter settings AC balance, AC frequency (50–250 Hz), as well as pulse frequency and width, ensuring optimal penetration and precise heat control.
- **Arc dynamics control** adjustable upslope and downslope times enable a clean start and smooth finish of the weld.
- **Spot modes** SingleSPOT and MultiSPOT functions support precise joining of components, especially useful in serial production and assembly work.
- Flexible operation the choice of 2T or 4T modes allows the handling to be adapted to the intensity and duration of the welding cycle.



#### MMA WELDING

The SPARTUS® ProTIG 401P AC/DC also supports shielded metal arc welding (MMA), making it a versatile solution for both production workshops and fieldwork. The machine ensures a stable arc and high-quality welds across a wide range of materials, regardless of thickness.

Key MMA-supporting functions:

• AC and DC output - allows selection of the current type

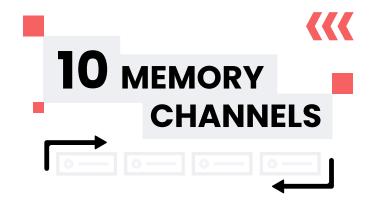
depending on the electrode and material being welded.

- **Hot Start** facilitates arc ignition, reduces the risk of electrode sticking, and ensures a reliable start of the weld.
- **Arc Force** stabilizes the arc under challenging conditions, minimizes spatter, and improves penetration control.
- **Wide current range** up to 400A, suitable for assembly work with thin electrodes as well as welding thick structural components.

#### MEMORY CHANNELS

- QUICK RECALL OF SETTINGS

The SPARTUS® ProTIG 401P AC/DC is equipped with an advanced memory system that allows up to 10 different welding configurations to be stored. This feature enables welders to switch quickly and easily between settings tailored to specific materials and working conditions. It significantly speeds up the workflow by eliminating the need for constant manual adjustments. The ability to save favorite setups makes the SPARTUS ProTIG 401P AC/DC not only efficient but also highly intuitive to operate, making it an ideal tool for professionals seeking both productivity and precision in welding.



#### >>> PROTIG 401P AC/DC

#### Version with cooler ProTIG 401PW AC/DC

#### COOLING

The SPARTUS® ProTIG 401P AC/DC offers a flexible cooling option, enabling operation with either gas cooling or an integrated cooler. Switching between modes is simple – just select the desired option on the control panel to adapt the cooling system to current needs and working conditions.





#### STEROWANIE

The SPARTUS® ProTIG 401P AC/DC also stands out with its flexible control options, providing comfort and adaptability in various working environments.

### THE UNIT SUPPORTS VARIOUS FORMS OF REMOTE CONTROL:

Control UP&DOWN Torch control Wired Wireless Wireless options torch control potentiometer foot control foot control remote control **V** M **V** PROTIG 401P AC/DC V SP-PILOT3



#### EQUIPMENT

The SPARTUS® ProTIG 401P AC/DC is available both as a standalone power source and in various configurations tailored to the user's needs.

#### The suggested package includes:

- ProTIG 401P AC/DC
- TIG torch SPARTUS SPP 26 4B X 4m
- TIG toolbox (consumable kit)
- 3 m electrode holder
- 3 m work clamp
- gas hose
- user's manual

Thanks to a flexible and innovative approach to customer needs, SPARTUS® Pro machines can also be configured with different torches and expanded with additional accessories, creating a set perfectly matched to the specifics of the job.

The modern design, LCD control panel, and wireless operation capability, combined with advanced technological components, place the **SPARTUS® ProTIG 401P AC/DC** among the top machines in its class on the market. As a professional device from the SPARTUS® Pro line, it is perfectly suited for both production and industrial applications.

## PROTIG 401P AC/DC TECHNICAL PARAMETER

Input	~3× 400V ± 10% 50 / 60 Hz
TIG welding current	10 - 400A
TIG duty cycle	60%
Gas pre flow	0.1 - 2s
Gas post flow	0 - 10s
Up slope	0 - 10s
Down slope	0 - 10s
TIG Pulse	yes
Pulse Amps	10 - 400A
Pulse Width	5 - 95%
Pulse frequency	0.5 - 999Hz
AC frequency	50 - 250Hz
AC wave formss	square   sinusoidal   triangular
AC balance	10 - 99%

2T/4T control	yes
Arc ignition	LIFT / HF
MMA welding current	10 - 400
Arc Force	yes
Hot Start	yes
No-load voltage	74V
Current consumpiton	AC: TIG 25.1 / MMA 19.4 DC: TIG 25.7 / MMA 32.7
Power factor (cosφ)	0.7
Efficiency η	85%
Insulation class	Н
Protection class	IP21S
Weight	31kg
Dimensions	700 × 260 × 480mm
Control plug	9SPA - SPARTUS®

