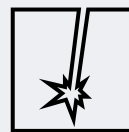


SPARTUS®



ProTIG
401PW 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 401PW 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 401PW 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.

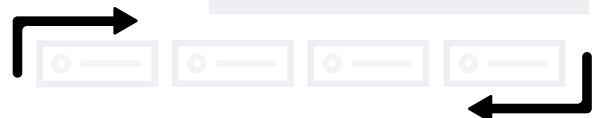
- **Hot Start** – facilitates arc ignition, reduces the risk of electrode sticking, and ensures a reliable start of the weld.
- **Arc Force** – stabilizes the arc under challenging conditions, minimizes spatter, and improves penetration control.
- **Wide current range** – up to 400A, suitable for assembly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

MEMORY CHANNELS

– QUICK RECALL OF SETTINGS

The SPARTUS® ProTIG 401PW 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.

10 MEMORY CHANNELS





■ MOBILE WELDING CART

The SPARTUS ProTIG 401PW AC/DC is supplied as a set with an integrated cooler mounted on a practical **welding cart**. This convenient and functional configuration not only significantly improves the mobility of the entire system but also enhances cooling efficiency, which is crucial during extended welding sessions. Thanks to better heat dissipation, welders can work longer without the risk of equipment overheating, resulting in higher productivity and extended machine lifespan. Additionally, the mobility of the set allows for easy movement between different workstations, which is especially valuable in dynamic industrial environments.

» Version without cooler
ProTIG 401P AC/DC



■ COOLING

The SPARTUS® ProTIG 401PW 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.



■ CONTROL

The SPARTUS® ProTIG 401PW 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 options	UP&DOWN torch control	Torch control – potentiometer	Wired foot control	Wireless foot control	Wireless remote control
PROTIG 401P AC/DC	✓	✓	✓ SP-FC	✓ SP-FC2	✓ SP-PILOT3



EQUIPMENT

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

The suggested package includes:

- ProTIG 401P AC/DC
- cooler
- MaxCoolant- cooling liquid
- 4 wheel drive set
- TIG torch SPARTUS SPP 18 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 customer-oriented approach, SPARTUS® Pro machines can also be configured with different torches and expanded with additional accessories, creating a set perfectly suited to the specifics of the job.

Nowoczesny design, panel funkcyjny LCD oraz możliwość sterowania bezprzewodowego w połączeniu z zaawansowanymi technologicznie podzespołami stawia urządzenie **SPARTUS® ProTIG 401PW AC/DC** w czołówce najlepszych maszyn w tej klasie na rynku. Profesjonalne urządzenie linii SPARTUS® Pro doskonale sprawdzi się w sektorze produkcyjnym i przemysle.



PROTIG 401PW AC/DC TECHNICAL PARAMETER



Input	~3× 400V ± 10% 50 / 60 Hz	2T/4T control	yes
TIG welding current	10 - 400A	Arc ignition	LIFT / HF
TIG duty cycle	60%	MMA welding current	10 - 400
Gas pre flow	0.1 - 2s	Arc Force	yes
Gas post flow	0 - 10s	Hot Start	yes
Up slope	0 - 10s	No-load voltage	74V
Down slope	0 - 10s	Current consumpition	AC: TIG 25.1 / MMA 19.4 DC: TIG 25.7 / MMA 32.7
TIG Pulse	yes	Power factor (cosφ)	0.7
Pulse Amps	10 - 400A	Efficiency η	85%
Pulse Width	5 - 95%	Insulation class	H
Pulse frequency	0.5 - 999Hz	Protection class	IP21S
AC frequency	50 - 250Hz	Weight	78.5kg
AC wave formss	prostokątny sinusoidalny trójkątny	Dimensions	1150 x 600 x 1200mm
AC balance	10 - 99%	Control plug	9SPA - SPARTUS®