

VOLKSWAGEN
GROUP

Resistance spot welder

VAS 821 101A



The VAS 821 101A processor-controlled multifunctional resistance welder with transformer G-clamp is suitable for all repair spot welds permitted on Volkswagen Group vehicles on high- and ultra-high-strength steel sheets and hot-tempered steel sheets (UHSS / Boron steel). It has a maximum electrode contact pressure of 550 daN at 8 bar and a welding power of up to 14,500 amperes. Existing disturbance factors such as paint residues, hollow positions, etc. are detected automatically and controlled adaptively wherever possible. If control tolerances are exceeded, a plain-text message appears on the device display. Full process monitoring and automatic control of pressure, welding current or welding temperature is possible using software. Energy guarantees consistently high quality welds.

Advantages:

- Lightweight: 11.3 kg with G1 clamp
- Automatic over-opening of 80 mm (20 mm at rest)
- Manual over-opening of arm for access to difficult areas (200 mm clearance)
- Brass clamp holder and arm base for optimum electrical contact (easier maintenance)
- Quick, tool-free arm change thanks to double-action lever
- Automatic cooling liquid connectors
- Remote controls on clamp (over-opening, welding, setting confirmation)
- Ball-bearing-mounted gyroscopic sensor integrated on the clamp
- Maximum productivity (18 points/min)
- G9 arm (optional) with automatic mode

Performance :

• Welding power:

- 14,500 A maximum
- Constant current monitoring
- Acoustic message if the tolerance value is exceeded
- Low current consumption

• Electrode application pressure:

- Automatic adjustment of contact pressure
- Maximum electrode force: 550 daN at 8 bar
- Liquid-cooled transformer, rectifiers, electrodes and closing parts

Adjustable boom:

- Reach from power source 120 cm
- Motorised boom to adjust working height
- Offset balancer for from working area
- Rubber protection at the end of the moving parts

Scope of delivery:

- Liquid-cooled resistance welder with
- Transformer G clamp and 6 m clamp cable
 - Standard G1 arm 190 x 97 mm
 - 360° gyroscope with ball bearings
 - Motorised balancing system to adapt working height
 - Cable holder
 - Spring balancer
 - 360° orbital clamp guide
 - Box of consumables with 6 type A electrode caps Ø 13 mm

Parameter memory:

- SD card interface for saving welding parameters
- Software for transferring reports to PC (SPOT SAVE)

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We reserve the right to make technical changes.
Illustrations may contain special accessories,
which are not included in the standard delivery.

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Technical data:

Input voltage: ULN	3~ 400 V- 50/60 Hz
Grid connection power: ILN	25 A
Rated power at 50% ED: S50	23 kVA
Max. Continuous power: Sp	16.5 kVA
Max. Welding power: Smax	96 kVA
Secondary voltage: U2d	7 VDC
Max. Short-circuit current: I2cc	14.500 A
Max. current Continuous current: I2P	2.500 A
Max. regulated welding current	13.000 A
Mains protection aM	25A D-curve
Fault current	30 mA
Working temperature range	+5°C / +40°C
Transport + storage temperature range	-25°C / +55°C
Max. temperature Air humidity	@ 40°C (104°F) < 50 % @ 20°C (68°F) < 90 %
Max. temperature Altitude	1.000 m
Thermal overload protection Rectifier	70°C
Protection class	IP 20
Width	650 mm
Depth	800 mm
Height	2.050 mm
Weight	100 kg
Length of power cable	8.000 mm
Length of clamp cable	6.000 mm
Max. pressure Inlet air pressure: P max.	10 bar
Coolant flow rate :	2.3 L/min
Min. set contact pressure: F min.	100 daN
Max. regulated contact pressure: F max.	550 daN

Options:

Coolant 10 L can (30 L recommended)	VAS 821 101A/1 - 048508
Caps type A Ø 13 mm (x 40)	VAS 821 101A/2 - 048515

