

VOLKSWAGEN

AKTIENGESELLSCHAFT



VAS 821 101

Resistance Spot Welder with C-clamp and transformer
in the clamp



The multifunction Resistance Spot welder VAS 821 101, with transformer integrated in the clamp, microprocessor controlled, fulfills the requirements for the repair of Volkswagen group vehicles for the welding of High and Ultra High strength steels (UHSS / Boron steel). Maximum clamping force of 550 daN under 8 bar. Maximum welding current of 14 500 A even with weaker electrical supply (the machine delivers around 9000 A on an installation with 16 A circuit breaker, and the maximum power on an installation with 25 A, or higher, circuit breaker). The presence of non-conductive elements like residues of paint, porosity, etc.... is recognized by the automatic mode and compensated by an automatic modification of the welding parameters. When tolerances are exceeded, a message appears on the screen of the machine. The complete supervision of the welding process and the automatic setting of the electrode force, welding current and energy, guarantees high quality welding spots in all circumstances.

Advantages:

- Liquid cooled medium frequency transformer integrated in the clamp
- Lower electricity consumption (40% less than cable machine)
- Operating from 16 Amps power supply (with delayed fuses)
- High duty cycle

Description:

- Ideal C-clamp for the welding of all types of steel
- Lightweight clamp and easy to handle : weight 12 kg
- 4m clamp cable, ideal to work at height
- Support cable bracket with balancer
- Remote control on the clamp

Performance:

- Welding current:
 - High welding current : 14 500 A
 - Constant current control
 - Sound alert when welding current is too low
 - Low electrical current consumption
- Electrode force:
 - Automatic regulation of electrode force
 - Electrode force: 550 daN with 8 bars
 - Liquid-cooled arms up to the tips

Machine interface:

- AUTO MODE : automatic setting of welding parameters.
- 7 modes available to answer the requirements of all end users.

Items supplied:

- Liquid cooled resistance spot welder delivered with:
- C-clamp with integrated transformer, and 4 m cable
 - Standard arm 200 x 97 mm
 - Support cable bracket
 - Balancer
 - 360° Gyro
 - SPOTSAVE traceability software
 - Accessories box with 6 type A tips Ø13 mm

Traceability:

- Record on SD card of the characteristics of each welding spot performed
- Restoration on any PC of the reports saved on the SD card

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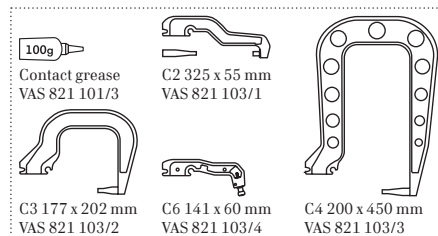
Latest modification: August 2014

Technical characteristics:

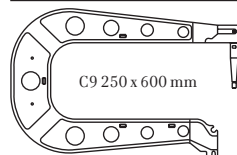
Nominal input voltage: U1N	3~ 400 V- 50/60 Hz
Permanent input current: I1N	25 A
Power at 50 % duty cycle: S50	20 kVA
Permanent input power: Sp	14 kVA
Maximum welding input power: Smax	80 kVA
Secondary voltage: U2d	7 VDC
Maximum short-circuit output current: I2cc	14 500 A
Maximum permanent output current: I2P	1 800 A
Maximum regulated welding current	13 000 A
Circuit breaker	25 A curve D
Earth leakage circuit breaker	30 mA
Ambiant temperature range	+5°C / +45°C
Transport and storage temperature range	-20°C / +70°C
Maximum hygrometry	80%
Maximum altitude	2 000 m
Thermal protection by thermistor on the diode bridge	70°C
Protection rating	IP 21
Width	610 mm
Depth	720 mm
Height (with support bracklet)	2260 mm
Weight	100 kg
Power supply cable length	8 000 mm
Clamp cable length	4 000 mm
Maximum input air pressure: Pmax	10 bar
Liquid flow rate	2 L/min
Minimum regulated force: Fmin	100 daN
Maximum regulated force: Fmax	550 daN

Accessories:

10 L cooling liquid (30L recommended)	VAS 821 101/1
Type A Ø 13 mm caps (x 40)	VAS 821 101/2



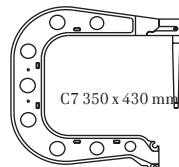
Set 1: VAS 821 103



VAS 821 105/1

VAS 821 103 + VAS 821 105/1

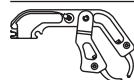
Set 2: VAS 821 105



VAS 821 107/1

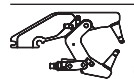
VAS 821 103 + VAS 821 107/1

Set 3: VAS 821 107



C10 arm - difficult access

VAS 821 101/4



C11 arm

VAS 821 101/5