

Plasma welding units

plasmaJET PW50

plasmaJET PW100

plasmaJET PW100 SPS

plasmaJET PW250 SPS



*Perfect technology
for
perfect results*

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Technical data

Model/ feature	<i>plasmaJET</i> ¹⁾ PW20	<i>plasmaJET</i> PW50	<i>plasmaJET</i> PW100	<i>plasmaJET</i> PW100 SPS	<i>plasmaJET</i> PW250 SPS
Mains voltage	1 x 230 V	1 x 230 V	1 x 230 V	1 x 230 V	3 x 400 V
Mains frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Mains fuse	1 x 16 A	1 x 16 A	1 x 16 A	1 x 16 A	3 x 16 A
Setting range of welding current	0,5 – 20 A	0,5 – 50 A	0,5 – 100 A	0,5 – 100 A	4 – 250 A
Setting range of pilot current	4,5 A	3 -10 A	3 -10 A	3 -10 A	3 -10 A
Cooling by circulation, for torch	✓	✓	✓	✓	✓
Flowmeter for shielding-/pilotgas	✓	✓	✓	✓	✓
connection for auto operation	✓	✓	✓	✓ ²⁾	✓ ²⁾
Monitoring of cooling circuit	-	✓	✓	✓	✓
Software-based adjustment	-	-	-	✓	✓
Spot welding timer	-	0.2-2.1sec (Option)	0.2-2.1sec (Option)	✓	✓
Ext. timer	-	✓	✓	✓	✓
Number of programs	-	-	-	8 (100 Option)	8 (100 Option)
Dimensions W x H x D (mm)		455x980x620	455x980x620	455x980x620	455x980x620
Weight (kg)		80	85	85	90

¹⁾ still in development stage

²⁾ expanded functions

The **plasma-arc welding** system allows to carry out high-quality welding jobs, because, compared to other arc-welding systems, it has a higher energy density and a very fine, almost cylindrical plasma-arc that can be measured in exact doses.

The range of application for plasma-arc welding extends from the welding of thin foils made of non-ferrous metals, up to components with thicker sheets of alloyed and unalloyed steel.

Compared to the conventional welding procedure, the reproducible plasma-arc achieves a high root penetration and a significantly lower deformation by heat. The achievable high quality of the weld seam and the welding velocity are characteristic advantages of the plasma-arc welding.

Most for the plasma-arc welding appliances are modified TIG welding devices. The new **PMC**-appliances of the *plasmaJET PW* series are especially designed for plasma-arc welding. They are based on our long-standing experience with the operation of our plasma-arc welding appliances MP50 and ZMW 100 as well as ZMW 250.

The *plasmaJET PW20* is provided for the manual welding of small components with low throat thicknesses. The controls are structured as simple as possible. The models *plasmaJET PW20* and *plasmaJET PW50* are delivered in series with a pedal for remote control.

The *plasmaJET PW50* replaces the previous appliances MP50 and 50. As far as

the functions are concerned, the *plasmaJET PW50* is largely identical with the MP50. The duty cycle comes to 100 % with a maximum current of 50 amps.

The power class of 100 amps is new in our product range. The *plasmaJET PW100* is dimensioned for a duty cycle of 100 % at 100 amps. Its control system corresponds to the system of the *plasmaJET PW50*.

The *plasmaJET PW100 SPS* is designed for automatic welding systems. Equipped with a duty cycle of 100 % and a Siemens SPC system, it is easy to link with a super-set process control.

Compared to the *plasmaJET PW100 SPS*, the *plasmaJET PW250 SPS* has a maximum strength of current of 250 amps. Technically, it is to a large extent identical with its predecessor ZMW 250 SPS. On the part of the machine, a duty cycle of 100 % at 200 amps is possible.

The models *plasmaJET PW100 SPS* and *plasmaJET PW250 SPS* allow a multitude of customized solutions to adapt the software to the individual welding jobs and peripheral equipment (robots, devices, bus connections etc.) of the customer.

Compared to the previous models, all **PMC** plasma-arc welding systems of the type *plasmaJET PW* are equipped with a markedly intensified cooling by circulating water. These components have been designed and constructed especially for the high demands of plasma-arc welding.

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