

SPATZH300 High Frequency Inverter Power Source

The **SPATZH300** high-frequency inverter power source with its 20,000 Hz clock frequency is the all-purpose, cost-effective alternative to all of the transistor-controlled power supplies for micro welding and small component welding. With its rapid reaction speed, the **SPATZH300** displays high-performance, lasting welding capability, functioning with just as much precision at 100 A as it does at 9,000 A.

Each welding operation is feedback controlled during the procedure. The control process takes place very quickly based on the 20 kHz inverter frequency. Actual values are compared with target values every 0.025 ms. The output power is adapted during the welding process if targets are not being met. Constant Current Control (CCC), Constant Power Control (CPC) and Constant Voltage Control (CVC) can all be used. At the end of each weld, the **SPATZH300** checks whether the actual welding parameters keep within the set limits.

The **SPATZH300's** timer and high-frequency inverter are housed in a compact IP54-protected housing, which weighs a total of 27.5 kg / 60.6 lb. While the external high-frequency transformer needs to be installed close to the welding site, the **SPATZH300** can be installed within the vicinity of the machine.

The **SPATZBG-02** operating device is used for operating the functions and adjusting the welding parameter settings. The curve characteristics of the process signals and the measured values of the last 10,000 welds can be read by the **SPATZBG-02** at any time.

The specific advantages of the **SPATZH300** high-frequency inverter, such as its low weight and high output voltage, allow the easy system integration. The high output voltage enables relatively long welding power lines to lead to the welding position.

The **SPATZH300** high-frequency inverter is deliverable for a mains input voltage range from 3~400 V to 500 V.



Technical Data

Number of programs	63
Welding impulses / program	16
Control modes	CCC, CPC, CVC
Weld parameter monitoring	yes
Stepper function	for CCC, CPC, CVC
Force schedule	yes
Slope up / slope down	yes
Signal inputs	current, voltage, force, penetration
Output for proportional valve	yes
Mains voltage U_1	3~400 V - 500 V, 50/60 Hz
Max. power S_{max}	60 kVA with 400 V
Nominal power S_N	33 kVA with 50 % duty, 400 V
Welding current range I_2	100-9,000 A with 6% duty cycle
Welding voltage U_{2N}	10 V DC
Interfaces	BG-02, RS232, MASDAT
Digital inputs	13
Digital outputs	8
Cooling water	4 l/min at 20 °C 1.1 gal(US)/min at 68 °F
Type of protection	IP54
Dimensions (H x W x D)	380 x 380 x 210 mm 15.0 x 15.0 x 8.3 in
Weight	27.5 kg / 60.6 lb
Colour	light grey / RAL7035
Included in delivery	-documentation -BG-02 connecting cable 3 m / 118.1 in -BG-02 connecting cable holder



SPATZT1-Pack Transformer

Welding transformers for 20 kHz

Technical Data

Type

Nom. power S_N (20 % duty cycle)

Nom. power S_N (50 % duty cycle)

S_{max}

Max. welding current I_{2max}

Sec. Voltage U_{20}

Primary voltage U_1

Max. primary current I_{1max}

Isol. class

Cooling Water

(at 20 - 25 °C / 68 - 77 °F)

Dimensions (H x W x D)

Weight

T1-Pack

50 kVA

33 kVA

60 kVA

9 kA

10 V

500 V

150 A

IP54

4 l/min

1 gal (US) / min

120 x 315 x 100 mm

4.7 x 12.4 x 3.9 in

10 kg / 22 lb



Other models are available on request.

