



PLASMA TEC



- COMPACT DESIGN
- MINIMAL RESIDUAL ENERGY AND FAST ARC RECOVERY
- RS232 SERVICE INTERFACE
- WATER COOLING
- OPTIONAL FIELD BUS
- OPTIONAL INTEGRATED CONTROL PANEL
- CUSTOM SOLUTIONS AVAILABLE

The primary switched-mode **PLASMA TEC** power supply delivers either a DC, unipolar or bipolar pulsed output voltage of 400 to 800V. In the unipolar pulse mode, the unit delivers an output frequency of 76 kHz, in bipolar pulsed operation 38kHz. The duty cycle can be adjusted via the RS232 interface. The pulse duration is selectable from 1µsec to 11.5µsec, corresponding to a duty cycle of 7.6% to 88%. The positive and negative pulses have the same voltage level. The number of positive and negative pulses is selectable via RS232 interface. To increase the power up to 15 devices can be connected in parallel.

Output controls:

Control of	Voltage, current, power
Arc detection	<1µsec
Arc threshold adjustable	from 0-800V
Arc injection time of 0-	100µsec adjustable
Arc pause time adjustable	from 0-1000µsec
Arc energy	<3mJ at 800V
Setting the Pulse:	
positive pulses	0-255 in steps of 1
negative pulses	0-255 in steps of 1
Duty cycle from	1µsec up to 11.5 µsec from 7.6% to 88%

SPECIFICATIONS

Input:

Input voltage	400Vac ±10%
Input current	50 or 60Hz, three phase max. 20A

Output:

Output power	10kW at 400 to 800V
Output voltage	±400 - ±800V DC or Pulse av
Ignition voltage	±1400V
Output frequency	unipolar bipolar 76kHz 38kHz
Output current	DC-operation Pulse-operation 12,5A at 800V ±9,6Aav at 800Vav 25A at 400V ±19,2Aav at 400Vav

Cooling system:

Water cooling	yes
Temperature	5°C min., 35°C max. non condensing
Water flow rate	4 l/min., > 3.5bar < 6bar
Water connection	10mm

Power connections:

Input	3-pin Han modular (Harting)
Output	Lapp-Epic HB16 with 2 GES-HV-modules
Output cable	2 x RG213/U

Dimensions (H x W x D):

3HE x 19" x 600mm (695mm incl. plug)

Protection:

IP 54

CE Marking:

DIN VDE 0160 / EN50178
Emission: EN55011 Group 2, Class A
Immunity: EN 61000-6-2

SELECTION TABLE

MAXIMUM RATING			MODULE NUMBER
Vav	Aav	kW	
400-800	19,25 – 9,6	10	NDCR1017F01001
400-800	38,5 – 19,25	20	2 x NDCR1017F01001

