

Capacitor Charging Power Supply **CCPS 6000**

FEATURES

6000 J/s

3 Phase 360 - 520 V

Passive Power Factor Correction

Modular output configuration

Positive or Negative polarity

Short circuit proof

Optional:

Serial bus interface RS-232 / RS-485

Configuration software



APPLICATIONS

Flash lamp Laser

Pulsed plasma (CO₂, EXCIMER)

RF Pulse Generators

Shock wave generator

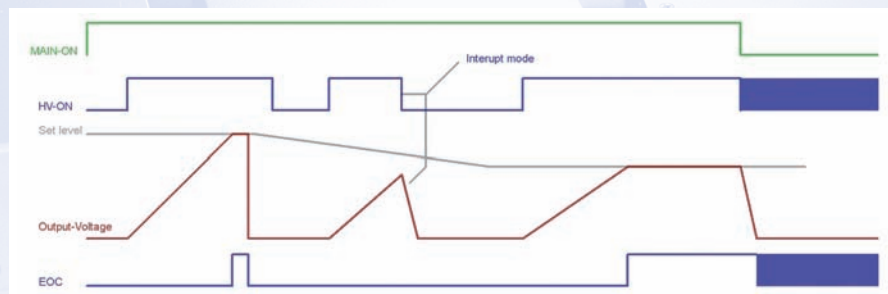
Meets **industrial, medical** and **scientific** requirements

GENERAL DESCRIPTION

The BKT converter series CCPS bases on a quasi sine wave topology and is designed specially for the requirements to charge capacitors with constant current. Hence, it must have a high dynamic internal resistance, like a current source, and a quick transition to voltage control. Discharged capacitors act like a short circuit, this is repetitive, pulse by pulse, and must therefore compensated reliable and very fast. The implemented high voltage transformer converts the energy to a galvanic isolated selectable polarity output.

Operating mode options:

Signals name	Description
Main ON -->	Enables the main contactor and activates the PFC buffer
HV - ON -->	Starts the charge sequence unless the output voltage is above set level
Set Level -->	Defines the threshold of the output
EOC <--	Indicates the output is above or even to set level (End Of Charge)
Temp-ERR <--	Interlock for abnormal thermal stress



Specifications:

Electrical	MIN	Max	Unit
Output			
Energy	-	6000	J/sec
Voltage * Transformer plug in	500	40.000	V
Current	-	25	A
Polarity on order request	Positive / Negative		
Input			
AC line Input voltage single phase	400(360)	480 (520)	V
AC Line Input current	9	12	A
Fuse	16	16	A
Power factor	>0.98		
Efficiency at full load	>88		%
Operating frequency line	45	65	Hz
Dynamic response			
Pulse to pulse stability	+/-2		%
Pulse repetition rate	Cont.	1000	Hz
Thermal			
Temperature drift	-	100 ppm	1/K
Ambiance/Installation/Transport			
Storage temperature	-5	+80	°C
Relative humidity storage		90	%
Ambient temperature during operation	+5	+45	°C
Relative humidity during operation	10	90 non condensing	%
Ambient conditions, room air	Atmospheric 0 - 3000 m		m
Body Dimensions L x W x H	19" 4U x 470		mm
Weight * Transformer dependent	18.000	27.000	g
Approvals	CE-Marking		