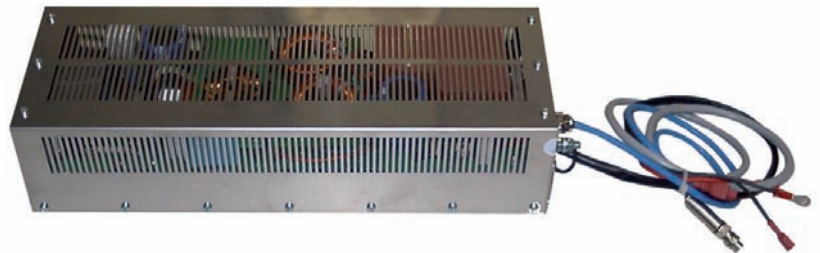


Capacitor Charging Power Supply **CCPS 500**

FEATURES

500 J/s

Wide range (90 - 264 V) Input
Active Power Factor Correction
Slim case style
Modular output configuration
Positive or Negative polarity
Short circuit proof
Optional:
Serial bus interface RS-232 / RS-485
Configuration software



APPLICATIONS

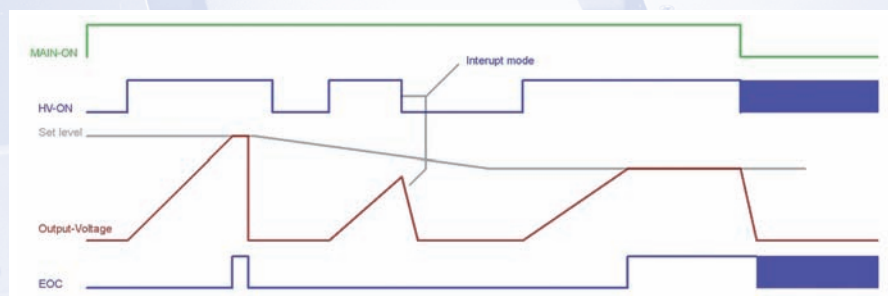
Flash lamp Laser
Pulsed plasma (CO₂, EXCIMER)
RF Pulse Generators
Shock wave generator
Meets **industrial**, **medical** and **scientific** requirements

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		500	J/sec
Voltage * Transformer plug in	500	15.000	V
Current	0.030	2	A
Polarity on order request	Positive / Negative		
Input			
AC line Input voltage single phase	110 (90)	240 (264)	V
AC Line Input current	2.6	7	A
Fuse	8	12	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	350 x 110 x 100		mm
Weight * Transformer dependent	1.700	2.200	g
Approvals	CE-Marking		