

## POWER STATION pe5210-W

<b>Output power:</b>	10 - 120 kW	<b>Typical applications:</b>	
<b>DC current:</b>	120 - 8000 A (max. 8000 A / 4 V)	Chrome plating	Barrel plating
<b>DC voltage:</b>	4 - 30 V (max. 1000 V / 120 A)	Anodizing/Aluminium colouring	Rack plating

Water cooled DC power supply in switch mode technology, designed for the direct installation at the electroplating tank.



POWER STATION pe5210-W, front view, example with 60V / 800A

### Characteristic values

Linearity inaccuracy:  
- for amperage < 1 %  
- for voltage < 0.5 %

Ripple less than < 2 %

Efficiency typical > 85 %

Powerfactor  $\cos \varphi$  0,95

Constant current and voltage control

Soft start function

Over temperature protection

Internal shunt with 60 mV at  $I_{nenn}$

Pulse operation optional

Mains supply: standard 3 x 400 V +/- 10 % / 50-60 Hz  
(other voltages on request)

### Cooling

Water cooled / cooling water specification: see page 2

Ambient temperature 40°C (other on request)

Stainless steel cooling system, over temperature protected

### Design

Compact Rittal TS cabinet; protection grade: IP54

Powder coated, RAL 7035

Mains supply below in cabinet

Cooling water connection in the plinth, 1/2" connections

DC output bus bars:

- Low voltage outputs in top plate of cabinet
- High voltage outputs inside the cabinet

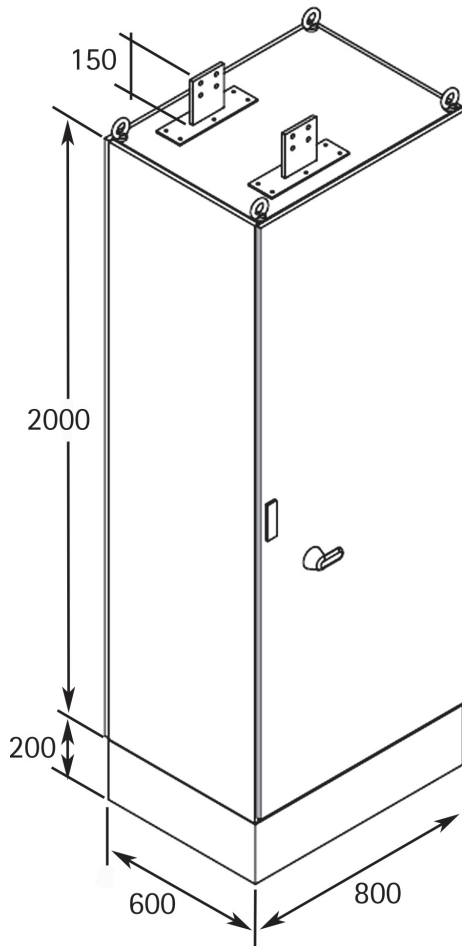
With mains power switch, fuses and sub distributor

Dimensions (W x H x D) 800 x (2200+150) x 600mm incl. plinth

EMV: EN50011 class A, group B ; EN61000-6-4 and EN61000-6-2;  
CE-conformity low voltage guide line: EN50178

Values	Standard sizes – DC output <sup>1</sup>										other sizes on request				
	8000 A		7200 A					6500 A	6000 A	5000 A	4000 A	120 A			
DC current	4 V	5 V	6 V	8 V	10 V	12 V	15 V	18 V	20 V	24 V	30 A	1000 V			
DC voltage															
Mains supply	3 x 400V AC														
Weight	approx. 310-400 kg														

### Standard dimensions



### Control

Standard: peRB-interface

Optional: external control via analog signals, also with integrated isolation amplifier

Signals: 0-10V  
0-1V  
4-20mA  
0-20mA (other on request)

Control unit pe280  
for the controlling of  
DC power supplies of  
the series POWER STATION pe5210-W

Designed for electroplating applications  
Large 3-line LCD-display,  
polycarbonate-keypad for easy operation  
Current and voltage infinitely adjustable  
by UP / DOWN buttons



Current and voltage preset

Ampere-hour counter (totalizer)

Protection grade: IP54

Ambient temperature max. 40°C

### Optional available functions

Preset counter, dosage counter \*

Ramp function (start / stop ramp)

Timer function for ON / OFF \*

Voltage / current alarm \*

Operating hours counter

Chopper timer (pulse-capable rectifier type requested)

Pole changer function (mechanical / electronic) \*

Programmable DC steps (14 individual steps) \*

Extern ON

\* Indication / alarm output

Control via: RS485, PROFIBUS, TCP/IP (other on request)

### Cooling water specification

For the water cooling system, city water with the following specifications should be used:

ph Value:	7,0 - 8,0	Inlet temperature:	18-26°C
Hardness:	<=1,3 mmol/l (<=7°dH)	Water pressure:	> 2bar
Chloride:	<=100 mg/l		

To operate this rectifier, and to keep the specified values of the cooling water, a closed cooling system is recommended.

Technical equipment, design and features: subject to change! For further information please contact plating electronic GmbH.