

Output power:	max. 20000 Watts	Typical applications:	Laboratory plating lines
DC current:	max. 1200A (at 15V)	Precious metal plating	Reel-to-reel plating
DC voltage:	max. 1000V (at 20A)	PCB lines	Manual plating lines

DC power supply in switch mode technology, designed for use in electroplating.



POWER STATION pe4203, front view



POWER STATION pe4203, back view

Characteristic values

Linearity inaccuracy:

- for amperage < 1 %
- for voltage < 0.5 %

Ripple less than < 1 %

Efficiency typical > 85 %

Powerfactor $\cos \varphi$ 0,95

Constant current and voltage control

Soft start function

Microprocessor controlled regulation

Mains supply: standard 3 x 400 V +/-10% / 50-60 Hz without N
(other voltages on request)

Cooling

Water cooled, over temperature protected

Ambient temperature 5° - 40°C

Cooling water consumption: min. 5l/per minute

Design

Protection grade IP53

Anodized aluminium front panel

DC connection in back panel

Wall mounting possible via additional rails

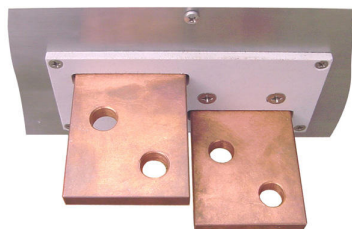
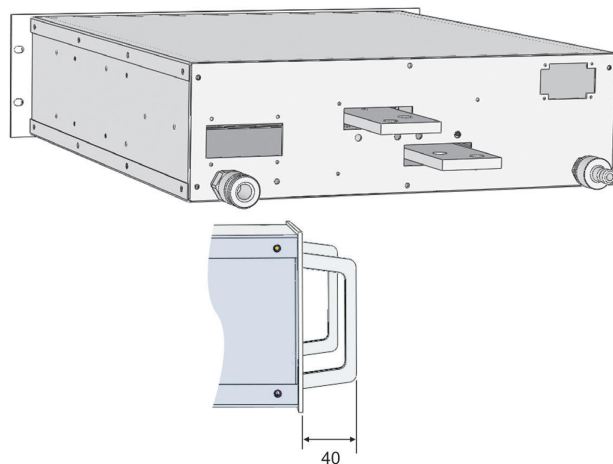
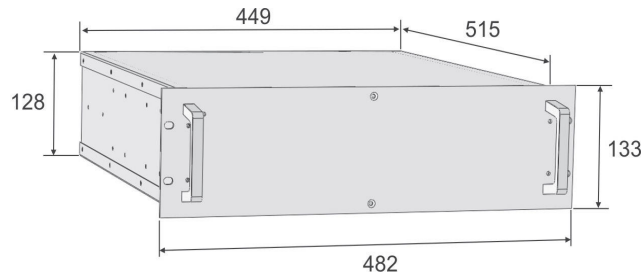
Water connections 1/2 inch thread or bayonet connector
(cooling: brass / copper pipes)

Operation parallel and serial (DC output) of up to 30 units possible

EMV: EN55011 class A, group 1 ; EN61000-6-4 and EN61000-6-2;
CE-conformity IEN50178 - low voltage guide line

Values	Standard sizes – DC output ¹									other sizes on request
	1200 A			1000 A			500 A		20 A	
DC current										
DC voltage	6 V	10 V	12 V	15 V	18 V	20 V	24 V	30 V	1000 V	
Mains supply	3 x 400 V AC									
Weight	approx. 50-70 kg									

Standard dimensions



DC output bus bars

Cooling water specification

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

ph Value:	7,0 - 8,0 und TOC < 1,5 mg/l	Sulfate:	< 240 mg/l
Hardness:	<=1,3 mmol/l (<=7°dH)	Nitrate:	< 50 mg/l
Chloride:	<=100 mg/l	Sodium:	< 150 mg/l
Inlet temperature:	18-26°C	Water pressure:	> 2-5 bar

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.

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 pe4203

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)