

POWER STATION pe5410-W

| | | | |
|----------------------|----------------------------------|-------------------------------|----------------|
| Output power: | 20 - 110 kW | Typical applications: | |
| DC current: | 50 - 5000 A (max. 5000 A / 22 V) | Chrome plating | Barrel plating |
| DC voltage: | 4 - 30 V (max. 1000 V / 100 A) | Anodizing/Aluminium colouring | Rack plating |

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



POWER STATION pe5410-W, front view



POWER STATION pe5410-W, back view

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

Variable output range

the output range can be individually multiplied

Characteristic values

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

Ripple less than < 1 %

Efficiency typical > 85 %

Powerfactor cos φ 0,95

Constant current and voltage control

Soft start function

Over temperature protection

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:

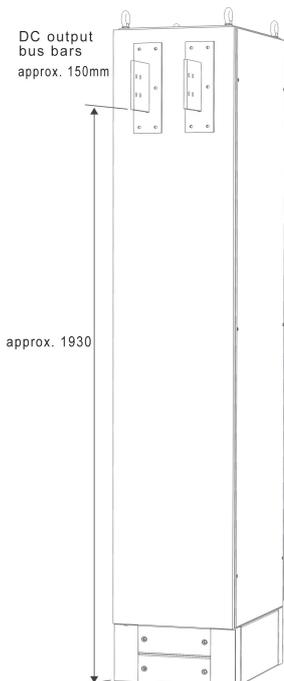
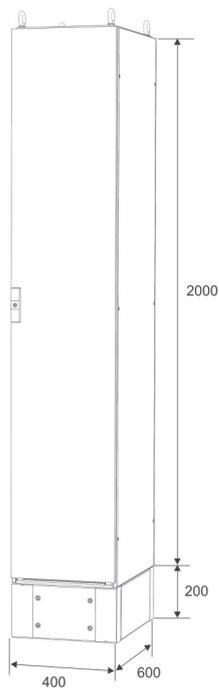
- Low voltage outputs in top plate of cabinet
- High voltage outputs inside the cabinet

With mains power switch, fuses and sub distributor in a separate supply cabinet - optional available

Dimensions (W x H x D) 400 x 2200 x 600mm incl. plinth

| Values | Standard sizes - DC output ¹ | | | | | | | | | | | other sizes on request | | |
|--------------|---|-----|-----|-----|------|------|------|------|------|------|------|------------------------|--------|-------|
| | 5000 A | | | | | | | | | | | 4000 A | 3000 A | 100 A |
| DC current | | | | | | | | | | | | | | |
| DC voltage | 4 V | 5 V | 6 V | 8 V | 10 V | 12 V | 15 V | 18 V | 20 V | 22 V | 24 V | 30 V | 1000 V | |
| Mains supply | 3 x 400V AC | | | | | | | | | | | | | |
| Weight | approx. 260 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 pe5410-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.