



# Plating Rectifiers / DC Power Supplies PULSE-REVERSE Power Supplies



plating electronic  
we care for power



## plating electronic – A FAMILY-RUN COMPANY AND A WORLD LEADER FOR DECADES



Karl Rieder  
General Manager  
plating electronic GmbH

- Technology leader in DC and Pulse power supplies
- Main concentration on individual customer solutions
- Meets the highest quality demands
- MADE IN GERMANY for global markets

## SWITCH-MODE TECHNOLOGY

With the use of efficient, high-frequency technology, switch-mode power supplies offer many advantages over conventional rectifiers based on output adjustment by motor control or thyristor technology. Switch-mode technology is a reliable, globally recognized and robust technology and is ideally suited for use in electroplating and industrial applications. The air or water-cooled DC and Pulse power supplies can also be easily integrated into a control system.

## DIGITAL CONTROL (DSP CONTROLLED)

We utilize the most up to date technology and employ digital controls in our power supplies. Our devices are characterized by excellent control accuracy and extremely low ripple.

Quick and easy connection to control units or to current BUS interfaces is another advantage of the digital technology.

<b>Regulation inaccuracy &lt; 1% <sup>(1)</sup></b>	Better quality thanks to enhanced process sequence reproducibility. Constant current and voltage regulation.
<b>Ripple &lt; 1% <sup>(1)</sup></b>	Qualitative benefits in many plating processes.
<b>Compact design</b>	Low space requirement and therefore low power losses, because installation is possible directly at the treatment baths.
<b>Power factor up to 0,99 <sup>(2)</sup></b>	Energy cost savings thanks to improved grid quality and reduced reactive power component.
<b>Efficiency up to 95%</b>	Low energy consumption leading to operating costs savings.
<b>Parallel or serial connection</b>	More flexibility thanks to easy multiplication of the performance range, in parallel or series.

<sup>1</sup> For control range from 1%-100% and related to rated DC value.

<sup>2</sup> Related to rated DC value



# Air and Water Cooled Rectifiers

## Bench Top Rectifiers - POWER STATION up to 12 kW

Air cooled



**pe1018-2**  
up to 750 W  
up to 50 A  
up to 30 V



**pe1028**  
up to 750 W  
up to 60 A  
up to 250 V



**pe4383**  
up to 6 kW  
up to 300 A  
up to 600 V



**pe1058**  
up to 12 kW  
up to 600 A  
up to 600 V

## DC Rectifiers - POWER STATION up to 48 kW

Air cooled



**pe3100-1**  
up to 750 W  
up to 50 A  
up to 30 V



**pe4606**  
up to 6 kW  
up to 300 A  
up to 600 V



**pe4606-2**  
up to 12 kW  
up to 600 A  
up to 600 V



**pe4606-3**  
up to 24 kW  
up to 1200 A  
up to 600 V



**pe4606-4**  
up to 48 kW  
up to 2200 A  
up to 600 V

## DC Rectifiers - POWER STATION up to 40 kW

Water cooled



**pe4626-W**  
up to 3 kW  
up to 200 A  
up to 30 V



**pe4203-W**  
up to 20 kW  
up to 1200 A  
up to 1000 V



**pe4206-W**  
up to 40 kW  
up to 2000 A  
up to 1000 V

*Are you interested in an easy and smart solution to install our DC rectifiers into a cabinet housing?  
Please contact us for further details on POWER STATION pe 7010-X, our customs tailored series with multiple outputs.*



## Cabinet Rectifiers - POWER STATION up to 200 kW

**Air cooled**

**Water cooled**



**pe5610**  
up to 90 kW  
up to 6000 A  
up to 600 V



**pe5410-W**  
up to 110 kW  
up to 5000 A  
up to 1000 V



**pe5910-W-X**  
up to 200 kW, up to 10.000 A, up to 1000 V  
with optional integrated, electronic pole changer  
pe5910-W-X with multiple outputs:  
up to 2x5000 A or 4x2000 A or 6x1000 A



The Output power can be individually increased by parallel or serial connection

## Programmable Control Units



**pe280**  
multi-functional control unit



**pe280**  
multi-functional control unit,  
flush panel mount control unit



**pe8007**  
multi-functional control unit,  
12" colour touch panel, with batch  
programming and process  
monitoring, data-logging

## pe900 series Control Systems



### Fieldbus interfaces

CANopen  
CC-Link  
ControlNet  
DeviceNet  
Modbus-RTU  
Profibus-DP  
RS485

### Ethernet version

EtherCAT  
EtherNet/IP  
Modbus-TCP  
Profinet IO  
Profinet IRT

Additional accessory, as for example Pole changer, Digital/Analogue Converter, PC Software, Isolation Amplifier complete our manufacturing range. Please contact us for individual data-sheets.



## PULSE-REVERSE Power Supplies POWER PULSE

Air cooled



### pe86CB series

Output power: max. 200 W  
Effective and DC current: max. 10 A  
Pulse current: max. 50 A  
Effective voltage: max. 60 V



### pe861 series

Output power: max. 6.36 kW  
Effective and DC current: max. 318 A (2 x 159 A)  
Pulse current: max. 720 A (2 x 360 A)  
Effective voltage: max. 550 V



## PULSE-REVERSE Power Supplies POWER PULSE

Water cooled



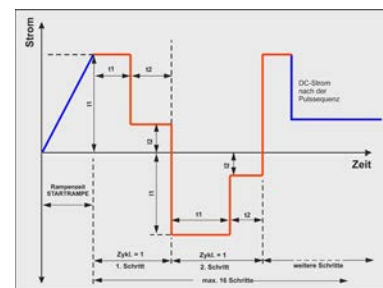
### pe80CD series/pe86CWD series

Output power: max. 224 kW  
Effective and DC current: max. 3392 A  
Pulse current: max. 7680 A  
Effective voltage: max. 800 V  
Outputs: up to 16



### pe8005

programmable  
control unit



Examples of pulse diagrams, schematic

### Typical parameters

Switch mode technology

#### Complex waveforms

Regulation inaccuracy < 1% (relative to related DC value)

Ripple < 1% (relative to related DC value)

Constant current and voltage regulation

Fast rise and fall times (steep curve flanks)

Permanently short-circuit and open-circuit proof

Operating/programming via pe8005 control unit

### Product characteristics, programmable control unit pe8005

Large, illuminated 5.7" graphic display

Clear and user-friendly guidance leading through structured pull-down menus

Controls from 1 to 16 outputs

Easy generation of complex waveforms, consisting of up to 16 steps

RS485 Bus Interface (optional: PROFIBUS, TCP/IP, Modbus)

Synchronization function

Ah-totalizer, dosage counter, timer, programmable START ramp, 2 configurable output relays, phase shifting

Parameters individually adjustable even during operation

Graphical visualization of set-values and real-time actual value curves (oscilloscope function)

Resolution: 100 mA, 0.02 mSec

The Output power range can be individually multiplied using parallel connection.

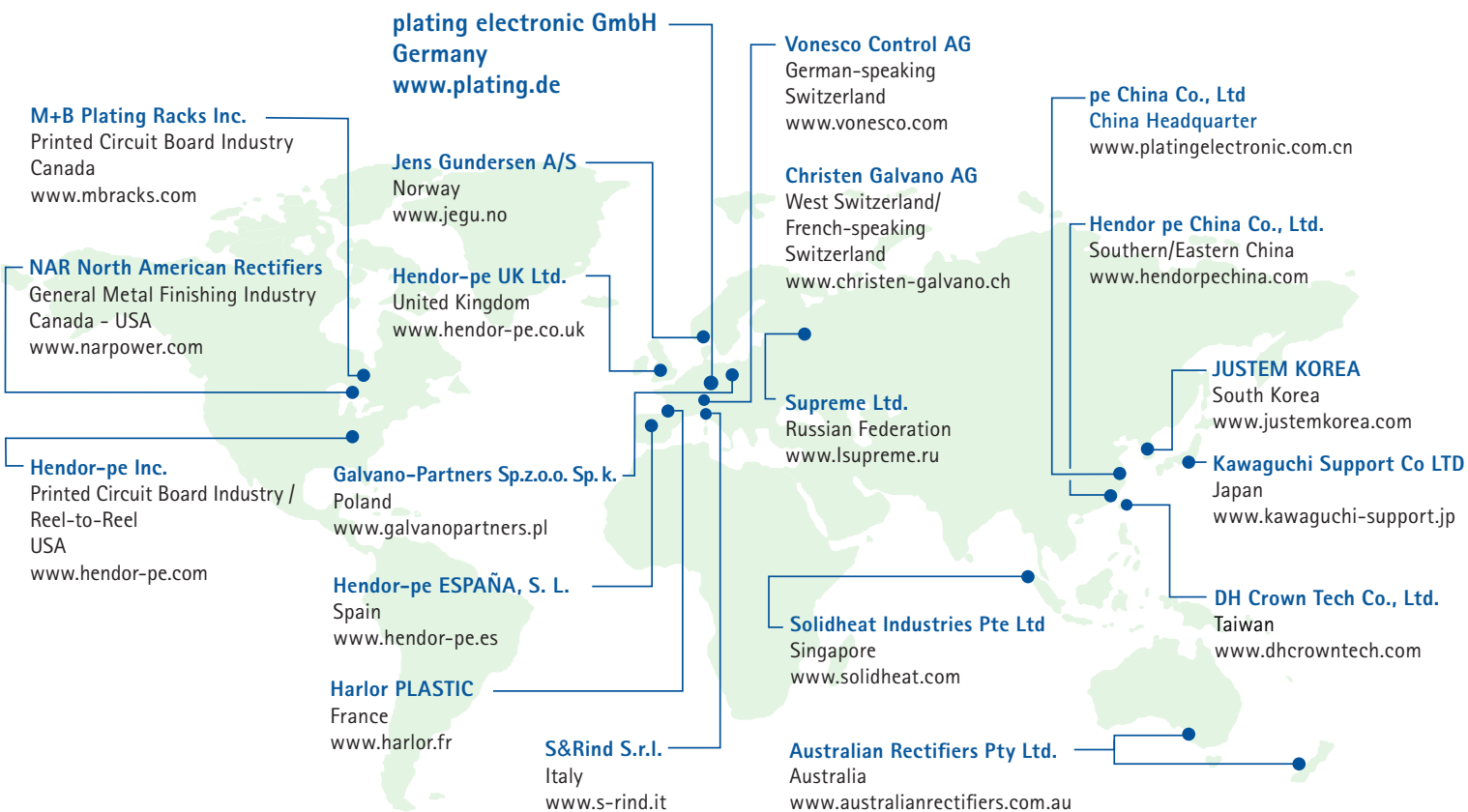
The individual outputs can be synchronised as required.



## plating electronic – Your specialist for DC and Pulse power supplies

Since 1986 plating electronic has been one of the leading developers and manufacturers of compact and highly specialised DC and Pulse power supplies. Our power supplies and control systems, which are exactly tailored to the specific application profiles, are in use worldwide. Global service and on-site customer support are provided by our international subsidiaries and partners.

As a medium-sized enterprise, our focus is on the fast realisation of projects and maximum customer satisfaction. Whether compact standard unit in bench-top design, plug-in, as cabinet units or specially planned solutions for a specific customer need – every power supply is suitable for the highest day-to-day requirements and continues, of course, to be **MADE IN GERMANY**.



For detailed information about our partners please visit: [www.plating.de](http://www.plating.de)

*If you are interested in our range of High-Current Power Supplies or Power Supplies and Controllers for ANODIZING and Aluminium Colouring. Please contact us for detailed brochures about our programmes or visit: [www.plating.de](http://www.plating.de).*

