



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.

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

¹ For control range from 1%-100% and related to rated DC value.

² 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

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



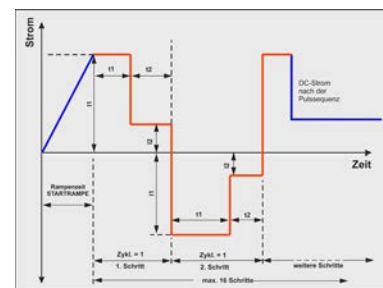
pe80CD series/pe86CWD series

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.

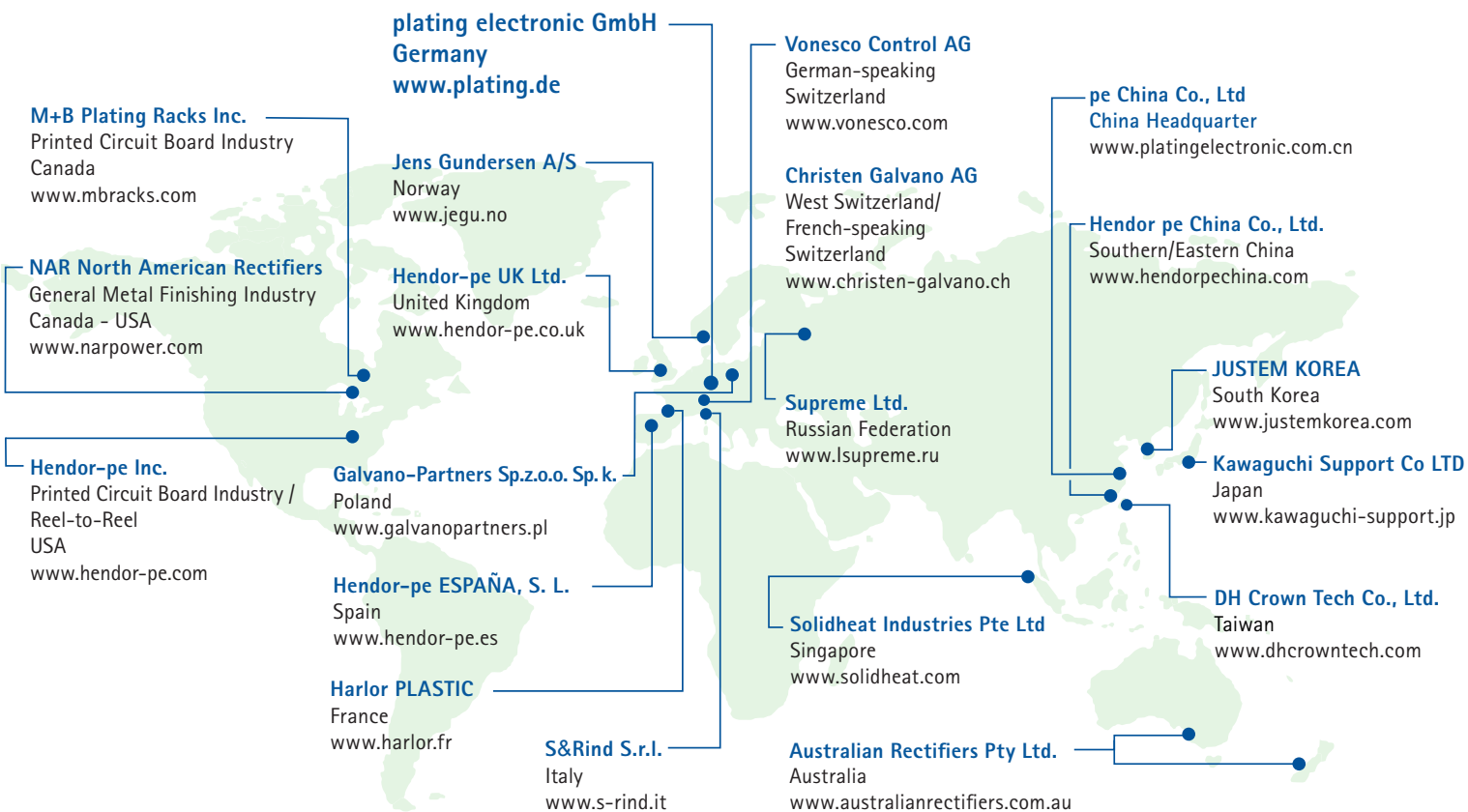
The individual outputs can be synchronised as required.



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

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.

