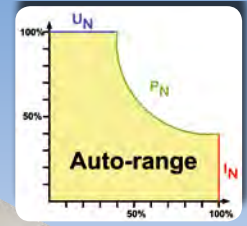


- U
- I
- P
- OVP
- OCP
- OPP
- OTP
- 19"
- USB
- LAN
- Keyboard icon



EA-PS 9080-60 2U

- 多相输入90...264VAC, 带主动式PFC
- 效率高达93%
- 输出功率有: 0...1000W至0...3000W
- 输出电压: 0...40V 至 0...750V
- 输出电流: 0...4A 至 0...120A
- 灵活的功率调整输出
- 各种保护功能 (OVP, OCP, OPP, OTP)
- 带按钮的控制面板与蓝色显示器, 可显示实际值与设定值、状态与报警
- 远程感测端
- 隔离模拟接口
 - 通过 0...10V或0...5V电压可对U / I / P编程
 - 通过 0...10V或0...5V电压可监控U / I
- 温控风扇制冷
- 符合SELV标准 (EN 60950)的40V产品型号
- 内置电隔离USB与以太网端口
- 支持SCPI指令语言

- **Wide input voltage range 90...264V, with active PFC**
- **High efficiency up to 93%**
- **Output power ratings: 0...1000W up to 0...3000W**
- **Output voltages: 0...40V up to 0...750V**
- **Output currents: 0...4A up to 0...120A**
- **Flexible, power regulated output stage**
- **Various protection circuits (OVP, OCP, OPP, OTP)**
- **Control panel with pushbuttons and blue LCD for actual values, set values, status and alarms**
- **Remote sense**
- **Galvanically isolated analog interface with**
 - **U / I / P programmable via 0...10V or 0...5V**
 - **U / I monitoring via 0...10V or 0...5V**
- **Temperature controlled fans for cooling**
- **40V models according to SELV (EN 60950)**
- **Galvanically isolated USB and Ethernet port integrated**
- **SCPI command language supported**

概要

EA-PS 9000 2U系列是一款由微处理器控制, 采用最新技术设计的实验室电源。其标准型号配备多种功能和特征, 让用户使用起来更方便、有效。

控制面板上清晰地分布有两个旋钮, 六个按钮, 以及两个LED灯。同时还有一显示所有数值与状态的蓝色液晶显示器, 从而简化了产品的使用。

AC 输入

本系列所有型号都采用主动式功率因数校正线路, 1.5kW以下型号可在90V_{AC}至264V_{AC}的输入电压范围下使用。

1.5kW型号在输入电压<150V_{AC}时输出功率减少至1kW。3kW型号在输入电压<205V_{AC}时则降至2.5kW。

General

The microprocessor controlled laboratory power supplies of series EA-PS 9000 2U offer many functions and features in their standard version, making the use of this equipment remarkably easy and most effective.

The clearly arranged control panel features two rotary knobs, six pushbuttons and two LEDs. Together with an illuminated, blue LC display for all values and status it simplifies the use of the device.

AC input

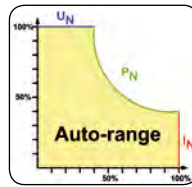
All units are provided with an active **Power Factor Correction** circuit and models up to 1.5kW are even suitable for a worldwide operation on a supply from 90V_{AC} up to 264V_{AC}.

With the 1.5kW models, the output power is automatically reduced to 1kW if the supply voltage is <150V_{AC} and with the 3kW models is reduced to 2.5kW at <205V_{AC}.



功率

所有型号输出功率可灵活调整。可在低电流时输出更高的电压，或在低电压时输出更大的电流，都由最大额定输出功率来限制。设定功率都可调。因此一台产品能涵盖大范围的应用领域。



Power

All models are equipped with a flexible auto-ranging output stage which provides a higher output voltage at lower output current, or a higher output current at lower output voltage, always limited to the max. nominal output power. The power set value is adjustable with these models. Therefore, a wide range of applications can already be covered by the use of just one single unit.

直流输出

本系列有多款不同型号，可选择0...40V至0...750V输出电压，0...4A至0...120A输出电流，0...1000W至0...3000W输出功率的类型。

可对电流、电压与功率在0%与100%之间连续调整，不论是手动调整还是远程控制（数字式或模拟式）。

直流输出端位于产品后板。

DC output

DC output voltages between 0...40V and 0...750V, output currents between 0...4A and 0...120A and output power ratings between 0...1000W and 0...3000W are available.

Current, voltage and power can thus be adjusted continuously between 0% and 100%, no matter if manually or remotely controlled (analog or digital).

The DC output is located on the rear panel of the devices.

保护功能

为保护连接负载，可给产品设定一过压保护极限值(OVP)，以及过流(OCP)与过功率(OPP)保护极限值。

一旦因任何缘故超过了这三个极限值中的一个，直流输出会被立即切断，在显示器和接口端会发出一状态信号。

本产品还有过温保护功能，如果产品过热，它会关断直流输出。

Protective features

For protection of the equipment connected, it is possible to set an overvoltage protection threshold (OVP), as well as one for overcurrent (OCP) and overpower (OPP).

As soon as one of these thresholds is reached for any reason, the DC output will be immediately shut off and a status signal will be generated on the display and via the interfaces.

There is furthermore an overtemperature protection, which will shut off the DC output if the device overheats.

远程感测端

远程感测输入端可直接连到负载设备，以补偿连线上一定程度的压降。如果感测输入端已接到负载上，本电源会自动检测并调整输出电压，以确保负载获得准确所需的电压值。

远程感测连接器位于产品后板。

Remote sense

Remote sensing can be done via a dedicated input which is directly connected to the load equipment, in order to compensate voltage drops along the load cables. The power supply detects automatically whether the sense input is connected and will stabilise the voltage directly at the load.

The connection for the remote sense is located on the rear of the device.

显示器和控制键

产品的所有重要信息都于一点阵显示器上清晰可见。

通过该显示器，电压与电流的实际输出值和预设值，(CV, CC, CP) 实际控制状态与其它状态，报警与设置菜单的设定，都清晰显示出来。

为使旋钮可以调节参数，只需按一下该旋钮，就可更换数值小数点后的光标位置。所有这些功能都归功于其方便易用的操作方式。



Display and controls

All important information is clearly visualised on a dot matrix display.

With this, information about the actual output values and set values of voltage and current, the actual control state (CV, CC, CP) and other statuses, as well as alarms and settings of the setup menu are clearly displayed.

In order to ease adjusting of values by the rotary knobs, pushing them can switch between decimal positions of a value. All these features contribute to an operator friendliness.

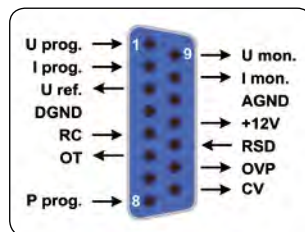
其面板锁定功能可以锁定整个面板，从而避免产品与连接负载出现误操作。

With a panel lock feature, the whole panel can be locked in order to protect the equipment and the loads from unintentional misuse.

内置模拟接口

产品后面板上装有一隔离模拟接口。它提供模拟接口输入脚，接上0V...10V或0V...5V电压，可设置0...100%的输出电压、电流与功率。

模拟输出脚接上0V...10V或0V...5V电压，可监控输出电压与电流。此外，还有几个输入脚和输出脚，可用来控制和监控产品状态。



Analog interface

There is a galvanically isolated analog interface terminal, located on the rear of the device. It offers analog inputs to set voltage, current and power from 0...100% through control voltages of 0V...10V or 0V...5V.

To monitor the output voltage and current, there are analog outputs with voltage ranges of 0V...10V or 0V...5V. Also, several inputs and outputs are available for controlling and monitoring the device status.



数字接口卡

本系列所有型号在其后板上标配两个电隔离数字接口（1xUSB, 1xLAN）。可通过发送SCPI语言指令或Modbus协议来控制与监控产品。

选购件

- High speed - 高速跃变（见132页）*

Digital interfaces

All models features two galvanically isolated, digital interfaces (1xUSB, 1xLAN) by default, which are located on the rear side. They can be used to control and monitor the devices either with SCPI language commands or Modbus protocol.

Options

- High speed ramping (also see page 132) *

技术参数	Technical Data	Series EA-PS 9000 2U / 系列	
AC输入	Input AC		
- 电压	- Voltage	90...264V, 1ph+N (Models 1000W & 1500W / 型号), 180...264V, 1ph+N (Models 3000W / 型号)	
- 频率	- Frequency	45...65Hz	
- 功率因数	- Power factor	>0.99	
输出: DC电压	Output: Voltage DC		
- 精确度	- Accuracy	<0.2%	
- 负载0-100% 时的稳定度	- Stability at 0-100% load	<0.05%	
- 在±10% Δ U _{IN} 时的稳定度	- Stability at ±10% ΔU _{IN}	<0.02%	
- 负载从10%-100%调整需时	- Regulation 10-100% load	<2ms	
- 负载从10-90%上升需时	- Rise time 10-90%	最长30ms	
输出: 电流	Output: Current		
- 精确度	- Accuracy	<0.2%	
- 负载0-100% Δ U _A 时的稳定度	- Stability at 0-100% ΔU _{OUT}	<0.15%	
- 在±10% Δ U _{IN} 时的稳定度	- Stability at ±10% ΔU _{IN}	<0.05%	
输出: 功率	Output power		
- 精确度	- Accuracy	<1%	
过压类别	Overvoltage category	2	
保护功能	Protection	OTP, OVP, OCP, OPP, PF ⁽¹⁾	
隔离耐压	Isolation		
- 输入对外壳	- Input to enclosure	2500V DC	
- 输入对输出	- Input to output	2500V DC	
- 输出对外壳	- Output to enclosure	DC-对PE最大耐压为400V / Max.400V on DC- against PE	
污染等级	Pollution degree	2	
保护级别	Protection class	1	
模拟接口	Analog interface	内置15-针D-Sub母插 / Built in, 15-pole D-Sub, female	
- 输入范围	- Input range	0...5V 或 / or 0...10V (可转换 / switchable)	
- U / I 的精确度	- Accuracy U / I	0...10V: <0.2% 0...5V: <0.4%	
- 编程分辨率	- Programming resolution	见下表 / See table below	
串联操作	Series operation	可实现, 任意直流负极端对PE有最大400V DC的电压转移) / possible (max. potential of any minus DC output: 400V DC against PE)	
- 主-从 (Master-Slave)	- Master-Slave	无 / no	
并联操作	Parallel operation	可实现, 通过共享总线操作或模拟接口 / Possible, via Share Bus operation or via analog interface	
- 主-从 (Master-Slave)	- Master-Slave	无 / no	
安全标准	Standards	EN 60950, EN 61326, EN 55022 等级 B / Class B	
制冷方式	Cooling	风扇 / Fan(s)	
工作温度	Operation temperature	0...50°C	
储存温度	Storage temperature	-20...70°C	
相对湿度	Humidity	<80%	
使用高度	Operation altitude	<2000m	
		1000W / 1500W	3000W
重量 ⁽²⁾	Weight ⁽²⁾	11.5kg	14.7kg
产品尺寸 (宽x高x长) ⁽³⁾	Dimensions (W H D) ⁽³⁾	19" 2HE/2U 460mm	

⁽¹⁾ 见133页 / See page 133

⁽²⁾ 标准型号, 带选项功能的则会不同 / Standard version, models with options may vary

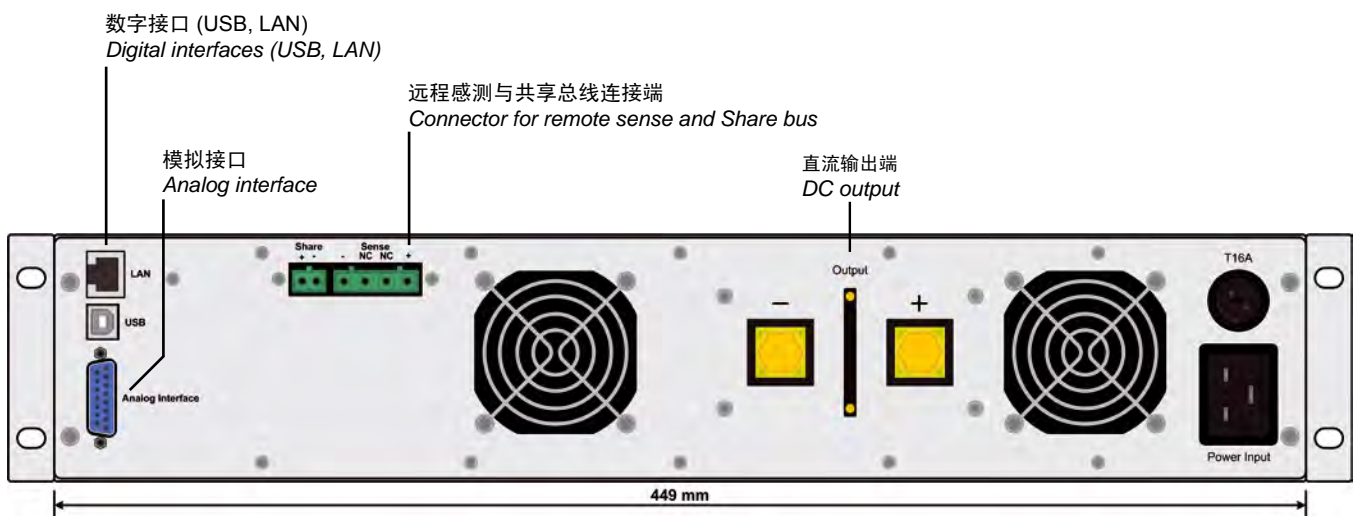
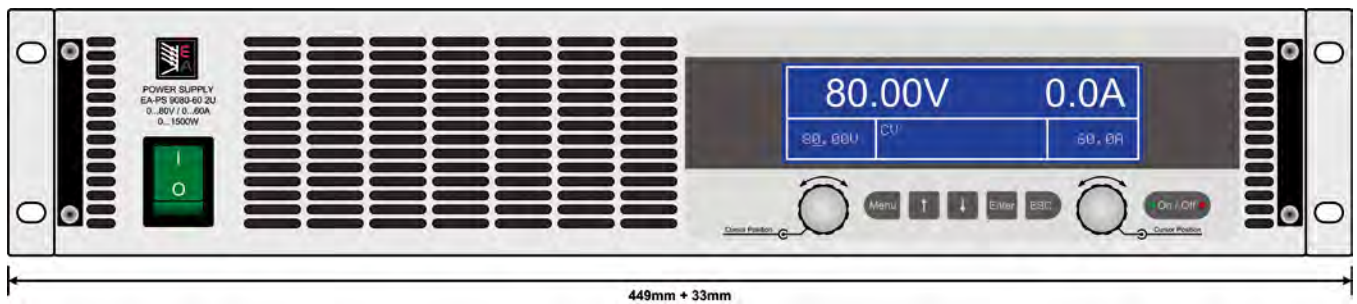
⁽³⁾ 标准型号的外壳尺寸, 非整体尺寸, 带选项功能的还会有不同 / Enclosure of the standard version and not overall size, versions with options may vary



型号	电压	电流	功率	效率	U最大时的纹波 ²	I最大时的纹波 ²	编程 ¹			产品编号
Model	Voltage	Current	Power	Efficiency	Ripple U max.	Ripple I max.	U (typ.)	I (typ.)	P (typ.)	Article number
PS 9040-40 2U	0...40V	0...40A	0...1000W	≤92%	114mV _{pp} / 8mV _{RMS}	53mA _{pp} / 3.7mA _{RMS}	0.8mV	0.8mA	0.06W	06230220
PS 9080-40 2U	0...80V	0...40A	0...1000W	≤92%	114mV _{pp} / 8mV _{RMS}	53mA _{pp} / 3.7mA _{RMS}	1.5mV	0.8mA	0.06W	06230204
PS 9200-15 2U	0...200V	0...15A	0...1000W	≤93%	164mV _{pp} / 34mV _{RMS}	11mA _{pp} / 2.2mA _{RMS}	4mV	0.3mA	0.06W	06230205
PS 9360-10 2U	0...360V	0...10A	0...1000W	≤93%	210mV _{pp} / 59mV _{RMS}	5.5mA _{pp} / 1.6mA _{RMS}	7mV	0.2mA	0.06W	06230206
PS 9500-06 2U	0...500V	0...6A	0...1000W	≤93%	190mV _{pp} / 48mV _{RMS}	1.9mA _{pp} / 0.5mA _{RMS}	10mV	0.1mA	0.06W	06230207
PS 9750-04 2U	0...750V	0...4A	0...1000W	≤93%	212mV _{pp} / 60mV _{RMS}	1mA _{pp} / 0.3mA _{RMS}	15mV	0.1mA	0.06W	06230208
PS 9040-60 2U	0...40V	0...60A	0...1500W	≤92%	114mV _{pp} / 8mV _{RMS}	79mA _{pp} / 5.6mA _{RMS}	0.8mV	1.1mA	0.1W	06230219
PS 9080-60 2U	0...80V	0...60A	0...1500W	≤92%	114mV _{pp} / 8mV _{RMS}	79mA _{pp} / 5.6mA _{RMS}	1.5mV	1.1mA	0.1W	06230209
PS 9200-25 2U	0...200V	0...25A	0...1500W	≤93%	164mV _{pp} / 34mV _{RMS}	16mA _{pp} / 3.3mA _{RMS}	4mV	0.5mA	0.1W	06230210
PS 9360-15 2U	0...360V	0...15A	0...1500W	≤93%	210mV _{pp} / 59mV _{RMS}	8.3mA _{pp} / 2.4mA _{RMS}	7mV	0.3mA	0.1W	06230211
PS 9500-10 2U	0...500V	0...10A	0...1500W	≤93%	190mV _{pp} / 48mV _{RMS}	2.8mA _{pp} / 0.7mA _{RMS}	10mV	0.2mA	0.1W	06230212
PS 9750-06 2U	0...750V	0...6A	0...1500W	≤93%	212mV _{pp} / 60mV _{RMS}	1.5mA _{pp} / 0.5mA _{RMS}	15mV	0.1mA	0.1W	06230213
PS 9040-120 2U	0...40V	0...120A	0...3000W	≤92%	114mV _{pp} / 8mV _{RMS}	158mA _{pp} / 11mA _{RMS}	1.5mV	2.3mA	0.2W	06230214
PS 9080-120 2U	0...80V	0...120A	0...3000W	≤92%	114mV _{pp} / 8mV _{RMS}	158mA _{pp} / 11mA _{RMS}	0.8mV	2.3mA	0.2W	06230221
PS 9200-50 2U	0...200V	0...50A	0...3000W	≤93%	164mV _{pp} / 34mV _{RMS}	32mA _{pp} / 6.5mA _{RMS}	4mV	1mA	0.2W	06230215
PS 9360-30 2U	0...360V	0...30A	0...3000W	≤93%	210mV _{pp} / 59mV _{RMS}	17mA _{pp} / 5mA _{RMS}	7mV	0.6mA	0.2W	06230216
PS 9500-20 2U	0...500V	0...20A	0...3000W	≤93%	190mV _{pp} / 48mV _{RMS}	6mA _{pp} / 1.5mA _{RMS}	10mV	0.4mA	0.2W	06230217
PS 9750-12 2U	0...750V	0...12A	0...3000W	≤93%	212mV _{pp} / 60mV _{RMS}	3mA _{pp} / 0.9mA _{RMS}	15mV	0.2mA	0.2W	06230218

¹ 无产品错误时的可编程分辨率 / Programmable resolution without device error

² RMS值: LF 0...300kHz, PP值: HF 0...20MHz / RMS value: LF 0...300kHz, PP value: HF 0...20MHz



- U
- I
- P
- OVP
- OCP
- OPP
- OTP
- 19"
- USB
- LAN
- WC



EA-PS 9080-340 3U

- ▶ 多相输入340...460VAC
- ▶ 效率高达95.5%
- ▶ 输出功率有：0...3.3kW, 0...5kW, 0...6.6kW, 0...10kW, 0...15kW还可扩展至0...150kW
- ▶ 输出电压：0...40V 至 0...1500V
- ▶ 输出电流：0...30A 至 0...510A 还可扩展至0...5100A
- ▶ 灵活的功率调整输出
- ▶ 各种保护功能 (OVP, OCP, OPP, OTP)
- ▶ 带按钮的控制面板与蓝色显示器，可显示实际值与设定值、状态与报警
- ▶ 隔离模拟接口
 - 通过0...10V或0...5V电压可对U / I / P编程
 - 通过0...10V或0...5V电压可监控U / I
- ▶ 可自动检测的远程感测
- ▶ 温控风扇制冷
- ▶ 3U高的19"外壳
- ▶ 符合SELV标准 (EN 60950)的40V产品型号
- ▶ 内置USB与以太网端口
- ▶ 支持SCPI指令语言

- ▶ **Multi-phase input 340...460V_{AC}**
- ▶ **High efficiency up to 95.5%**
- ▶ **Output power ratings: 0...3.3kW, 0...5kW, 0...6.6kW, 0...10kW, 0...15kW, expandable up to 150kW**
- ▶ **Output voltages: 0...40V up to 0...1500V**
- ▶ **Output currents: 0...30A up to 0...510A**
Expandable up to 0...5100A
- ▶ **Auto-ranging output stage**
- ▶ **Various protection circuits (OVP, OCP, OPP, OTP)**
- ▶ **Control panel with pushbuttons and blue LCD for actual values, set values, status and alarms**
- ▶ **Galvanically isolated analog interface with**
 - **U / I / P programmable via 0...10V or 0...5V**
 - **U / I monitoring via 0...10V or 0...5V**
- ▶ **Remote sense with automatic detection**
- ▶ **Temperature controlled fans for cooling**
- ▶ **19" enclosure in 3U**
- ▶ **40V models according to SELV (EN 60950)**
- ▶ **USB and Ethernet port integrated**
- ▶ **SCPI command language supported**

概要

EA-PS 9000 3U系列是一款由微处理器控制的高效实验室电源，其标准型号配备多种功能和特征，用户使用起来非常方便、有效。

控制面板上清晰地分布有两个旋钮，六个按钮，以及两个LED灯。同时还有一显示所有数值与状态的蓝色液晶显示器，从而简化了产品的使用。

若想获得更大的输出功率，可按照用户需求，将多台单机装于最高达42U的机柜内，以获得高达150kW的功率。也可见128页。

功率

本系列所有产品输出功率可灵活调整，在低电流时输出更高电压，或在低电压时输出更大电流，都由最大额定输出功率来限制。因此一台该产品能涵盖大范围的应用领域。

General

The microprocessor controlled high efficiency laboratory power supplies of series EA-PS 9000 3U offer many functions and features in their standard version, making the use of this equipment remarkably easy and most effective.

The clearly arranged control panel features two rotary knobs, six pushbuttons and two LEDs. Together with an illuminated, blue LC display for all values and status it simplifies the use of the device.

In order to achieve even higher output power than the single units can supply, cabinets with up to 150kW and up to 42U size can be configured to suit the user's requirements. Also see page 128.

Power

The devices are equipped with a flexible autoranging output stage which provides a higher output voltage at lower output current, or a higher output current at lower output voltage, always limited to the max. nominal output power. Therefore, a wide range of applications can already be covered by the use of just one single unit.



输入

本系列所有型号都采用主动式PFC功率因数校正线路，专为在340V至460V AC三相供电条件下操作而设计。交流输入端至少需要两相电，6.6kW以上型号则要三相。

直流输出

本系列有多款不同型号，可选择0...40V和0...1500V输出电压，0...40A和0...510A输出电流，0...3.3kW，0...5kW，0...6.6kW，0...10kW或0...15kW输出功率的多个型号。输出端位于产品后板。

保护功能

为保护连接负载，可给产品设定一过压保护极限值(OVP)，以及过流(OCP)与过功率(OPP)保护极限值。

一旦因任何缘故超过了这三个极限值中的一个，直流输出会被立即切断，在显示器和接口端会发出一状态信号。

本产品还有过温保护功能，如果产品过热，它会关断直流输出。

显示器和控制键

产品的所有重要信息都于一点阵显示器上清晰可见。

通过该显示器，电压与电流的实际输出值和预设值，(CV, CC, CP) 实际控制状态与其它状态，以及报警错误信息与设置菜单的设置，都清晰显示出来。

为使旋钮可以调节参数，只需按一下该旋钮，就可更换数值小数点后的光标位置。所有这些功能都归功于其方便易用的操作方式。

其面板锁定功能可以锁定整个面板，从而避免产品与连接负载出现误操作。

扩展功能

可按需求将本系列单机产品组成各种配置，并装于高达42U的机柜内，并联后获得一个总功率高达150kW的组合系统。也可参考第128页。

还有一个共享总线可用来对多达10台产品执行并联连接与电流均衡，还有一个模拟接口能进行多种配置。

远程感测端

标准远程感测输入端可直接连到负载设备，以补偿连线上的压降。如果输入端已接上负载，本电源会自动调整输出电压，以确保负载获得准确所需的电压值。

Input

All models are provided with an active Power Factor Correction circuit and are designed for a usage on a three-phase supply with 340V up to 460V AC. The AC input requires at least two phases, models from 6.6kW require all three.

DC output

DC output voltages between 0...40V and 0...1500V, output currents between 0...40A and 0...510A and output power ratings of 0...3.3kW, 0...5kW, 0...6.6kW, 0...10kW or 0...15kW are available. The output terminal is located in the rear panel.

Protective features

For protection of the equipment connected, it is possible to set an overvoltage protection threshold (OVP), as well as one for overcurrent (OCP) and overpower (OPP).

As soon as one of these thresholds is reached for any reason, the DC output will be immediately shut off and a status signal will be generated on the display and via the interfaces.

There is furthermore an overtemperature protection, which will shut off the DC output if the device overheats.

Display and controls

All important information is clearly visualised on a dot matrix display.

With this, information about the actual output values and set values of voltage and current, the actual control state (CV, CC, CP) and other statuses, as well as alarms and settings of the setup menu are clearly displayed.

In order to ease adjusting of values by the rotary knobs, pushing them can switch between decimal positions of a value. All these features contribute to an operator friendliness.

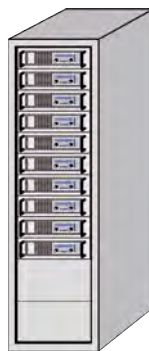
With a panel lock feature, the whole panel can be locked in order to protect the equipment and the loads from unintentional misuse.



Extensibility

The single units can be combined into various configurations upon request and in cabinets of up to 42U height, in order to build parallel systems of up to 150kW total power. Also see page 128.

A so-called Share bus for the parallel connection and current balancing of up to 10 units, as well as an analog interface offer multiple possible configurations.



Remote sense

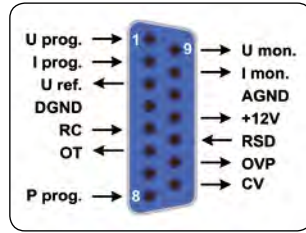
The standard sense input can be connected directly to the load in order to compensate voltage drops along the power cables. If the sense input is connected to the load, the power supply will adjust the output voltage automatically to ensure the required voltage is available at the load.



模拟接口

隔离模拟接口位于产品后板。它有多个模拟输入脚，接上0V...10V或0V...5V电压，可设置0...100%的输出电压、电流和功率。

模拟输出脚接上0V...10V或0V...5V电压，可监控输出电压和电流。此外，还有几个输入脚和输出脚，可用来控制和监控产品状态。



Analog Interface

There is a galvanically isolated analog interface terminal, located on the rear of the device. It offers analog inputs to set voltage, current and power from 0...100% through control voltages of 0...10V or 0...5V.

To monitor the output voltage and current, there are analog outputs with voltage ranges of 0...10V or 0...5V. Also, several inputs and outputs are available for controlling and monitoring the device status.

选购件

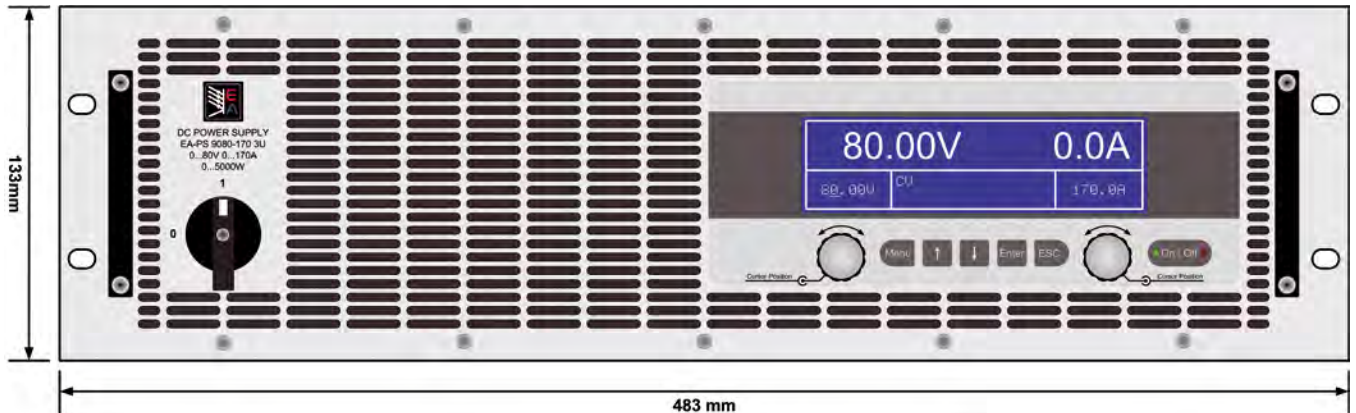
- 高速跃变 (也可见132页)*
- 水制冷 (仅针对200V以下型号)

* 并非针对所有电压—具体请咨询

Options

- High speed ramping (see page 132) *
- Water cooling (only for models up to 200V)

* not for all voltages - please enquire for availability

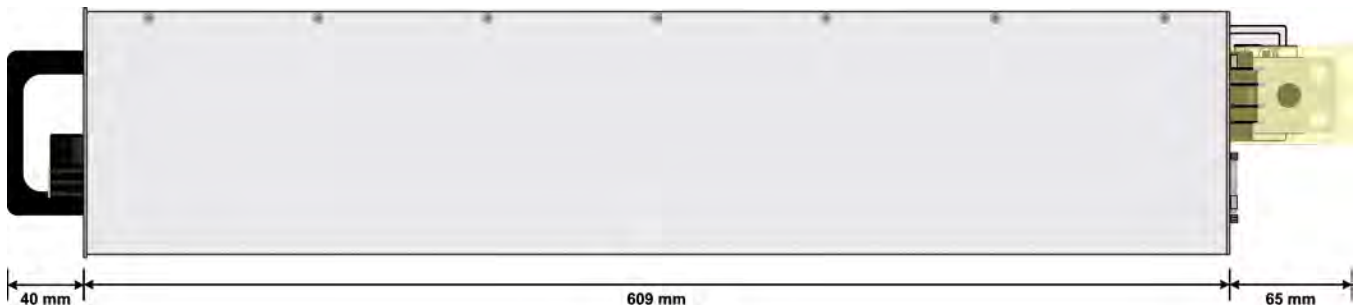
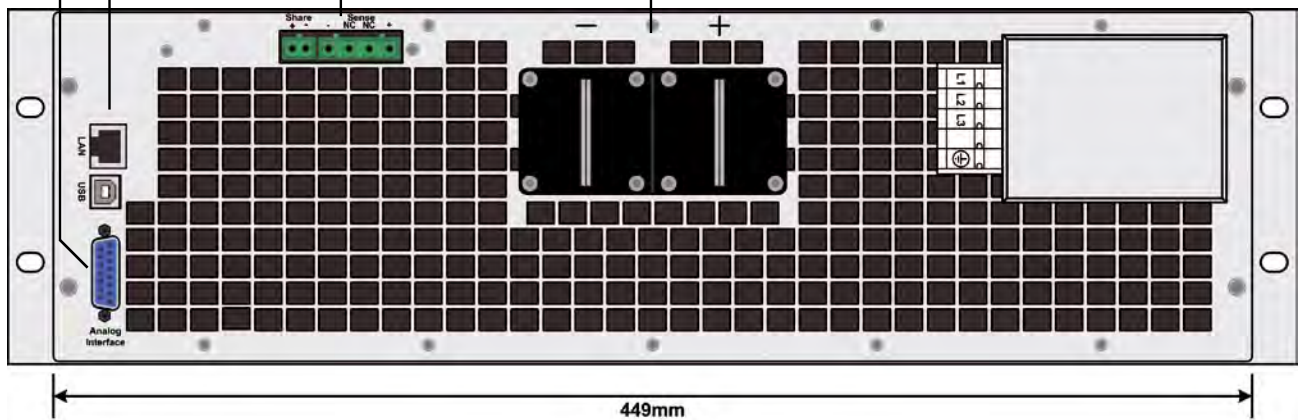


模拟接口
Analog interface

数字接口 (USB, LAN)
Digital interfaces (USB, LAN)

远程感测与共享总线连接端
Connector for remote sense and Share bus

直流输出端
DC output



技术参数	Technical Data	Series EA-PS 9000 3U / 系列
AC输入	Input AC	
- 电压	- Voltage standard	340..460V, 2ph/3ph
- 频率	- Frequency	45..65Hz
- 功率因数	- Power factor	>0.99
输出: DC电压	Output: Voltage DC	
- 精确度	- Accuracy	<0.1%
- 负载0-100% 时的稳定度	- Stability at 0-100% load	<0.05%
- 在±10% ΔU_{IN} 时的稳定度	- Stability at ±10% ΔU_{IN}	<0.02%
- 负载从10%-100%调整需时	- Regulation 10-100% load	<2ms
- 负载从10-90%上升需时	- Slew rate 10-90%	最长30ms
- 过压保护	- Overvoltage protection	可调, 范围为0...110% U_{nenn} / adjustable, 0...110% U_{nom}
- 直流端关闭时空载放电需时	- No load discharge time on DC off	100% U 针对 / to <60V; 少于10s / less than 10s
输出: 电流	Output: Current	
- 精确度	- Accuracy	<0.2%
- 负载0-100% ΔU_A 时的稳定度	- Stability at 0-100% ΔU_{OUT}	<0.15%
- 在±10% ΔU_{IN} 时的稳定度	- Stability at ±10% ΔU_{IN}	<0.05%
输出: 功率	Output power	
- 精确度	- Accuracy	<1%
过压类别	Overvoltage category	2
保护功能	Protection	OTP, OVP, OPP, PF, OCP ⁽²⁾
隔离耐压	Isolation	
- 输入对外壳	- Input to enclosure	2500V DC
- 输入对输出	- Input to output	2500V DC
- 输出对外壳	- Output to enclosure	DC-对PE最大耐压为400V / Max.400V on DC- against PE
污染等级	Pollution degree	2
保护级别	Protection class	1
模拟接口	Analog interface	内置15-针D-Sub母插 / Built in, 15-pole D-Sub, female
- 输入范围	- Input range	0...5V 或 / or 0...10V (可转换 / switchable)
- U / I 的精确度	- Accuracy U / I	0...10V: <0.2% 0...5V: <0.4%
- 编程分辨率	- Programming resolution	见下表 / See tables below
串联操作	Series operation	可实现, 任意直流负极端对PE有最大400V DC的电压转移) / possible (max. potential of any minus DC output: 400V DC against PE)
- 主-从 (Master-Slave)	- Master-Slave	无 / no
并联操作	Parallel operation	可实现, 通过共享总线操作或模拟接口 / Possible, via Share Bus operation or via analog interface
- 主-从 (Master-Slave)	- Master-Slave	无 / no
安全标准	Standards	EN 60950, EN 61326
认证	Certifications	通过TÜV认证 / EMC TÜV approved according to IEC 61000-6-2:2005 IEC 61000-6-3:2006 Class B
制冷方式	Cooling	风扇, 还可选择: 水冷 / Fan, optional: water
工作温度	Operation temperature	0...50°C
储存温度	Storage temperature	-20...70°C
相对湿度	Relative humidity	<80%, n.c.
使用高度	Operation altitude	<2000m
产品尺寸 (宽x高x长) ⁽¹⁾	Dimensions (W H D) ⁽¹⁾	19" 3HE/3U 609mm

⁽¹⁾ 仅为外壳尺寸, 非整体尺寸 / Enclosure only, not overall

⁽²⁾ 见133页 / See page 133


技术参数	Technical Data	PS 9040-170 3U	PS 9080-170 3U	PS 9200-70 3U	PS 9360-40 3U
DC输出电压	Output voltage DC	0...40V	0...80V	0...200V	0...360V
- 纹波 ⁽¹⁾	- Ripple ⁽¹⁾	<100mV _{PP} <10mV _{RMS}	<100mV _{PP} <10mV _{RMS}	<200mV _{PP} <25mV _{RMS}	<250mV _{PP} <50mV _{RMS}
- 感测端电压补偿	-Sense compensation	~ 1V	~ 2V	~ 5V	~ 7.5V
输出电流	Output current	0...170A	0...170A	0...70A	0...40A
- BWL纹波 ⁽¹⁾	- Ripple BWL ⁽¹⁾	<528mA _{PP} <106mA _{RMS}	<300mA _{PP} <40mA _{RMS}	<44mA _{PP} <11mA _{RMS}	<32mA _{PP} <6.5mA _{RMS}
输出功率	Output power	0...3300W	0...5000W	0...5000W	0...5000W
效率	Efficiency	~93%	~93%	~95%	~93%
U的编程步宽 (典型值)	Programming U (typ.)	1mV	1.5mV	4mV	7mV
I的编程步宽 (典型值)	Programming I (typ.)	3.5mA	3.5mA	1.5mA	1mA
P的编程步宽 (典型值)	Programming P (typ.)	0.27W	0.27W	0.27W	0.27W
重量 ⁽²⁾	Weight ⁽²⁾	17kg	17kg	17kg	17kg
产品编号 ⁽³⁾	Article number ⁽³⁾	06230250	06230251	06230252	06230253

技术参数	Technical Data	PS 9500-30 3U	PS 9750-20 3U	PS 9040-340 3U	PS 9040-510 3U
DC输出电压	Output voltage DC	0...500V	0...750V	0...40V	0...40V
- 纹波 ⁽¹⁾	- Ripple ⁽¹⁾	<250mV _{PP} <70mV _{RMS}	<600mV _{PP} <120mV _{RMS}	<150mV _{PP} <10mV _{RMS}	<150mV _{PP} <10mV _{RMS}
- 感测端电压补偿	-Sense compensation	~ 10V	~ 15V	~ 1V	~ 1V
输出电流	Output current	0...30A	0...20A	0...340A	0...510A
- 纹波 ⁽¹⁾	- Ripple ⁽¹⁾	<14mA _{PP} <8mA _{RMS}	<14mA _{PP} <8mA _{RMS}	<600mA _{PP} <80mA _{RMS}	<900mA _{PP} <120mA _{RMS}
输出功率	Output power	0...5000W	0...5000W	0...6600W	0...10000W
效率	Efficiency	~95.5%	~94%	~93%	~93%
U的编程步宽 (典型值)	Programming U (typ.)	10mV	15mV	1mV	1mV
I的编程步宽 (典型值)	Programming I (typ.)	0.8mA	0.5mA	6.5mA	10mA
P的编程步宽 (典型值)	Programming P (typ.)	0.29W	0.29W	0.27W	0.55W
重量 ⁽²⁾	Weight ⁽²⁾	17kg	17kg	24kg	30kg
产品编号 ⁽³⁾	Article number ⁽³⁾	06230254	06230255	06230256	06230263

技术参数	Technical Data	PS 9080-340 3U	PS 9200-140 3U	PS 9360-80 3U	PS 9500-60 3U
DC输出电压	Output voltage DC	0...80V	0...200V	0...360V	0...500V
- 纹波 ⁽¹⁾	- Ripple ⁽¹⁾	<150mV _{PP} <10mV _{RMS}	<200mV _{PP} <25mV _{RMS}	<300mV _{PP} <50mV _{RMS}	<300mV _{PP} <70mV _{RMS}
- 感测端电压补偿	-Sense compensation	~ 2V	~ 5V	~ 7.5V	~ 10V
输出电流	Output current	0...340A	0...140A	0...80A	0...60A
- 纹波 ⁽¹⁾	- Ripple ⁽¹⁾	<600mA _{PP} <80mA _{RMS}	<89mA _{PP} <22mA _{RMS}	<77mA _{PP} <13mA _{RMS}	<33mA _{PP} <16mA _{RMS}
输出功率	Output power	0...10000W	0...10000W	0...10000W	0...10000W
效率	Efficiency	~93%	~95%	~93%	~95%
U的编程步宽 (典型值)	Programming U (typ.)	1.5mV	4mV	7mV	10mV
I的编程步宽 (典型值)	Programming I (typ.)	7mA	3mA	2mA	1.5mA
P的编程步宽 (典型值)	Programming P (typ.)	0.55W	0.55W	0.55W	0.55W
重量 ⁽²⁾	Weight ⁽²⁾	24kg	24kg	24kg	24kg
产品编号 ⁽³⁾	Article number ⁽³⁾	06230257	06230258	06230259	06230260

(1) RMS值: NF 0...300KHz, PP值: HF 0...20MHz / RMS value: LF 0...300kHz, PP value: HF 0...20MHz

(2) 针对标准型号, 带有选项的重量会不同 / of standard version, models with options may vary

(3) 标准型号的产品编码, 带3W选项功能的编码则会不同 / Article number of the standard version, models with option 3W installed have different article numbers.



技术参数	Technical Data	PS 9750-40 3U	PS 91000-30 3U	PS 9080-510 3U	PS 9200-210 3U
DC输出电压	Output voltage DC	0...750V	0...1000V	0...80V	0...200V
- 纹波 ⁽¹⁾	- Ripple ⁽¹⁾	<650mV _{PP} <120mV _{RMS}	<800mV _{PP} <200mV _{RMS}	<150mV _{PP} <10mV _{RMS}	<250mV _{PP} <25mV _{RMS}
- 感测端电压补偿	-Sense compensation	~ 15V	~ 20V	~ 2.5V	~ 6V
输出电流	Output current	0...40A	0...30A	0...510A	0...210A
- 纹波 ⁽¹⁾	- Ripple ⁽¹⁾	<38mA _{PP} <7mA _{RMS}	<22mA _{PP} <11mA _{RMS}	<900mA _{PP} <120mA _{RMS}	<167mA _{PP} <33mA _{RMS}
输出功率	Output power	0...10000W	0...10000W	0...15000W	0...15000W
效率	Efficiency	~94%	~95%	~93%	~95%
U的编程步宽 (典型值)	Programming U (typ.)	15mV	20mV	1.5mV	4mV
I的编程步宽 (典型值)	Programming I (typ.)	1mA	1mA	10mA	4mA
P的编程步宽 (典型值)	Programming P (typ.)	0.55W	0.6W	0.85W	0.85W
重量 ⁽²⁾	Weight ⁽²⁾	25.5kg	25.5kg	33kg	33kg
产品编号	Article number	06230261	06230262	06230264	06230265

技术参数	Technical Data	PS 9360-120 3U	PS 9500-90 3U	PS 9750-60 3U	PS 91500-30 3U
DC输出电压	Output voltage DC	0...360V	0...500V	0...750V	0...1500V
- 纹波 ⁽¹⁾	- Ripple ⁽¹⁾	<350mV _{PP} <50mV _{RMS}	<300mV _{PP} <70mV _{RMS}	<700mV _{PP} <120mV _{RMS}	<1000mV _{PP} <350mV _{RMS}
- 感测端电压补偿	-Sense compensation	~ 7.5V	~ 10V	~ 15V	~ 30V
输出电流	Output current	0...120A	0...90A	0...60A	0...30A
- 纹波 ⁽¹⁾	- Ripple ⁽¹⁾	<132mA _{PP} <19mA _{RMS}	<50mA _{PP} <23mA _{RMS}	<61mA _{PP} <11mA _{RMS}	<19mA _{PP} <13mA _{RMS}
输出功率	Output power	0...15000W	0...15000W	0...15000W	0...15000W
效率	Efficiency	~93%	~95%	~94%	~95%
U的编程步宽 (典型值)	Programming U (typ.)	7mV	10mV	15mV	29mV
I的编程步宽 (典型值)	Programming I (typ.)	2.5mA	2mA	1.5mA	1mA
P的编程步宽 (典型值)	Programming P (typ.)	0.85W	0.9W	0.9W	0.9W
重量 ⁽²⁾	Weight ⁽²⁾	33kg	33kg	33kg	33kg
产品编号	Article number	06230266	06230267	06230268	06230269

(1 RMS值: NF 0...300KHz, PP值: HF 0...20MHz / RMS value: LF 0...300kHz, PPvalue: HF 0...20MHz

(2 针对标准型号, 带可选件的重量会不同 / of standard version, models with options may vary

