

EA-PS 800 SM 80W - 480W

导轨式直流电源 / DIN RAIL MOUNT DC POWER SUPPLIES

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- 宽范围输入电压 90...264V,带主动式 PFC
- 效率: 高达 93%
- 输出功率: 80W 至 480W
- 输出电压: 12V, 24V 和 48V
- 输出电流: 1.6A 至 40A
- 可过载 50% 持续 8 秒后即保护
- 导轨式安装
- 有过压保护 (OVP)
- 有过温保护 (OT)
- 状态 LED 指示灯
- 自由电位信号接点表示 "输出 OK"
- 自然风冷式冷却方式
- 符合 EN 60950 安规标准
- 符合 EMI EN 61000-6-1, EN 61000-6-3 标准

- · Wide input voltage range 90...264V with active PFC
- · High efficiency: up to 93%
- Output power ratings: 80W up to 480W
- Output voltages: 12V, 24V and 48V
- Output currents: 1.6A up to 40A
- 50% overload for 8 seconds
- DIN rail mount
- Overvoltage protection (OVP)
- Overtemperature protection (OT)
- · Status indication via LEDs
- Potential-free signal contact for "Output OK"
- · Natural convection cooling
- Safety EN 60950
- EMI EN 61000-6-1, EN 61000-6-3

概要

EA-PS 800 SM 这一代DIN导轨安装式电源系列,已经发展成重型工业领域应用之产品。其效率高达93%,体积小巧,全因使用了创新的开关技术。本产品的功率因数值(PFC)>99%。

本产品在8秒钟内可输出超过额定功率50%的峰值功率。

电源断电时能持续供电时间 >20ms。

调节前板电位器可调节输出电压。

所有型号都有一干式继电器接点(直流电源失效),可用来监控输出电压,还有两个状态LED灯指示输出和错误。 本产品还有过载和短路保护功能,以及浪涌电流限制。过压和过温保护电路还可保护连接负载以及电源。

以自然对流作为冷却方式,工作温度为0...70°C,60°C以上每升高一度降额2%的功率。(480W型号则从50°C开始)

安装于DIN导轨上时,仅需弹簧夹即可,不需其它工具协助。

General

This generation of DIN rail mount DC power supply series EA-PS 800 SM has been developed for heavy-duty industrial applications. An outstanding efficiency of up to 93% and smallest dimensions are the result of an innovative switching technology. The units have a power factor correction (PFC) with >99% power factor.

They are able to supply an additional peak power of 50% of the nominal rating for 8 seconds.

The hold-up time upon mains power failure is >20ms.

The output voltage can be adjusted by a trimmer on the front panel.

All models have a dry relay contact (DC power fail) to monitor the output voltage and two status LEDs for output and error. They are furthermore equipped with overload and short-circuit protection, as well as inrush current limitting. Overvoltage and overtemperature circuits protect the connected load and the power supply, too.

Cooling is arranged via natural convection, operating temperature is 0...70°C with a 2%/°C derating above 60°C (50°C with the 480W models).

Mounting on DIN rails is done with springclips, eliminating the need for tools.



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输入

本产品采用主动式**PFC**校正线路,从而产品能应用于世界范围内,输入电压为90V至264VAC,还可当90V至360V DC的隔离DC/DC转换器用。

输出

本系列有多款不同型号,可选择12V,24V和48V输出电压,1.6A至40A输出电流,80W至480W输出功率的类型。输出电压可调。输出端为螺丝端。

过压保护 (OVP)

为保护连接负载,可将过压保护极限值(OVP)设定为输出电压的110%。超过该值,则关断输出。

过温保护 (OT)

为保护产品和连接设备,本产品配备过温保护功能。一旦达到关键温度,如:在高的环境温度或在有限空气环流条件下工作,输出被关断,当温度下降后又自动重启。

选项

本系列配上合适的电池组可当多功能直流UPS用。详见94页。

Input

The equipment uses an active **Power Factor Correction** to enable using it worldwide on a mains input from 90V up to 264V AC and for a usage as isolated DC/DC converters for 90V DC up to 360V DC as well.

Output

Different units with voltage output ranges from 12V, 24V and 48V, current output ranges from 1.6A to 40A and power output ranges from 80W to 480W, are available. The output voltage is adjustable. The output is provided at screw terminals.

Overvoltage protection (OVP)

To protect connected equipment an overvoltage protection (OVP) of 110% of output voltage is set. Exceeding this value shuts the output off.

Overtemperature protection (OT)

To protect the unit and connected equipment the units are fitted with an overtemperature protection (OT). On reaching critical temperature, e.g. high ambient temperature or operating with limited air circulation, the output is cut off and is automatically restarted when the temperature has reduced.

Options

 This series can also be supplied as DC-USV units with many functions, together with suitable battery units. See also from page 94.

| 技术参数 | Technical Data | PS 812-07 SM | PS 824-04 SM | PS 848-02 SM | PS 812-10 SM | PS 824-05 SM | PS 848-03 SM |
|--------------------------------|---|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| AC输入电压 | Input voltage AC | 90264V | 90264V | 90264V | 90264V | 90264V | 90264V |
| -频率 | -Frequency | 4565Hz | 4565Hz | 4565Hz | 4565Hz | 4565Hz | 4565Hz |
| -功率因数 | -Power factor | >0.99 | >0.99 | >0.99 | >0.99 | >0.99 | >0.99 |
| DC输入电压 | Input voltage DC | 150360V | 150360V | 150360V | 150360V | 150360V | 150360V |
| 输出电压 | Output voltage | 1215V | 2428V | 4856V | 1215V | 2428V | 4856V |
| -负载0-100% 时的稳定度 | -Stability at 0-100% load | <1% | <1% | <1% | <1% | <1% | <1% |
| -在±10% ∆ U _{IN} 时的稳定度 | -Stability at ±10% ΔU_{IN} | <0.05% | <0.05% | <0.05% | <0.05% | <0.05% | <0.05% |
| - 纹波 | -Ripple | <40mV _{pp} | <40mV _{pp} | <40mV _{pp} | <50mV _{pp} | <50mV _{pp} | <50mV _{pp} |
| -调整时间 | -Regulation | <2msec. | <2msec. | <2msec. | <2msec. | <2msec. | <2msec. |
| -过压保护 | -Overvoltage protection | 16V ±1V | 30V ±1V | 58V ±1V | 16V ±1V | 30V ±1V | 58V ±1V |
| 输出电压 | Output current | 6.6A | 3.3A | 1.6A | 10.0A | 5.0A | 2.5A |
| 输出功率 | Output power | 80W | 80W | 80W | 120W | 120W | 120W |
| 尺寸 (WxHxD) | Dimensions (WxHxD) | 48x126x112mm | 48x126x112mm | 48x126x112mm | 48x126x112mm | 48x126x112mm | 48x126x112mm |
| 重量 | Weight | 0.9kg | 0.9kg | 0.9kg | 0.9kg | 0.9kg | 0.9kg |
| 产品编号 | Article No. | 35320187 | 35320188 | 35320189 | 35320190 | 35320191 | 35320192 |

| 技术参数 | Technical Data | PS 812-16 SM | PS 824-10 SM | PS 848-05 SM | PS 824-20 SM | PS 848-10 SM |
|--------------------------------|---|---------------------|---------------------|----------------------|----------------------|----------------------|
| AC输入电压 | Input voltage AC | 90264V | 90264V | 90264V | 90264V | 90264V |
| -频率 | -Frequency | 4565Hz | 4565Hz | 4565Hz | 4565Hz | 4565Hz |
| -功率因数 | -Power factor | >0.99 | >0.99 | >0.99 | >0.99 | >0.99 |
| DC输入电压 | Input voltage DC | 150360V | 150360V | 150360V | 150360V | 150360V |
| 输出电压 | Output voltage | 1215V | 2428V | 4856V | 2428V | 4856V |
| -负载0-100% 时的稳定度 | -Stability at 0-100% load | <1% | <1% | <1% | <1% | <1% |
| -在±10% Δ U _{IN} 时的稳定度 | -Stability at ±10% $\Delta U_{\text{\tiny IN}}$ | <0.05% | <0.05% | <0.05% | <0.05% | <0.05% |
| - 纹波 | -Ripple | <50mV _{pp} | <50mV _{pp} | <100mV _{pp} | <120mV _{pp} | <180mV _{pp} |
| -调整时间 | -Regulation | <2msec. | <2msec. | <2msec. | <2msec. | <2msec. |
| -过压保护 | -Overvoltage protection | 16V ±1V | 30V ±1V | 58V ±1V | 30V ±1V | 58V ±1V |
| 输出电压 | Output current | 16.0A | 10.0A | 5.0A | 20.0A | 10.0A |
| 输出功率 | Output power | 240W | 240W | 240W | 480W | 480W |
| 尺寸 (WxHxD) | Dimensions (WxHxD) | 60x126x112mm | 60x126x112mm | 60x126x112mm | 78x126x125mm | 78x126x125mm |
| 重量 | Weight | 1.0kg | 1.0kg | 1.0kg | 1.3kg | 1.3kg |
| 产品编号 | Article No. | 35320193 | 35320194 | 35320195 | 35320197 | 35320198 |