

DIN rail power supply unit PS24V14AA



- Single-phase input: 115 VAC to 230 VAC
- Output: 24 VDC, 14 A up to 60 °C operating temperature
- Flexible output power from 240 watts to 336 watts
- Robust metal housing with DIN rail mounting
- High overload without shutdown
- 3 different protection modes for the output

<https://www.wachendorff-prozesstechnik.de/en/PS24V14AA>

Description

The PS24V14AA power supply unit is a high-quality switched-mode power supply unit for DIN rail mounting. It impresses with its compact and intelligent design and robust metal housing. The output voltage is easy and simple to adjust (22 to 27 VDC) and is highly stable even with temperature fluctuations and load changes. In addition to short-circuit protection with 3 different output protection modes, overload and overvoltage protection at the output and a monitoring relay ensure a high level of safety. The output power can be easily increased by connecting additional PS24V14AA power supply units of the same type in parallel.

Product details

Entrance:	Nominal input voltage: 115 VAC to 230 VAC Input voltage range: 90 VAC to 135 VAC (115 VAC); 170 VAC to 264 VAC (230 VAC) Frequency range: 47 to 63 Hz Inrush current (V and In 40 °C) I _{2t} : ≤42A ≤5 msec Input current (115 VAC to 230 VAC): 4.4 A to 2.2 A Internal fuse: T6.3 A External fuse (recommended): 16 A (B characteristic)
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Output:	Output voltage (Vn) Factory setting +/-3 %: 24 VDC Adjustment range output voltage (Vadj): 22 VDC to 27 VDC Start with large load (capacitive load): ≤50,000 µF Switch-on delay after applying supply: 1 sec (max.) Continuous current at 24 VDC <40 °C (In): 14 A (permanent) Continuous current at 24 VDC <50 °C (In): 12 A (permanent) Continuous current at 24 VDC <60 °C (In): 10 A (permanent) Power boost current at 24 VDC / 60 °C (In): In (60 °C) x 1.5 ≥3 Min. Max. Current at overload approx. 4 VDC (perm.): I _{max} =In 60° C x (1.8 to 2.2) Max. Max. current for short circuit (I _{cc}): In (60 °C) x 3 Max. 2 seconds: in hiccup mode Permanent: Continuous mode Hold-up time (min. VAC) 24 VDC 5 A: typically 20 milliseconds Remaining residual ripple: ≤80 mVpp Efficiency: ≥89 % Overtemperature protection: Yes, shutdown of the output and automatic restart of the module Short-circuit protection at the output (adjustable via jumper): A. Hiccup mode (cyclical clocking of the output until the short circuit is eliminated) B. Continuous mode C. Reset when power supply is reapplied (output switches off until power supply unit is restarted) Maximum power dissipation: 42 watts Overload protection: Yes Overvoltage protection at output: Yes (typically 35 VDC) Parallel operation possible: Yes Protective relay: Relay output at 10 % undervoltage; 1 A @ 30 VDC
Isolation:	Input/output insulation voltage: 3,000 VAC Insulation voltage input/PE: 1,605 VAC Insulation voltage output/PE: 500 VAC
Standards and approvals:	CE according to EMC, UL approval according to UL508, RoHS-compliant

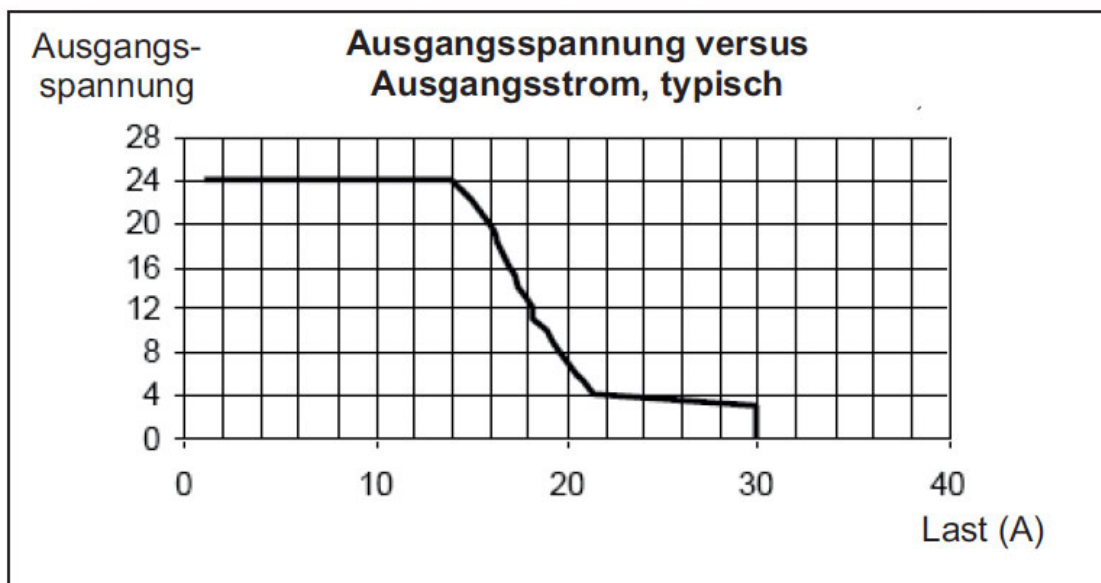
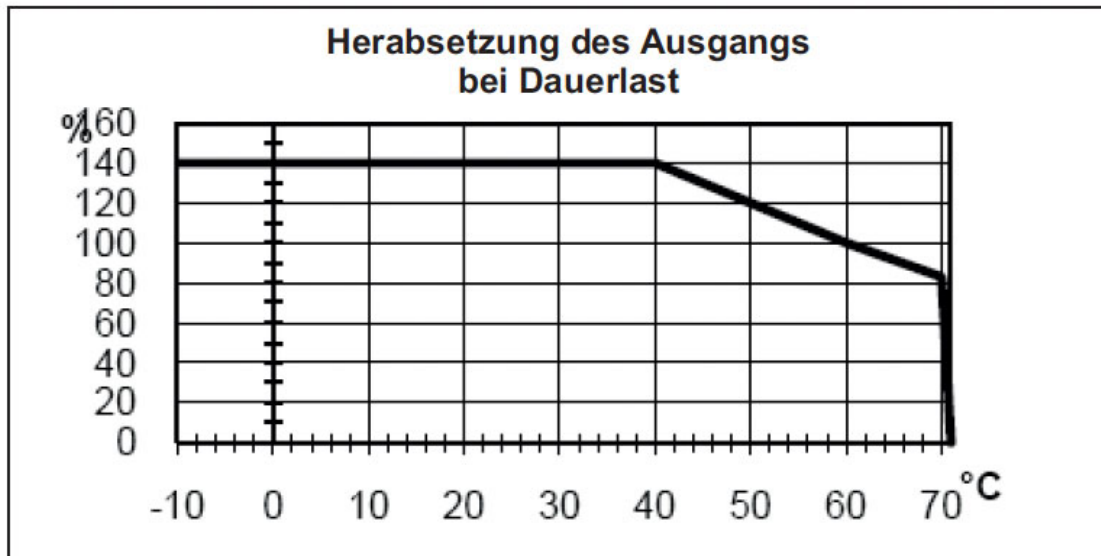
Reliability:	MTBF according to IEC 61709 >500,000 hours
Protection class:	IP20
Housing:	Sturdy metal housing. Dimensions: W 72 mm x H 115 mm x D 135 mm. Mounting on DIN rail.
Connection:	fixed terminal strips with 2.5 mm ² cross-section.
Relative humidity:	max. 95 % RH at 25 °C, non- condensing.
Ambient temperature:	Operation: -25 °C to +70 °C (> +60 °C leads to a reduction of the operating values by 2.5 %/ °C). Storage: -40 °C to +85 °C.
Weight:	approx. 650 g
Scope of delivery:	Device, operating instructions.
Manufacturer:	ADEL System s.r.l., Italy

Products Order no.

PS24V14AA	Power supply unit for DIN rail, 230 VAC, 24 VDC 15 A
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Drawings

Graphic





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