DIN rail power supply unit PS24V14AB

- 2-phase input: 230 VAC to 500 VAC
- Output: 24 VDC up to 60 °C operating temperature
- Flexible output power from 240 watts to 336 watts
- Robust metal housing with top-hat rail mounting
- High overload without shutdown; up to 50 %
- 3 different protection modes for the output
- Relay output for monitoring the output voltage

https://www.wachendorff-prozesstechnik.de/PS24V14AB

Description

The PS24V14AB power supply unit is a high-quality switched-mode power supply unit for top-hat rail mounting. It impresses with its compact and intelligent design as well as its robust metal housing. The output voltage is easy and simple to adjust (22 VDC 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 and a monitoring relay at the output ensure a high level of safety. The output power can be easily increased by connecting additional PS24V14AB power supply units of the same type in parallel.

Product details

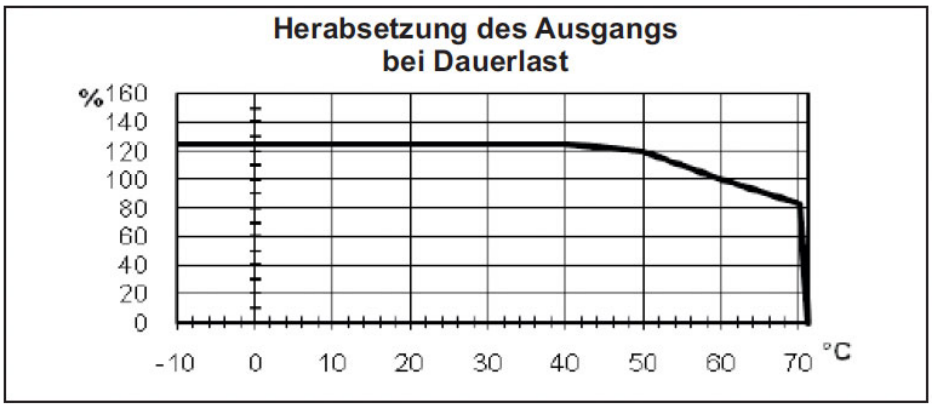
Entrance:	Nominal input voltage: 230 VAC / 400 VAC / 500 VAC Input voltage range: 187 VAC to 264 VAC (230 VAC) 330 VAC to 550 VAC (400 VAC / 500 VAC) Frequency range: 47 Hz to 63 Hz Inrush current (Vn and In load) I²t: ≤ 34 A ≤ 5 msec. Input current (230 VAC / 400 VAC / 550 VAC): 2.49 A / 1.44 A / 1.15 A Internal fuse: T 4 A External fuse (recommended): 16 A (B characteristic)
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 the supply: 1 second (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.): Imax=In 60 °C x (1.8 to 2.2) Max. Max. current for short circuit (Icc): 30 A In hiccup mode; max. 2 seconds: 30 A Permanent; Continuous mode: 30 A Hold-up time (min. VAC) Vn at 40 °C: typically 20 milliseconds Remaining residual ripple: 80 mVpp Efficiency: ≥ 89 % Overtemperature protection: Yes Output shutdown and automatic restart of the module. Short-circuit protection at the output (adjustable via jumper): A. Manual reset B. Hiccup mode (cyclical clocking of the output until the short circuit is eliminated) C. Reset when power supply is reconnected (output switches off until power supply unit is restarted) Maximum power dissipation: 40 watts Overload protection: Yes Overvoltage protection at the output: Yes (typically 35 VDC) Parallel operation possible: Yes Relay output opens when the output voltage falls below 20 VDC +/- 5 %. Max. 1 A @ 30 VDC / 60 VAC resistive load.

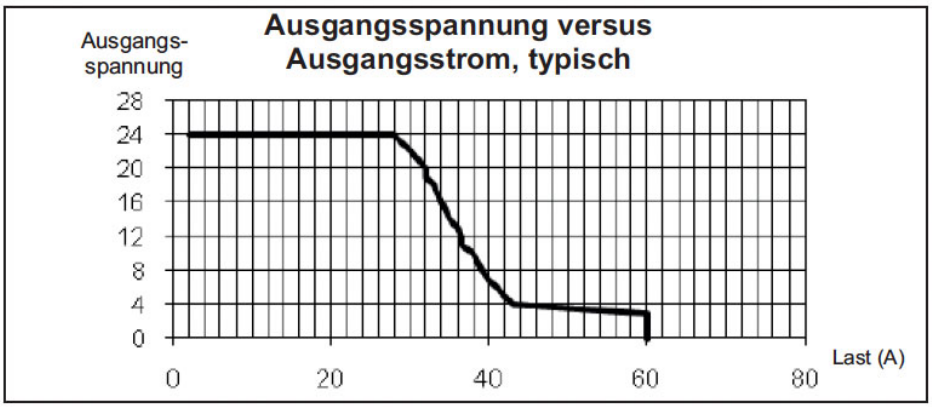
Isolation:	Input/output insulation voltage: 3,000 VAC Insulation voltage input/PE: 1,605 VAC Insulation voltage output/PE: 500 VAC
Standards and approvals:	CE according to EMC 2004/108/EC and Low Voltage Directive 2006/95/EC, UL approval according to UL508, RoHs compliant
Reliability:	MTBF according to IEC 61709 > 500,000 hours
Protection class:	IP20
Housing:	Sturdy metal housing. Mounting on the top-hat rail. Dimensions (WxHxD): 72 mm x 115 mm x 135 mm.
Connection:	Fixed terminal strips with 2.5 mm² 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

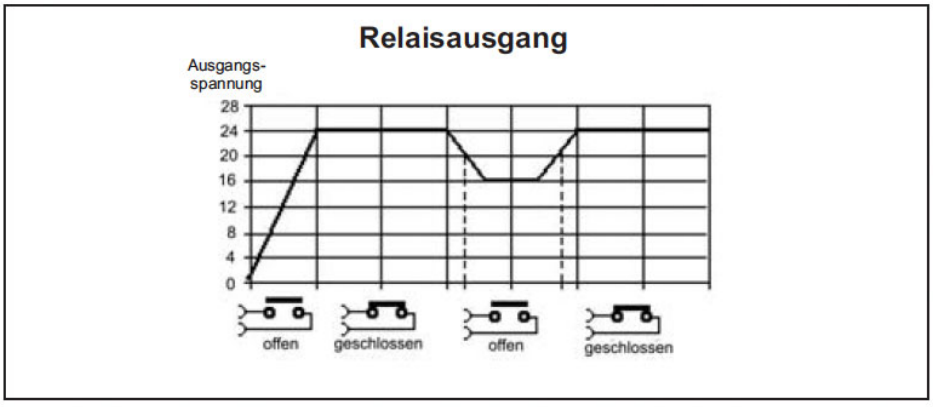
Products Order no.	
PS24V14AB	Power supply unit for top-hat rail, 230 VAC - 400 VAC - 500 VAC to 24 VDC, 15 A (2/3 phases)

Drawings

Graphic







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