The new generation power supplies make three power packed promises



# power supplies

- Rugged
- Reliable
- · Cost-effective

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SIEMENS

## Power Supplies - a standard for all 24 V applications

#### Leading the world through innovation

All industrial fields worldwide are benefiting from the advantages given by stabilized power supplies and especially those using Sipower and Sitop Power. The advantages these power supplies offer are: longer lifetime for connected loads, less heat dissipation, more compact construction, more functions, easier installation, and so much more.

### Two families to choose from... Sitop Power

These are Switched Mode Power Supplies made by Siemens AG, Germany, with excellent aesthetics for smarter look-up. The family includes an entire range from 24V/2A to 24V/4OA power supplies (single phase / three phase). With an extremely high efficiency of around 90%, they reduce energy wastage drastically. They open your way to the export market as they come with all major certifications including the prestigious CE mark.

#### Sipower

When it comes to design, reliability, protection and cost-effectiveness, these indigenously developed and manufactured Switched Mode Power Supplies are comparable to the best in the world. With a unique price by performance ratio, Sipower power supplies fit in perfectly for lower power application of single phase 24V/2A and 24V/5A. Sipower is highly suitable for the Indian power/mains conditions, thanks to the various protection and safety functions and ability to withstand tough environmental conditions. Economy is ensured by saving upfront cost and running costs due to low price and high efficiency.

#### Efficient and cost-effective

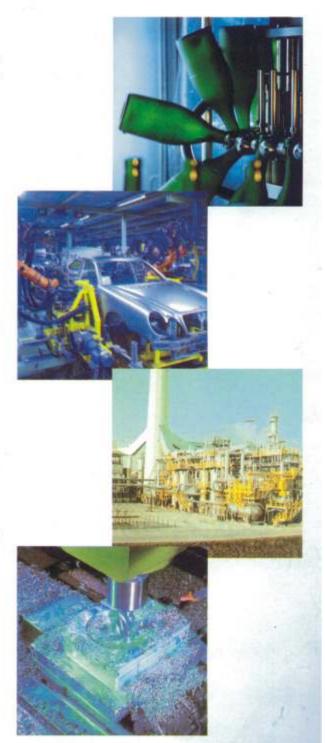
The high efficiency of upto 90% guarantees considerably less power consumption and at the same time, distinctly lowers the heat dissipation reducing the need of forced cooling. This further results in lower current operating costs without losses in power. The light and compact power supplies eliminates the need of huge panels, further bringing down the panel costs.

#### Extend the lifetime of your equipment

The constant stable 24V output voltage protects your modules against overvoltage and undervoltage in the extended allowable range of variations of the input voltage. This not only improves the operating safety but also ensures a longer lifetime of your modules.

#### Build in safety with built-in safety

Thanks to the integrated electronic short-circuit protection you don't need any additional fuses in the 24V circuit. A substantial output buffering time ensures a minimum power for some time immediately after a mains power failure, making it highly suitable for use with Programmable Controllers.



## **Technical Specifications**

SITOP Ordering No.	1phase 24VDC / 2A 6EP1331-28A00	1phase 24VDC/5A 6EP1333-2BA00	1phase 24V / 10A 6EP1334-2BA00	1phase 24V / 20A 6EP1336-28A00	3phase 24V / 20A 6EP1436-2BA00	3phase 24V / 40A 6EP1437-2BA10
AC hold-up time	>10 ms	> 10 ms	>10 ms	around 10 ms	> 3 ms	> 3 ms
Nominal AC frequency value	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Rated input current -Inrush current (25°C) Recommended C.B. Switch (AC power line supply)	0.9/0.6A 20A 6A characteristic C 3A characteristic D	2.21Q.9A 55A 16A characteristic C 8A characteristic D	4.3/1.7A 45A 10A characteristic C 6A characteristic D	8.0/3.3A 81A 25A characteristic C	1.2A <20A, <5ms Prot. Required is 3-ph coupled circuit breaker characteristic C max. 25A	1.9A <30A, <5ms Prot. Required is 3-ph coupled circuit breaker characteristic C max. 25A
Output voltage-nominal Output voltage tolerance Output voltage adj. range	24V DC ±1% 22.8 26.4 VDC	24V DC ±1% 22.826.4 VDC	24V DC ±1% 22.8 26.4 VDC	24V DC ±1% 22.8 26.4 VDC	24V DC ±2% 22.8 26.4 VDC	24V DC ±2% 22.8 26.4 VDC
Nominal output current value	2A	5A	10A	20A	2GA	40A
Efficiency	82%	87%	89%	about 87%	>87%	> 87%
Parallel connection possible	Yes, upto 2 units	Yes, upto 2 units	Yes, upto 2 units	Yes, upto 2 units	Yes, upto 2 units	Yes, upto 2 units
RFI specification (EN 55011/55022)	Class B	Class B	Class B	Class B	Class B	Class B
Mains pollution to EN 6100-3-2	Yes	Yes	Yes	Yes		
Degree of protection (VDE 0470, IEC 529)	IP 20	IP20	IP20	IP20	IP20	IP20
Ambient temperature	0°+60°C	0°+60°C	0°+60°C	0°+55°C	0"+55"C	0"+55"C
Dimensions (W x H x D) in mm	50 x 125 x 125	75 x 125 x 125	100 x 125 x 125	280 x 125 x 92	280 x 125 x 92	280 x 180 x 92
Approx. weight	0.4 Kg	0.75 Kg	1.1 Kg	2 Kg	2 Kg	3.6 Kg



## **Technical Specifications**

Si-Power	24V12A	24V / 5A	
Ordering No.	6EP01331AA000AA0	6EP01333AA000AA0	
Input Voltage			
- nominal value	115 / 230VAC	115/230 VAC	
-range	87 to 270VAC	87 to 130//187 to 270 VAC	
Line frequency	47 to 63 Hz	47 to 63 Hz	
Output Voltage			
- rate value	24VDC12A	24VDC15A	
- tolerance	+1-5%	+1-5%	
-load regulation	+ /-1%	+1-1%	
- line regulation	+ 1-1%	+/-1%	
- dynamic load regulation	+1-3%	+/-3%	
- residual ripple	<100mVp-p	<100mVp-p	
- switching peaks	< 200mVp-p	<200mVp-p	
Efficiency			
- At nominal load operation	> 80%	>80%	
Protection and monitoring fun	ctions		
- current limit	typ. 1.1 - 1.3x Imax	typ. 1.1 - 1.3x Imax	
- response to short ckt.	Auto. Soft restart	Auto. Soft restart	
- mains buffering time	>20ms	>20ms	
· output overvoltage protection	clamps to 28VDC (type. +1-5%)	clamps to 28VDC (typ. + /-5%)	
Safety			
-galvanic isolation	yes, SELV as per EN60950	yes, SELV as per EN60950	
- earth leakage current	<3.5 mA	<3.5 mA	
- degree of protection	IP 20	IP 20	
EMC			
-emission	EN 50081-2	EN 50081-2	
	EN 55011, classA	EN 55011, classA	
Mechanical Data	W		
- size W* H* D (mm)	96 x 160 x 45	96 x 160 x 55	
- connection I/P, L,N, earth	screw terminals for max. 2.5mm	screw terminals for max.2.5mm	
-connection, output+	screw terminals for max. 2.5mm	screw terminals for max. 2.5mm	
-connection, output M	screw terminals for max, 2.5mm	screw terminals for max. 2.5mm	
- installation	screw to mounting plate	screw to mounting plate	
Environmental Conditions	Andreas Control of the Control of th		
- operating temperature	0 to 60 deg. C	0 to 60 deg. C	
- transport and storage	-25 to 85 deg. C	-25 to 85 deg, C	
-humidity	75% as annual average, 95% in 30 days,	75% as annual average, 95% in 30 days,	
	no moisture condensation; according to DIN 40040	no moisture condensation; according to DIN 40040	

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