AEG

POWER
SOLUTIONS

SMPS SERIES AC 7000 N1

High reliability 7 KW rectifier for industrial applications

Picture 1 shows 110VDC / 220VDC Version

Picture 2 shows 24VDC version

The Switch Mode Power Supply (SMPS) AC7000 N1 product family is a logical further development of the proven series AC7000 from AEG Power Solutions.
it has a 7000 W output power at 24, 110/120 and 220 VDC. High reliability
due to advanced protection (input, output, temperature, current, power) and a high MTBF. The rectifier provides secured DC power in combination with a parallel battery, to supply of all types of DC consumer loads including constant voltage and current sources

FEATURES

- Robust design
- characteristic curve changeover via external contacts
- Low voltage ripple to prolong battery life
- Automatic stop at high and low mains voltage with automatic re-start
- Self-protection against high temperature conditions via automatic switch-off and automatic restart
- Double row LCD display for output voltage and output current
- ROHS compliant

BENEFITS

- Adapted to charge many types of batteries including: vented lead acid, valve regulated lead-acid (VRLA) or nickel-cadmium batteries (NiCd)
- The system can also be used as a direct power supply without batteries
- Switchable via external contact between float charge, boost charge, manual charge, Genset (all adjustable via potentiometer)

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Specifications AC 7000 N1

Output rating from single rectifier	24 V / 250 A	110 V / 75A	220 V / 30 A
Part Number	3000001261	3000001401	3000001281
Input voltage	3 x 400 VAC ± 10%		
Input frequency	47 Hz to 63 Hz		
Current consumption	3 x 11.5 A	3 x 12 A*	3 x 12.2 A
Inrush current	1.0 nominal peak current		
Power factor	0.92		
Output voltage nominal (default)	24 VDC (26.8 VDC)	110VDC (122.7 VDC)	220 VDC (245.3 VDC)
Setting range	18 to 32 VDC	105 to 135 VDC	180 to 280 VDC
Output current	250 A	75 A*	60 A
Setting range (adjustable current limit)	150 to 250 A	25 to 75 A*	17 to 30 A
Voltage ripple	< 30 mV pp*	< 30 mV pp*	< 30 mV pp*
Efficiency	89 %	92 %	92 %
Line and load regulation	< 1 %		
Dynamic response	≤ 5 % for 10 % – 90 %, recovery to normal regulation limits < 5 ms		
Short circuit response	Permanently short circuit proof		
Parallel operation	Number unlimited, current sharing approx. 20 %		
Characteristic line	IU Characteristics in acc. to DIN 41772		
Mains-side monitoring	Under- voltage/over-voltage with switch-off, self-acknowledging		
Output-side monitoring	Over voltage with switch-off / under voltage without switch-off		
Alarms	Double row LCD display		
Display	Central fault alarm		
Indicators	LED: Power On, over temperature, DC overvoltage, DC		
undervoltage			
MECHANICAL/ENVIRONMENTAL			
Design	19" module 5U (110V/220VDC) / 6U (24VDC) for installation in 19" rack		
Degree of protection	IP 20		
Mechanical strength and vibration resistance	EN 60068-2-6*		
Equipment color	Anodized aluminum (front plate)		
Dimensions W x H x D	483 x 265.9 x 400 mm (19" x 6HU)	483 x 221.4 x 400 mm (19" x 5HU)	483 x 221.4 x 400 mm (19" x 5HU)
Weight	approx. 29 kg	approx. 26 kg	approx. 26 kg
Connections	front connections		
Type of cooling	Forced air cooling		
Operating temperature	0 °C to 45 °C		
Storage temperature	-40 °C to 70 °C (in original packing)*		
Environmental conditions	EN 60721 part 3-3 class 3K3/3Z1/3B1/3C1/3S2/3M2		
Installation height	Up to 1000 m above sea level at nominal load		
STANDARDS			
Safety	EN 62477-1:2017		
EMC	EN 61000.6-2, 3, 4, 5		
Environment	EN 60721-3-1, 2, 3, ROHS		

* previous values

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