SIEMENS

Data sheet 6AG1333-4BA00-7AA0

Figure similar

SIPLUS S7-1500 PM 1507 24V/8A
SIPLUS S7-1500 PM 1507 24 V/8 A -40 ... +70°C with conformal coating based on 6EP1333-4BA00 . STABILIZED POWER SUPPLY FOR SIMATIC S7-1500 INPUT: 120/230 V AC OUTPUT: 24 V/8 A DC

Input	
Input	1-phase AC
• Note	Automatic range selection
Supply voltage	
• 1 at AC Rated value	120 V
• 2 at AC Rated value	230 V
Input voltage	
• 1 at AC	85 ... 132 V
• 2 at AC	170 ... 264 V
Wide-range input	No
Overvoltage resistance	2.3 × Vin rated, 1.3 ms
Mains buffering	at Vin = 93/187 V
Mains buffering at Iout rated, min.	20 ms; at Vin = 93/187 V
Rated line frequency 1	50 Hz
Rated line frequency 2	60 Hz
Rated line range	45 ... 65 Hz
Input current	

• at rated input voltage 120 V	3.7 A
• at rated input voltage 230 V	1.7 A
Switch-on current limiting (+25 °C), max.	62 A
Duration of inrush current limiting at 25 °C	
• maximum	3 ms
I^2t, max.	12 $A^2 \cdot s$
Built-in incoming fuse	T 6.3 A/250 V (not accessible)
Protection in the mains power input (IEC 898)	Recommended miniature circuit breaker: 16 A characteristic B or 10 A characteristic C

Output	
Output	Controlled, isolated DC voltage
Rated voltage Vout DC	24 V
Total tolerance, static ±	1 %
Static mains compensation, approx.	0.1 %
Static load balancing, approx.	0.1 %
Residual ripple peak-peak, max.	50 mV
Spikes peak-peak, max. (bandwidth: 20 MHz)	150 mV
Product function Output voltage adjustable	No
Status display	LED green for 24 V OK; LED red for error; LED yellow for stand-by
On/off behavior	No overshoot of Vout (soft start)
Startup delay, max.	1.5 s
Voltage rise, typ.	10 ms
Rated current value Iout rated	8 A
Current range	0 ... 8 A
Supplied active power typical	192 W
Short-term overload current	
• on short-circuiting during the start-up typical	35 A
• at short-circuit during operation typical	35 A
Duration of overloading capability for excess current	
• on short-circuiting during the start-up	70 ms
• at short-circuit during operation	70 ms
Parallel switching for enhanced performance	No

Efficiency	
Efficiency at Vout rated, Iout rated, approx.	90 %
Power loss at Vout rated, Iout rated, approx.	21 W

Closed-loop control	
Dynamic mains compensation (Vin rated ±15 %), max.	0.1 %
Dynamic load smoothing (Iout: 50/100/50 %), Uout ± typ.	2 %
Dynamic load smoothing (Iout: 10/90/10 %), Uout ± typ.	3 %

Load step setting time 10 to 90%, typ.	5 ms
Load step setting time 90 to 10%, typ.	5 ms
Setting time maximum	5 ms

Protection and monitoring	
Output overvoltage protection	Additional control loop, limitation (closed loop control) at < 28.8 V
Current limitation	8.4 ... 9.6 A
Current limitation, typ.	9 A
Property of the output Short-circuit proof	Yes
Short-circuit protection	Electronic shutdown, automatic restart
Overload/short-circuit indicator	-

Safety	
Primary/secondary isolation	Yes
Galvanic isolation	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 and EN 61131-2
Protection class	Class I
Leakage current	
• maximum	3.5 mA
• typical	1.3 mA
Degree of protection (EN 60529)	IP20

Approvals	
CE mark	Yes

EMC	
Emitted interference	EN 55022 Class B
Supply harmonics limitation	EN 61000-3-2
Noise immunity	EN 61000-6-2

environmental conditions	
Ambient temperature in horizontal mounting position during operation	-40 ... +70; with natural convection
Ambient temperature during storage and transport	-40 ... +85
Installation altitude at height above sea level maximum	6 000 m
Ambient condition relating to ambient temperature - air pressure - installation altitude	In case of operation at altitudes of 2000 - 6000 m above sea level: Output power derating of -7.5 %/1000 m or reduction of the ambient temperature by 5 K/1000 m
Relative humidity with condensation acc. to IEC 60068-2-38 maximum	100 %; RH incl. condensation/frost (no commissioning if condensation is present), horizontal installation
Chemical resistance to commercially available cooling lubricants	Yes; incl. diesel and oil droplets in the air
Resistance to biologically active substances conformity acc. to EN 60721-3-3	Yes; Class 3B2 mold, fungal, sponge spores (except fauna); class 3B3 upon request
Resistance to chemically active substances conformity acc. to EN 60721-3-3	Yes; Class 3C4 (RH < 75%) incl. salt spray acc. to EN 60068-2-52 (severity level 3)

Resistance to mechanically active substances conformity acc. to EN 60721-3-3	Yes; Class 3S4 incl. sand, dust
Resistance to biologically active substances conformity acc. to EN 60721-3-6	Yes; Class 6B2 mold, fungal, sponge spores (except fauna)
Resistance to chemically active substances conformity acc. to EN 60721-3-6	Yes; Class 6C3 (RH < 75%) incl. salt spray acc. to EN 60068-2-52 (severity level 3)
Resistance to mechanically active substances conformity acc. to EN 60721-3-6	Yes; Class 6S3 incl. sand, dust
Coating for equipped printed circuit board acc. to EN 61086	Yes; Class 2 for high availability
Type of coating protection against pollution according to EN 60664-3	Yes; Type 1 protection
Type of test of the coating acc. to MIL-I-46058C	Yes; Discoloration of the coating during service life possible
Product conformity of the coating Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies acc. to IPC-CC-830A	Yes; Conformal Coating, Class A

Mechanics	
Connection technology	Screw-/spring clamp connection
Connections	
• Supply input	L, N, PE: 1 screw terminal each for 0.5 ... 2.5 mm²
• Output	L+, M: 2 spring-loaded terminals each for 0.5 to 2.5 mm²
Product function	
• removable terminal at input	Yes
• removable terminal at output	Yes
Width of the enclosure	75 mm
Height of the enclosure	147 mm
Depth of the enclosure	129 mm
Required spacing	
• top	40 mm
• bottom	40 mm
• left	0 mm
• right	0 mm
Weight, approx.	0.74 kg
Product feature of the enclosure housing for side-by-side mounting	Yes
Installation	Can be mounted onto S7-1500 rail
MTBF at 40 °C	1 362 918 h
Other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)