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Data sheet 6AG1307-1KA02-7AA0

SIPLUS S7-300 PS 307 10 A -25...+70°C with conformal coating based on 6ES7307-1KA02-0AA0 . Stabilized power supply PS 307 Input: 120/230 V AC Output: 24 V DC/10 A



Figure similar

Supply voltage	
Rated value (AC)	
• 120 V AC	Yes; 85 to 132 V AC
• 230 V AC	Yes; 170 to 264 V AC
Overvoltage strength	2.3x Ue rated, 1.3 ms
Line frequency	
• permissible range, lower limit	47 Hz
• permissible range, upper limit	63 Hz
Mains buffering	
• Mains/voltage failure stored energy time	20 ms; min., for Ia rated and Ue = 93 / 187 V
• Repeat rate, min.	1 s

Input current	
Rated value at 120 V AC	4.2 A
Rated value at 230 V AC	1.9 A
Inrush current, max.	55 A; max. at 25 °C, duration max. 3 ms
I^2t	3.3 $A^2 \cdot s$
Leakage current, typ.	0.6 mA

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Leakage current, max.	3.5 mA
Overcurrent overload capability	80 ms on short circuit during startup and operation
Output voltage	
Rated value (DC)	24 V; stable at no-load max. 2.5 s
permissible range, lower limit (DC)	23.27 V
permissible range, upper limit (DC)	24.72 V
Power up time, max.	2 s
Voltage rise time, typ.	10 ms
Overvoltage protection	Additional control circuit, cutoff at < 28.8 V, automatic restart
Short-circuit strength	electronic trip, automatic restart
Residual ripple, typ.	15 mV; Peak - peak
Residual ripple, max.	50 mV; Peak - peak
Output current	
Current output (rated value)	10 A; 7 A @ > 60 °C, can be switched in parallel
Short-circuit protection	Yes; Electronic
Continuous short-circuit current, max.	12 A
Power	
Active power input, typ.	240 W
Efficiency	90 %; approx., at Ua rated, Ia rated
Power loss	
Power loss, typ.	27 W; approx., at Ua rated, Ia rated
Interrupts/diagnostics/status information	
Diagnostics indication LED	
• Status indicator output 24 V OK (green)	Yes
Potential separation	
primary/secondary	Yes; SELV output voltage Ua according to EN 60950-1 and EN 50178
Isolation	
Isolation tested with	Rated insulation voltage (24 V against L1) 250 V AC, tested with 4 200 V DC
EMC	
EMC interference immunity	EN 61000-6-2
EMC interference emission	EN 55022 Class B
Degree and class of protection	
Equipment protection class	I, with protective conductor
Standards, approvals, certificates	
CE mark	Yes
Standard for line harmonics limit	EN 61000-3-2
Ambient conditions	

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Ambient temperature during operation	
• min.	-25 °C; = Tmin
• max.	70 °C; = Tmax; 60 °C @ UL/cUL, ATEX and FM use
Altitude during operation relating to sea level	
• Installation altitude above sea level, max.	2 000 m
• Ambient air temperature-barometric pressure-altitude	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax - 20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m); above 2 000 m max. 75 V DC
Relative humidity	
• With condensation, tested in accordance with IEC 60068-2-38, max.	100 %; RH incl. condensation/frost (no commissioning under condensation conditions)
Resistance	
Use in stationary industrial systems	
— to biologically active substances according to EN 60721-3-3	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request
— to chemically active substances according to EN 60721-3-3	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
— to mechanically active substances according to EN 60721-3-3	Yes; Class 3S4 incl. sand, dust, *
Use on ships/at sea	
— to biologically active substances according to EN 60721-3-6	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request
— to chemically active substances according to EN 60721-3-6	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
— to mechanically active substances according to EN 60721-3-6	Yes; Class 6S3 incl. sand, dust; *
Usage in industrial process technology	
— Against chemically active substances acc. to EN 60654-4	Yes; Class 3 (excluding trichlorethylene)
— Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)
Remark	
— Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04	* The supplied plug covers must remain in place over the unused interfaces during operation!

Dimensions	
Width	80 mm
Height	125 mm
Depth	120 mm

Weights	
Weight, approx.	0.8 kg

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