SIEMENS

Data sheet 6AG1307-1KA02-7AA0



Figure similar

spare part SIPLUS S7-300 PS 307 10 A based on 6ES7307-1KA02-0AA0 with conformal coating, -25…+70 °C, stabilized power supply PS 307 input: 120/230 V AC output: 24 V DC/10 A

General information	
based on	6ES7307-1KA02-0AA0
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
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 protection	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.	267 W
Efficiency	90 %; approx., at Ua rated, Ia rated

© Copyright Plcbin

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	
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
Classifications	

	Version	Classification

© Copyright Plcbin

eClass	16	27-24-22-09
eClass	14	27-24-22-09
eClass	12	27-24-22-09
eClass	9.1	27-24-22-09
eClass	9	27-24-22-09
eClass	8	27-24-22-09
eClass	7.1	27-24-22-09
eClass	6	27-24-22-09
ETIM	10	EC000599
ETIM	9	EC000599
ETIM	8	EC000599
ETIM	7	EC000599
IDEA	4	3575
UNSPSC	15	32-15-17-06

Approvals / Certificates

General Product Approval

Manufacturer Declaration

China RoHS

General Product Approval

EMV

For use in hazardous locations

CCC-Ex

For use in hazardous locations

last modified: 7/1/2025

© Copyright Plcbin