

Siemens 6AG1307-1KA02-7AA0 Manual

Brand	Siemens
Product Series	Siemens
Product Type	-

Description

6AG1307-1KA02-7AA0

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

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

I²t 3.3 A²·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 / header

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

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Active power input, typ. 267 W

Efficiency 90 %; approx., at U_a rated, I_a rated

Power loss

Power loss, typ. 27 W; approx., at U_a rated, I_a rated

Interrupts/diagnostics/status information

Diagnostics indication LED

- Status indicator output 24 V OK (green) Yes

Potential separation

primary/secondary Yes; SELV output voltage U_a 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; = T_{min}
- max. 70 °C; = T_{max} ; 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 T_{min} ... T_{max} at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // T_{min} ... (T_{max}

- 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // T_{min} ... (T_{max} - 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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