SIEMENS

Data sheet 6AG1407-0KR02-7AA0

Figure similar

SIPLUS S7-400 PS 407 10 A based on 6ES7407-0KR02-0AA0 with conformal coating, -25…+70 °C, 10 A, wide range, 120/230 V UC; 5 V DC/10 A, for redundant use

General information	
based on	6ES7407-0KR02-0AA0
Supply voltage	
Rated value (DC)	
● 120 V DC	Yes
● 230 V DC	Yes
Rated value (AC)	
● 120 V AC	Yes
● 230 V AC	Yes
Line frequency	
● Rated value 50 Hz	Yes
● Rated value 60 Hz	Yes
● permissible range, lower limit	47 Hz
● permissible range, upper limit	63 Hz
Mains buffering	
● Mains/voltage failure stored energy time	20 ms
● Mains buffering according to NAMUR recommendation	Yes
Input current	
Rated value at 120 V DC	1 A
Rated value at 230 V DC	0.5 A
Rated value at 120 V AC	0.9 A
Rated value at 230 V AC	0.5 A
Inrush current, max.	63 A; Full width at half maximum 1 ms
Leakage current, max.	5 mA
Output voltage	
Type of output voltage	DC
Rated value (DC)	
● 5 V DC	Yes
● 24 V DC	Yes
Output current	
for backplane bus (5 V DC), max.	10 A; no base load required
for backplane bus (24 V DC), max.	1 A; idling-proof
Short-circuit protection	Yes
Power	
Active power input, typ.	95 W
Power loss	
Power loss, typ.	20 W
Battery	

Backup battery	
● Backup battery (optional)	Yes; 0 °C to +60 °C: 2x lithium AA; 3.6 V/2.3 Ah // -25 °C to +70 °C and/or 100 % RH: 2x external battery box 6AG1971-0AA00-7AA0 and 2x MONO cell design D
Hardware configuration	
Slots	
● required slots	2
Potential separation	
primary/secondary	Yes
Isolation	
Overvoltage category	II
EMC	
Compliance with line harmonic distortion limits	
● Compliance with line harmonic distortion acc. to IEC 61000-3-2, IEC 61000-3-3	Yes
Degree and class of protection	
Equipment protection class	I, with protective conductor
Ambient conditions	
Ambient temperature during operation	
● min.	-25 °C; using the external battery box SIPLUS 6AG1971-0AA00-7AA0 for buffer mode
● max.	70 °C; using the external battery box SIPLUS 6AG1971-0AA00-7AA0 for buffer mode
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)
Relative humidity	
● With condensation, tested in accordance with IEC 60068-2-38, max.	100 %; RH incl. condensation/frost (no commissioning if there is condensation). In buffer mode, use battery box SIPLUS 6AG1971-0AA00-7AA0 for high humidity
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!
Conformal coating	
● Coatings for printed circuit board assemblies acc. to EN 61086	Yes; Class 2 for high reliability
● Protection against fouling acc. to EN 60664-3	Yes; Type 1 protection
● Military testing according to MIL-I-46058C, Amendment 7	Yes; Discoloration of coating possible during service life
● Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A	Yes; Conformal coating, Class A
Connection method	
Design of electrical connection	3x 1.5 mm², solid or stranded wire with end sleeve, external diameter 3 mm to 9

	mm
Dimensions	
Width	50 mm
Height	290 mm
Depth	217 mm
Weights	
Weight, approx.	1 200 g

Classifications

	Version	Classification
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

China RoHS

EMV

last modified: 6/18/2025