SIEMENS

Data sheet

6AG1405-0KR02-7AA0



SIPLUS S7-400 PS 405 10 A based on 6ES7405-0KR02-0AA0 with conformal coating, -25...+70 °C, 10 A, wide range, 24/48/60 V DC; 5 V DC/10 A, for redundant use

Figure similar

Dased on GES7405-0K802-0AA0	General information	
Rated value (DC)	based on	6ES7405-0KR02-0AA0
• 24 V DC • 48 V DC • 48 V DC • 80 V DC	Supply voltage	
• 48 ∨ DC • 50 ∨ DC	Rated value (DC)	
● 60 V D C Mains buffering ● Mains voltage failure stored energy time ● Mains buffering according to NAMUR recommendation Rated value at 24 V D C Rated value at 48 V D C Rated value at 60 V D C Inush current, max. 18 A; Full width at half maximum 20 ms output voltage / header Type of output voltage / D C Rated value (DC) ● 5 V D C ● 2 4 V D C Active value (DC) ● 5 V D C ● 2 4 V D C Output current for backplane bus (5 V D C), max. 10 A; in base load required for backplane bus (24 V D C), max. 1 A; idling-proof Short-circuit protection Power Ioss Power loss Power loss, typ. Backup battery ● Backup battery ● Backup battery (optional) Yes 1 Potential separation primary/secondary Yes	• 24 V DC	Yes
Mains buffering • Mains/voltage failure stored energy time • Mains buffering according to NAMUR recommendation Input current Rated value at 24 V DC Rated value at 48 V DC Rated value at 48 V DC Rated value at 60 V DC Inush current, max. 18 A; Full width at half maximum 20 ms output voltage / header Type of output voltage Rated value (DC) • 5 V DC • 24 V DC Ves • 24 V DC Output current for backplane bus (5 V DC), max. for backplane bus (24 V DC), max. Short-circuit protection Yes Power Active power input, typ. Power loss, typ. Backup battery • Ferquired slots • required slots • required slots • required slots • required slots 2 Potential separation primary/secondary Yes	• 48 V DC	Yes
Mains/voltage failure stored energy time Mains buffering according to NAMUR recommendation Input current Rated value at 24 V DC Rated value at 48 V DC Rated value at 60 V DC Insub current, max. 18 A; Full width at half maximum 20 ms output voltage / header Type of output voltage DC Rated value (DC) S V DC S V B Power loss, typ. Active power input, typ. Power loss Power loss, typ. Backup battery Backup battery Backup battery Backup stores Prequired slots Yes 2 ms 2 ms Yes 10 A; no base load required for backplane bus (24 V DC), max. 10 A; no base load required for backplane bus (24 V DC), max. 11 A; idling-proof S by W Power loss Power loss, typ. Backup battery Backup battery Backup battery Backup battery Pack we we make the first of the office of the office of the office of the office of	• 60 V DC	Yes
Mains buffering according to NAMUR recommendation Input current Rated value at 24 V DC	Mains buffering	
Input current	 Mains/voltage failure stored energy time 	20 ms
Rated value at 24 V DC	 Mains buffering according to NAMUR recommendation 	Yes
Rated value at 60 V DC 1.6 A Inrush current, max. 18 A; Full width at half maximum 20 ms output voltage / header Type of output voltage Type of output voltage DC Rated value (DC)	Input current	
Rated value at 60 V DC Inrush current, max. 18 A; Full width at half maximum 20 ms output voltage / header Type of output voltage DC Rated value (DC) • 5 V DC • 24 V DC 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	Rated value at 24 V DC	4 A
Inrush current, max. output voltage / header Type of output voltage Rated value (DC) • 5 V DC • 2 4 V DC Output current for backplane bus (5 V DC), max. for backplane bus (24 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, 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	Rated value at 48 V DC	2 A
output voltage / header Type of output voltage DC Rated value (DC) • 5 V DC • 24 V DC Output current for backplane bus (5 V DC), max. for backplane bus (24 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. Batkury 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 • required slots 2 Potential separation primary/secondary Yes	Rated value at 60 V DC	1.6 A
Type of output voltage DC Rated value (DC) • 5 V DC • 24 V DC Ves Output current for backplane bus (5 V DC), max. for backplane bus (24 V DC), max. 10 A; no base load required for backplane bus (24 V DC), max. 11 A; idling-proof Yes Power Active power input, typ. 95 W Power loss Power loss, typ. 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	Inrush current, max.	18 A; Full width at half maximum 20 ms
Rated value (DC) • 5 V DC • 24 V DC Output current for backplane bus (5 V DC), max. for backplane bus (24 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 Power loss, typ. Backup battery • Backup 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 • required slots • required slots 2 Potential separation primary/secondary Yes	output voltage / header	
• 5 V DC • 24 V DC • 24 V DC Output current for backplane bus (5 V DC), max. for backplane bus (24 V DC), max. 1 A; idling-proof Short-circuit protection Yes Power Active power input, typ. 95 W Power loss, typ. Backup battery • Backup 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 • required slots 2 Potential separation primary/secondary Yes	Type of output voltage	DC
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Output current for backplane bus (5 V DC), max. for backplane bus (24 V DC), max. 1 A; idling-proof Short-circuit protection Yes Power Active power input, typ. Power loss Power loss, typ. 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	• 5 V DC	Yes
for backplane bus (5 V DC), max. for backplane bus (24 V DC), max. Short-circuit protection Yes Power Active power input, typ. Power loss Power loss Power loss, typ. Batkup 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	• 24 V DC	Yes
for backplane bus (24 V DC), max. 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 required slots 2 Potential separation primary/secondary Yes	Output current	
Short-circuit protection 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 required slots 2 Potential separation primary/secondary Yes	for backplane bus (5 V DC), max.	10 A; no base load required
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 Fequired slots 2 Potential separation primary/secondary Yes	for backplane bus (24 V DC), max.	1 A; idling-proof
Active power input, typ. Power loss Power loss, typ. 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 required slots 2 Potential separation primary/secondary Yes	Short-circuit protection	Yes
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 required slots 2 Potential separation primary/secondary Yes	Power	
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% 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	Backup battery	
Slots	Backup battery (optional)	% RH: 2x external battery box 6AG1971-0AA00-7AA0 and 2x MONO cell
◆ required slots Potential separation primary/secondary Yes	Hardware configuration	
Potential separation primary/secondary Yes	Slots	
primary/secondary Yes	• required slots	2
	Potential separation	
Isolation	primary/secondary	Yes
	Isolation	

Overweltere esterony	п
Overvoltage category	II.
Degree and class of protection	Luith protective conductor
Equipment protection class Ambient conditions	I, with protective conductor
Ambient temperature during operation	
min.	-25 °C; = Tmin; using the external battery box SIPLUS 6AG1971-0AA00-7AA0
	for buffer mode 70 °C; = Tmax; using the external battery box SIPLUS 6AG1971-0AA00-7AA0
• max.	for buffer mode
Altitude during operation relating to sea level	F 000
 Installation altitude above sea level, max. Ambient air temperature-barometric pressure-altitude 	5 000 m 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)
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
last modified:	5/29/2024 🖸