SIEMENS

Data sheet

6AG1931-2EC21-2AA0



SIPLUS PS DC-USV 24V/15A

SIPLUS PS DC-UPS 24 V/15 A based on 6EP1931-2EC21 with conformal coating, -25...+60 $^{\circ}\text{C},$

Figure similar

input			
supply voltage at DC rated value	24 V		
input voltage at DC	22 29 V		
adjustable response value voltage for buffer connection preset	22.5 V		
adjustable response value voltage for buffer connection	22 25.5 V; Adjustable in 0.5 V increments		
input current at rated input voltage 24 V rated value	15 A; + approx. 1 A with empty battery		
memory			
type of energy storage	with batteries		
design of the mains power cut bridging-connection	Dependent on connected battery and load current, see selection table battery module and mains buffering times as well as the relevant important information notes!		
output			
output voltage			
 in normal operation at DC rated value 	24 V		
in buffering mode at DC rated value	24 V		
formula for output voltage	Vin - approx. 0.5 V		
startup delay time typical	1 s		
voltage increase time of the output voltage typical	60 ms		
output voltage in buffering mode at DC	19 28.5 V		
output current			
rated value	15 A		
 in normal operation 	0 15 A		
in buffering mode	0 15 A		
peak current	15.7 A		
property of the output short-circuit proof	Yes		
charging current	0.35 A, 0.7 A; factory setting approx. 0.7 A		
efficiency			
efficiency in percent			
 at rated output voltage for rated value of the output current typical 	96.2 %		
in case of operation on rechargeable battery typical	96 %		
power loss [W]			
 at rated output voltage for rated value of the output current typical 	14 W		
in case of operation on rechargeable battery typical	15 W		
supplied active power typical	360 W		
protection and monitoring			
product function			
 reverse polarity protection against energy storage unit polarity reversal 	Yes		

reverse polarity protection against input voltage polarity reversal	Yes		
display version			
● for normal operation	Normal operation: LED green (OK), floating changeover contact "Bat/OK" to setting "OK" ("OK" means: Voltage of the supplying power supply unit is greater than cut-in threshold set at the DC UPS module); Lack of buffer standby: LED red (alarm), floating changeover contact "Alarm/Bat" to setting "Alarm"; Battery replacement required: LED red (alarm) flashing with approx. 0.25 Hz, floating changeover contact "Alarm/Bat" switching with approx. 0.25 Hz; Energy storage > 85%: LED green (Bat > 85%), floating NO contact "Bat > 85" closed; Permissible contact current capacity: DC 60 V/1 A or AC 30 V /1 A		
in buffering mode	Buffered mode: LED yellow (Bat), floating changeover contact "OK/Bat" to setting "Bat"; Prewarning battery voltage < 20.4 VDC: LED red (alarm), floating changeover contact "Alarm/Bat" to setting "Alarm"; Energy storage > 85%: LED green (Bat > 85%), floating NO contact "Bat > 85" closed		
interfaces			
product component PC interface	No		
product function communication function	No		
design of the interface	without		
safety	Millout		
galvanic isolation between input and output	No		
operating resource protection class	Class III		
protection class IP	IP20		
<u> </u>	11 20		
standard • for emitted interference	EN 55022 Class P		
	EN 55022 Class B		
for interference immunity	EN 61000-6-2		
standards, specifications, approvals			
certificate of suitability			
CE marking	Yes		
MTBF at 40 °C	791 139 h		
ambient conditions			
ambient temperature			
 in horizontal mounting position during operation 	-25 +60 °C; with natural convection		
during transport	-40 +85 °C		
during storage	-40 +85 °C		
installation altitude at height above sea level maximum	6 000 m		
ambient condition relating to ambient temperature - air pressure - installation altitude	In case of operation at altitudes of 2000 - 6000 m above sea level: Output power derating of -7.5 %/1000 m or reduction of the ambient temperature by 5 K/1000 m		
relative humidity with condensation according to IEC 60068-2-38 maximum	100 %; RH incl. condensation/frost (no commissioning if condensation is present), horizontal installation		
chemical resistance to commercially available cooling lubricants	Yes; incl. diesel and oil droplets in the air		
resistance to biologically active substances conformity according to EN 60721-3-3	Yes; Class 3B2 mold, fungal, sponge spores (except fauna); class 3B3 upon request		
resistance to chemically active substances conformity according to EN 60721-3-3	Yes; Class 3C4 (RH < 75%) incl. salt spray acc. to EN 60068-2-52 (severity level 3)		
resistance to mechanically active substances conformity according to EN 60721-3-3	Yes; Class 3S4 incl. sand, dust		
resistance to biologically active substances conformity according to EN 60721-3-6	Yes; Class 6B2 mold, fungal, sponge spores (except fauna)		
resistance to chemically active substances conformity according to EN 60721-3-6	Yes; Class 6C3 (RH < 75%) incl. salt spray acc. to EN 60068-2-52 (severity level 3)		
resistance to mechanically active substances conformity according to EN 60721-3-6	Yes; Class 6S3 incl. sand, dust		
coating for equipped printed circuit board according to EN 61086	Yes; Class 2 for high availability		
type of coating protection against pollution according to EN 60664-3	Yes; Type 1 protection		
type of test of the coating according to MIL-I-46058C	Yes; Discoloration of the coating during service life possible		
product conformity of the coating Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A	Yes; Conformal Coating, Class A		
connection method			
type of electrical connection	screw terminal		
• at input	24 V DC: 2 screw terminals for 1 4 mm²/17 11 AWG		
• at output	24 V DC: 4 screw terminals for 1 4 mm²/17 11 AWG		
for rechargeable battery module	24 V DC: 2 screw terminals for 1 4 mm²/17 11 AWG		
for control circuit and status message	10 screw terminals for 0.5 2.5 mm ² /20 13 AWG		

mechanical data					
width × height × depth of the enclosure	50 × 125 × 125 mm				
installation width × mounting height	50 × 225 mm				
required spacing					
• top	50 mm				
• bottom	50 mm				
● left	0 mm				
• right	0 mm				
fastening method	Snaps onto DIN rail EN 60715 35x7.5/15				
standard rail mounting	Yes				
S7 rail mounting	No				
wall mounting	No				
housing can be lined up	Yes				
net weight	0.4 kg				
accessories					
electrical accessories	Battery module				
further information internet links					
internet link					
• to website: Industry Mall	https://mall.industry.siemens.com				
 to website: Industry Online Support 	https://support.industry.siemens.com				
additional information					
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)				
security information					
security information	Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit www.siemens.com/cybersecurity-industry. Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under https://www.siemens.com/cert. (V4.7)				
Classifications					
		Version	Classification		
	eClass	14	27-04-07-05		
	eClass	12	27-04-07-05		
	eClass	9.1	27-04-07-05		
	eClass	9	27-04-07-05		
	eClass	8	27-04-06-90		
	eClass	7.1	27-04-06-90		
	eClass	6	27-04-06-90		
	ETIM	9	EC000382		
	ETIM	8	EC000382		
	ETIM	7	EC000382		
	IDEA	4	4149		
	UNSPSC	15	39-12-10-11		
Approvals Certificates					
General Product Approval			EMV		

Miscellaneous

Manufacturer Declaration







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last modified: 6/24/2024 🖸