6AG1931-2FC21-7AA0

Data sheet

SIPLUS DC-USV-MODUL 24V/40A



Figure similar

SIPLUS PS DC UPS module 24 V/40 A -25...+70°C with conformal coating based on 6EP1931-2FC21 . Uninterruptible Power supply without interface Input: 24 V DC/43 A Output: 24 V DC/40 A

Input		
supply voltage at DC rated value	24 V	
voltage curve at input	DC	
input voltage range	22 29 V DC	
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	40 A; + approx. 2.6 A with empty battery	
Mains buffering		
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!	
charging current	1 A, 2 A	
adjustable charging current maximum note	factory setting approx. 2 A	
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	360 ms	
output voltage in buffering mode at DC	19 28.5 V	
output current		
rated value	40 A	
in normal operation	0 40 A	
in buffering mode	0 40 A	
peak current	42 A	
supplied active power typical	960 W	
Efficiency		
efficiency in percent		

 at rated output voltage for rated value of the output current typical 	97.2 %
in case of operation on rechargeable battery typical	96.9 %
power loss [W]	
at rated output voltage for rated value of the output current typical	28.6 W
 in case of operation on rechargeable battery typical 	33.6 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
Signaling	
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
• in buffering mode	"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 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
Interface	
product component PC interface	No
design of the interface	without
	Without
Safety	
galvanic isolation between input and output	No
operating resource protection class	Class III
certificate of suitability	
CE marking	Yes
protection class IP	IP20
EMC	
standard	
for emitted interference	EN 55022 Class B
for interference immunity	EN 61000-6-2
environmental conditions	
ambient temperature in horizontal mounting position during operation	-25 +70; with natural convection
ambient temperature during storage and transport	-40 +85
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 acc. 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 acc. to EN 60721-3-3	Yes; Class 3B2 mold, fungal, sponge spores (except fauna); class 3B3 upon request
resistance to chemically active substances conformity acc. 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 acc. to EN 60721-3-3	Yes; Class 3S4 incl. sand, dust
resistance to biologically active substances conformity acc. to EN 60721-3-6	Yes; Class 6B2 mold, fungal, sponge spores (except fauna)
resistance to chemically active substances conformity acc. to EN 60721-3-6	Yes; Class 6C3 (RH < 75%) incl. salt spray acc. to EN 60068-2-52 (severity level 3)
to EN 00721-0-0	(Severity level o)

resistance to mechanically active substances conformity acc. to EN 60721-3-6	Yes; Class 6S3 incl. sand, dust
coating for equipped printed circuit board acc. 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 acc. 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 acc. to IPC-CC-830A	Yes; Conformal Coating, Class A
Mechanics	
type of electrical connection	screw-type terminals
• at input	24 V DC: 2 screw terminals for 0.33 10 mm²/22 7 AWG
• at output	24 V DC: 2 screw terminals for 0.33 10 mm²/22 7 AWG
 for rechargeable battery module 	24 V DC: 2 screw terminals for 0.33 10 mm²/22 7 AWG
 for control circuit and status message 	10 screw terminals for 0.5 2.5 mm²/20 13 AWG
width of the enclosure	102 mm
height of the enclosure	125 mm
depth of the enclosure	125 mm
required spacing	
• top	50 mm
• bottom	50 mm
• left	0 mm
• right	0 mm
net weight	1.1 kg
product feature of the enclosure housing can be lined up	Yes
fastening method	Snaps onto DIN rail EN 60715 35x7.5/15
electrical accessories	Battery module
MTBF at 40 °C	522 739 h
reference code acc. to IEC 81346-2	Т
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

