SIEMENS

Data sheet

6AG1931-2BA00-3AA0



SIPLUS POWER DC 24V/ 0,375 A

SIPLUS PS 24 V/0.375 A based on 6EP1731-2BA00 with conformal coating, -25...+70 °C, in: 48...220 V DC out: 24 V DC/0.375 A

Figure similar

nput		
type of the power supply network	DC voltage	
supply voltage at AC		
• initial value	30 V	
• full-scale value	187 V	
supply voltage at DC	48 220 V	
input voltage at DC	30 264 V	
wide range input	Yes	
overvoltage overload capability	-	
buffering time for rated value of the output current in the event of power failure minimum	10 ms	
operating condition of the mains buffering	at Vin = 220 V	
input current		
 at rated input voltage 48 V 	0.3 A	
at rated input voltage 220 V	0.06 A	
current limitation of inrush current at 25 °C maximum	35 A	
duration of inrush current limiting at 25 °C		
• typical	3 ms	
I2t value maximum	1.2 A²·s	
fuse protection type	F 4 A/250 V (not accessible)	
fuse protection type in the feeder	Recommended miniature circuit breaker: from 6 A characteristic C, suitable for DC	
output		
voltage curve at output	Controlled, isolated DC voltage	
output voltage at DC rated value	24 V	
output voltage		
 at output 1 at DC rated value 	24 V	
output voltage adjustable	No; -	
relative overall tolerance of the voltage	3 %	
relative control precision of the output voltage		
on slow fluctuation of input voltage	0.1 %	
on slow fluctuation of ohm loading	0.1 %	
residual ripple		
maximum	150 mV	
• typical	50 mV	
voltage peak		
maximum	240 mV	
• typical	50 mV	
display version for normal operation	Green LED for 24 V OK	

	N
behavior of the output voltage when switching on	No overshoot of Vout (soft start)
response delay maximum	2.5 s
voltage increase time of the output voltage	
• typical	90 ms
output current	
rated value	0.375 A
rated range	0 0.375 A; +60 +70 °C: Derating 3%/K
supplied active power typical	9 W
short-term overload current	
at short-circuit during operation typical	2.7 A
duration of overloading capability for excess current	
at short-circuit during operation	200 ms
bridging of equipment	No
efficiency	
efficiency in percent	66 %
power loss [W]	
at rated output voltage for rated value of the output	4.6 W
current typical	
closed-loop control	
relative control precision of the output voltage with rapid	0.3 %
fluctuation of the input voltage by +/- 15% typical	
relative control precision of the output voltage load step of resistive load 50/100/50 % typical	0.4 %
setting time	
load step 50 to 100% typical	2 ms
 load step 100 to 50% typical 	2 ms
protection and monitoring	
design of the overvoltage protection	Yes, according to EN 60950-1
property of the output short-circuit proof	Yes
design of short-circuit protection	Electronic shutdown, automatic restart
response value current limitation	0.41 0.49 A
enduring short circuit current RMS value	
• maximum	0.9 A
safety	
galvanic isolation between input and output	Yes
galvanic isolation	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178
operating resource protection class	Class I
leakage current	
maximum	3.5 mA
protection class IP	IP20
EMC	
standard	
for emitted interference	EN 55022 Class B
for mains harmonics limitation	not applicable
• for interference immunity	EN 61000-6-2
standards, specifications, approvals	
certificate of suitability	Yes
CE marking LIKCA marking	Yes
UKCA marking MTBF at 40 °C	1 466 123 h
ambient conditions	1 700 120 11
ambient temperature	25 170 °C; with natural convention
in horizontal mounting position during operation	-25 +70 °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
	100 %; RH incl. condensation/frost (no commissioning if condensation is
relative humidity with condensation according to IEC 60068-2-38 maximum chemical resistance to commercially available cooling lubricants	present), horizontal installation

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		
resistance to mechanically active substances conformity according to EN 60721-3-3	level 3) Yes; Class 3S4 incl. sand, dust		
resistance to biologically active substances conformity	Yes; Class 6B2 mold, fungal, sponge spores (except fauna)		
according to EN 60721-3-6 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		
resistance to mechanically active substances conformity	Ves; Class 6S3 incl. sand, dust		
according to EN 60721-3-6 coating for equipped printed circuit board according to EN	Yes; Class 2 for high availability		
61086 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		
onnection method			
type of electrical connection	screw terminal		
• at input	L+1, M1, PE: 1 screw terminal each for 0.5 2.5 mm² single-core/finely stranded		
• at output	+: 1 screw terminal for 0.5 2.5 mm²; -: 2 screw terminals for 0.5 2.5 mm²		
nechanical data			
width × height × depth of the enclosure	22.5 × 80 × 91 mm		
installation width × mounting height	22.5 mm × 180 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	0.14 kg		
urther information internet links			
internet link			
to website: Industry Online Support	https://support.industry.siemens.com		
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)		
ecurity 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 strongl 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)		

eClass	14	27-04-07-01
eClass	12	27-04-07-01
eClass	9.1	27-04-07-01
eClass	9	27-04-07-01
eClass	8	27-04-90-02
eClass	7.1	27-04-90-02
eClass	6	27-04-90-02
ETIM	9	EC002540
ETIM	8	EC002540
ETIM	7	EC002540
IDEA	4	4130
UNSPSC	15	39-12-10-04

Approvals Certificates

General Product Approval EMV

Miscellaneous



Manufacturer Declaration



<u>KC</u>



last modified:

8/28/2024