## **SIEMENS**

## **Data sheet**

6AG1931-2BA00-3AA0



SIPLUS POWER DC 24V/ 0,375 A

Figure similar

SIPLUS PS 24 V/0.375 A Condensation permissible in: 48...220 V DC out: 24 V DC/0.375 A based on 6EP1731-2BA00

Input	
Input	DC voltage
Voltage range AC	30 187 V
supply voltage	
• at DC	48 220 V
input voltage	
• at DC	30 264 V
Wide-range input	Yes
Overvoltage resistance	
Mains buffering	at Vin = 220 V
Mains buffering at lout rated, min.	10 ms; at Vin = 220 V
input current	
<ul> <li>at rated input voltage 48 V</li> </ul>	0.3 A
<ul> <li>at rated input voltage 220 V</li> </ul>	0.06 A
Switch-on current limiting (+25 °C), max.	35 A
duration of inrush current limiting at 25 °C	
• typical	3 ms
I²t, max.	1.2 A <sup>2</sup> ·s
Built-in incoming fuse	F 4 A/250 V (not accessible)
Protection in the mains power input (IEC 898)	Recommended miniature circuit breaker: from 6 A characteristic C, suitable for DC
Output	
Output	Controlled, isolated DC voltage
Rated voltage Vout DC	24 V
output voltage at output 1 at DC rated value	24 V
Total tolerance, static ±	3 %
Static mains compensation, approx.	0.1 %
Static load balancing, approx.	0.1 %
Residual ripple peak-peak, max.	150 mV
Residual ripple peak-peak, typ.	50 mV
Spikes peak-peak, max. (bandwidth: 20 MHz)	240 mV
Spikes peak-peak, typ. (bandwidth: 20 MHz)	50 mV
product function output voltage adjustable	No

Output voltage setting	-
Status display	Green LED for 24 V OK
On/off behavior	No overshoot of Vout (soft start)
Startup delay, max.	2.5 s
Voltage rise, typ.	90 ms
Rated current value lout rated	0.375 A
Current range	0 0.375 A
Note	+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
Parallel switching for enhanced performance	No
Efficiency	
Efficiency at Vout rated, lout rated, approx.	66 %
Power loss at Vout rated, lout rated, approx.	4.6 W
Closed-loop control	
Dynamic mains compensation (Vin rated ±15 %), max.	0.3 %
Dynamic load smoothing (lout: 50/100/50 %), Uout ± typ.	0.4 %
Load step setting time 50 to 100%, typ.	2 ms
Load step setting time 100 to 50%, typ.	2 ms
Protection and monitoring	
Output overvoltage protection	Yes, according to EN 60950-1
Current limitation	0.41 0.49 A
property of the output short-circuit proof	Yes
Short-circuit protection	Electronic shutdown, automatic restart
enduring short circuit current RMS value	·
maximum	0.9 A
Overload/short-circuit indicator	-
Safety	
Primary/secondary isolation	Yes
galvanic isolation	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178
Protection class	Class I
leakage current	
maximum	3.5 mA
Degree of protection (EN 60529)	IP20
Approvals	
CE mark	Yes
EMC	
Emitted interference	EN 55022 Class B
Supply harmonics limitation	not applicable
Noise immunity	EN 61000-6-2
environmental conditions	LIT 01000 0 Z
	25 ±70; with natural convention
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)
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	
Connection technology	screw-type terminals
Connections	
Supply input	L+1, M1, PE: 1 screw terminal each for 0.5 2.5 mm² single-core/finely stranded
Output	+: 1 screw terminal for 0.5 2.5 mm²; -: 2 screw terminals for 0.5 2.5 mm²
width of the enclosure	22.5 mm
height of the enclosure	80 mm
depth of the enclosure	91 mm
required spacing	
• top	50 mm
• bottom	50 mm
• left	0 mm
• right	0 mm
Weight, approx.	0.14 kg
product feature of the enclosure housing can be lined up	Yes
Installation	Snaps onto DIN rail EN 60715 35x7.5/15
MTBF at 40 °C	1 466 123 h
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

