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Data sheet 6AG1331-6SB00-7AY0



SIPLUS LOGO! POWER 24V 1.3A

SIPLUS LOGO! power 24 V 1.3 A based on 6EP3331-6SB00-0AY0 with conformal coating, -40…+70 °C, start up -25 °C, stabilized power supply input: 100-240 V AC output: 24 V DC/ 1.3 A

Input	
type of the power supply network	1-phase AC or DC
supply voltage at AC	
● minimum rated value	100 V
● maximum rated value	240 V
● initial value	85 V
● full-scale value	264 V
input voltage	
● at DC	110 ... 300 V
design of input wide range input	Yes
operating condition of the mains buffering	at Vin = 187 V
buffering time for rated value of the output current in the event of power failure minimum	40 ms
operating condition of the mains buffering	at Vin = 187 V
line frequency	
● 1 rated value	50 Hz
● 2 rated value	60 Hz
line frequency	47 ... 63 Hz
input current	
● at rated input voltage 120 V	0.7 A
● at rated input voltage 230 V	0.35 A
current limitation of inrush current at 25 °C maximum	25 A
I2t value maximum	0.8 A²·s
fuse protection type	internal
● in the feeder	Recommended miniature circuit breaker: from 6 A characteristic B or from 2 A characteristic C
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
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	200 mV
● typical	30 mV
voltage peak	
● maximum	300 mV
● typical	50 mV

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adjustable output voltage	22.2 ... 26.4 V
product function output voltage adjustable	Yes
type of output voltage setting	via potentiometer
display version for normal operation	Green LED for output voltage OK
behavior of the output voltage when switching on	No overshoot of Vout (soft start)
response delay maximum	0.5 s
voltage increase time of the output voltage	
● typical	100 ms
output current	
● rated value	1.3 A
● rated range	0 ... 1.3 A; +55 ... +70 °C: Derating 2%/K
supplied active power typical	31.2 W
product feature	
● bridging of equipment	Yes
number of parallel-switched equipment resources for increasing the power	2
Efficiency	
efficiency in percent	86 %
power loss [W]	
● at rated output voltage for rated value of the output current typical	5 W
● during no-load operation maximum	0.3 W
Closed-loop control	
relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical	0.2 %
relative control precision of the output voltage at load step of resistive load 10/90/10 % typical	1 %
setting time	
● load step 10 to 90% typical	1 ms
● load step 90 to 10% typical	1 ms
Protection and monitoring	
design of the overvoltage protection	Yes, according to EN 60950-1
● typical	1.7 A
property of the output short-circuit proof	Yes
design of short-circuit protection	Constant current characteristic
enduring short circuit current RMS value	
● maximum	1.7 A
overcurrent overload capability in normal operation	overload capability 150% Iout rated typ. 200 ms
display version for overload and short circuit	-
measuring point for output current	50 mV =^ 1.3 A
overcurrent overload capability when switching on	150% Iout rated typ. 200 ms
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 II (without protective conductor)
protection class IP	IP20
Approvals	
certificate of suitability	
● CE marking	Yes
EMC	
standard	
● for emitted interference	EN 55022 Class B
● for mains harmonics limitation	not applicable
● for interference immunity	EN 61000-6-2
environmental conditions	
ambient temperature	
● in horizontal mounting position during operation	-40; Startup @ -25 °C ... +70 °C; with natural convection
● during storage and transport	-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

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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
Mechanics	
type of electrical connection	screw-type terminals
● at input	L, N: 1 screw terminal each for 0.5 ... 2.5 mm2 single-core/finely stranded
● at output	+, -: 2 screw terminals each for 0.5 ... 2.5 mm²
● for auxiliary contacts	-
width of the enclosure	36 mm
height of the enclosure	90 mm
depth of the enclosure	53 mm
required spacing	
● top	20 mm
● bottom	20 mm
● left	0 mm
● right	0 mm
net weight	0.12 kg
product feature of the enclosure housing can be lined up	Yes
fastening method	Snaps onto DIN rail EN 60715 35x7.5/15, direct mounting in different mounting positions
MTBF at 40 °C	3 094 996 h
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)



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