SIEMENS

Data sheet 6AG1331-1SH03-7AA0

SIPLUS LOGO! POWER 24V 1,3A
SPARE PART SIPLUS LOGO! Power 24 V 1.3 A for medial exposure -25...+70 °C based on 6EP1331-1SH03 . stabilized power supply input 24 V DC/1.3 A

Input	
Input	1-phase AC or DC
Rated voltage value Vin rated	100 ... 240 V
Voltage range AC	85 ... 264 V
Input voltage	
• at DC	110 ... 300 V
Wide-range input	Yes
Overvoltage resistance	2.3 × Vin rated, 1.3 ms
Mains buffering at Iout rated, min.	40 ms; at Vin = 187 V
Rated line frequency 1	50 Hz
Rated line frequency 2	60 Hz
Rated line range	47 ... 63 Hz
Input current	
• at rated input voltage 120 V	0.7 A
• at rated input voltage 230 V	0.35 A
Switch-on current limiting (+25 °C), max.	25 A
I^2t, max.	0.8 $A^2 \cdot s$
Built-in incoming fuse	internal
Protection in the mains power input (IEC 898)	Recommended miniature circuit breaker: from 6 A characteristic B or from 2 A characteristic C

Output	
Output	Controlled, isolated DC voltage
Rated voltage Vout DC	24 V
Total tolerance, static ±	3 %
Static mains compensation, approx.	0.1 %
Static load balancing, approx.	1.5 %
Residual ripple peak-peak, max.	200 mV
Residual ripple peak-peak, typ.	10 mV
Spikes peak-peak, max. (bandwidth: 20 MHz)	300 mV
Spikes peak-peak, typ. (bandwidth: 20 MHz)	20 mV
Adjustment range	22.2 ... 26.4 V
Product function Output voltage adjustable	Yes
Output voltage setting	via potentiometer
Status display	Green LED for output voltage OK
On/off behavior	No overshoot of Vout (soft start)

Startup delay, max.	0.5 s
Voltage rise, typ.	15 ms
Rated current value Iout rated	1.3 A
Current range	0 ... 1.3 A
• Note	+55 ... +70 °C: Derating 2%/K
Supplied active power typical	30 W
Parallel switching for enhanced performance	Yes
Numbers of parallel switchable units for enhanced performance	2

Efficiency	
Efficiency at Vout rated, Iout rated, approx.	85 %
Power loss at Vout rated, Iout rated, approx.	6 W

Closed-loop control	
Dynamic mains compensation (Vin rated ±15 %), max.	0.2 %
Dynamic load smoothing (Iout: 10/90/10 %), Uout ± typ.	1 %
Load step setting time 10 to 90%, typ.	1 ms
Load step setting time 90 to 10%, typ.	1 ms

Protection and monitoring	
Output overvoltage protection	Yes, according to EN 60950-1
Current limitation, typ.	1.7 A
Property of the output Short-circuit proof	Yes
Short-circuit protection	Constant current characteristic
Enduring short circuit current RMS value	
• maximum	2.4 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 II (without protective conductor)
CE mark	Yes
Degree of protection (EN 60529)	IP20

EMC	
Emitted interference	EN 55022 Class B
Supply harmonics limitation	not applicable
Noise immunity	EN 61000-6-2

Operating data	
Ambient temperature	
• during operation	-40 ... +70 °C

— Note	with natural convection
• during transport	-40 ... +85 °C
• during storage	-40 ... +85 °C
Ambient condition relating to ambient temperature - air pressure - installation altitude	Tmin ... Tmax at 1140 hPa ... 795 hPa (-1000 m ... +2000 m); Tmin ... (Tmax - 10K) at 795 hPa ... 658 hPa (+2000 m ... +3500 m); Tmin ... (Tmax - 20K) at 658 hPa ... 540 hPa (+3500 m ... +5000 m)
Relative humidity with condensation maximum	100 %; Relative humidity, incl. condensation/frost permitted (no commissioning under condensation conditions)
Resistance to biologically active substances conformity acc. to EN 60721-3-3	Yes; Conformity with EN 60721-3-3, Class 3B2 mold, fungus and dry rot spores (with the excepion of fauna). The supplied connector covers must remain on the unused interfaces during operation!
Resistance to chemically active substances conformity acc. to EN 60721-3-3	Yes; Conformity with EN 60721-3-3, Class 3C4 incl. salt spray according to EN 60068-2-52 (degree of severity 3). The supplied connector covers must remain on the unused interfaces during operation!
Resistance to mechanically active substances conformity acc. to EN 60721-3-3	Yes; Conformity with EN 60721-3-3, Class 3S4 incl. Sand, dust. The supplied connector covers must remain on the unused interfaces during operation!

Mechanics	
Connection technology	screw-type terminals
Connections	
• Supply input	L, N: 1 screw terminal each for 0.5 ... 2.5 mm2 single-core/finely stranded
• Output	+, -: 2 screw terminals each for 0.5 ... 2.5 mm²
• Auxiliary	-
Width of the enclosure	54 mm
Height of the enclosure	90 mm
Depth of the enclosure	55 mm
Required spacing	
• top	20 mm
• bottom	20 mm
• left	0 mm
• right	0 mm
Weight, approx.	0.17 kg
Product feature of the enclosure housing for side-by-side mounting	Yes
Installation	Snaps onto DIN rail EN 60715 35x7.5/15
Other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)