SIEMENS

Data sheet 6AG1337-8SB00-7AY0

SIPLUS PS PSU8200 40A
SIPLUS PS PSU8200 40A -40 °C...+70°C with conformal coating based on 6EP3337-8SB00-0AY0 . Stabilized power supply Input: 120/230 C AC Output: 24 V DC/40 A

Figure similar

Input	
Input	1-phase and 2-phase AC
• Note	Automatic selection; startup starting from Ue ≥ 90/180 V
Supply voltage	
• 1 at AC Rated value	120 V
• 2 at AC Rated value	230 V
Input voltage	
• 1 at AC	85 ... 132 V
• 2 at AC	170 ... 264 V
Wide-range input	No
Mains buffering	at Vin = 230 V
Mains buffering at Iout rated, min.	25 ms; at Vin = 230 V
Rated line frequency 1	50 Hz
Rated line frequency 2	60 Hz
Rated line range	45 ... 65 Hz
Input current	
• at rated input voltage 120 V	15 A

• at rated input voltage 230 V	9 A
Switch-on current limiting (+25 °C), max.	50 A
I²t, max.	8 A²·s
Built-in incoming fuse	Yes
Protection in the mains power input (IEC 898)	Recommended miniature circuit breaker at 1-phase operation: 16 A characteristic C; required at 2-phase operation: circuit breaker 2-pole connected or circuit breaker 3RV2421-4BA10 (120 V) or 3RV2411-1JA10 (230 V)

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.	0.1 %
Residual ripple peak-peak, max.	100 mV
Residual ripple peak-peak, typ.	50 mV
Spikes peak-peak, max. (bandwidth: 20 MHz)	240 mV
Spikes peak-peak, typ. (bandwidth: 20 MHz)	220 mV
Adjustment range	24 ... 28 V
Product function Output voltage adjustable	Yes
Output voltage setting	via potentiometer; max. 960 W
Status display	Green LED for 24 V OK; LED yellow for overload; LED red for short-circuit or latching shutdown
Signaling	Relay contact (NO contact, rating 60 V DC/ 0.3 A) for "24 V OK"
On/off behavior	Overshoot of Vout approx. 3 %
Startup delay, max.	1.5 s
Voltage rise, typ.	30 ms
Rated current value Iout rated	40 A
Current range	0 ... 40 A
• Note	+60 ... +70 °C: Derating 3%/K
Supplied active power typical	960 W
Short-term overload current	
• on short-circuiting during the start-up typical	120 A
• at short-circuit during operation typical	120 A
Duration of overloading capability for excess current	
• on short-circuiting during the start-up	25 ms
• at short-circuit during operation	25 ms
Constant overload current	
• on short-circuiting during the start-up typical	60 A
Parallel switching for enhanced performance	Yes; switchable characteristic
Numbers of parallel switchable units for enhanced performance	2

Efficiency

Efficiency at Vout rated, Iout rated, approx.	92 %
Power loss at Vout rated, Iout rated, approx.	82 W
Power loss [W] during no-load operation maximum	6.8 W

Closed-loop control	
Dynamic mains compensation (Vin rated ±15 %), max.	1 %
Dynamic load smoothing (Iout: 50/100/50 %), Uout ± typ.	1.9 %
Load step setting time 50 to 100%, typ.	2 ms
Load step setting time 100 to 50%, typ.	2 ms
Dynamic load smoothing (Iout: 10/90/10 %), Uout ± typ.	3.8 %
Load step setting time 10 to 90%, typ.	1 ms
Load step setting time 90 to 10%, typ.	1 ms
Setting time maximum	1 ms

Protection and monitoring	
Output overvoltage protection	< 32 V
Current limitation, typ.	41 A
Property of the output Short-circuit proof	Yes
Short-circuit protection	Alternatively, constant current characteristic approx. 41 A or latching shutdown
Enduring short circuit current RMS value	
• typical	41 A
Overcurrent overload capability in normal operation	250% Iout rated up to 25 ms, 150% Iout rated up to 5 s/min
Overload/short-circuit indicator	LED yellow for "overload", LED red for "latching shutdown" or "short-circuit"

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	0.1 mA
• typical	0.1 mA
Degree of protection (EN 60529)	IP20

Approvals	
CE mark	Yes

EMC	
Emitted interference	EN 55022 Class B
Supply harmonics limitation	-
Noise immunity	EN 61000-6-2

environmental conditions

Ambient temperature in horizontal mounting position during operation	-40 ... +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, N, PE: 1 screw terminal each for 0.2 ... 4 mm² single-core/finely stranded
• Output	+, -: 2 screw terminals each for 0.5 ... 10 mm²
• Auxiliary	13, 14 (alarm signal): 1 screw terminal each for 0.14 ... 1.5 mm²
Width of the enclosure	145 mm
Height of the enclosure	145 mm
Depth of the enclosure	150 mm
Required spacing	
• top	40 mm
• bottom	40 mm

• left	0 mm
• right	0 mm
Weight, approx.	3.1 kg
Product feature of the enclosure housing for side-by-side mounting	Yes
Installation	Snaps onto DIN rail EN 60715 35x15
Electrical accessories	Buffer module, redundancy module
Mechanical accessories	Device identification label 20 mm × 7 mm, TI-grey 3RT2900-1SB20
MTBF at 40 °C	838 156 h
Other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)