SIEMENS

Data sheet 6EP1321-1LD00

SITOP PSU100D/1AC/12VDC/3A
PSU100D 12 V/3 A Stabilized power supply input: 100-240 V AC
output: 12 V DC/3 A

Input	
Input	1-phase AC
Rated voltage value Vin rated	100 ... 240 V
Voltage range AC	85 ... 264 V
Wide-range input	Yes
Mains buffering	at Vin = 115/230 V
Mains buffering at Iout rated, min.	15 ms; at Vin = 115/230 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 100 V	0.75 A
• at rated input voltage 240 V	0.5 A
Switch-on current limiting (+25 °C), max.	60 A
I^2t, max.	1.2 $A^2 \cdot s$
Built-in incoming fuse	internal
Protection in the mains power input (IEC 898)	Recommended miniature circuit breaker: from 10 A characteristic C or from 16 A characteristic B

Output

Output	Controlled, isolated DC voltage
Rated voltage Vout DC	12 V
Total tolerance, static ±	2 %
Static mains compensation, approx.	0.5 %
Static load balancing, approx.	1 %
Residual ripple peak-peak, max.	100 mV
Spikes peak-peak, max. (bandwidth: 20 MHz)	100 mV
Adjustment range	11 ... 14 V
product function output voltage adjustable	Yes
Output voltage setting	via potentiometer
Status display	Green LED for 12 V OK
On/off behavior	Overshoot of Vout < 2 %
Startup delay, max.	2.5 s
voltage increase time of the output voltage maximum	30 ms
Rated current value Iout rated	3 A
Current range	0 ... 3 A
• Note	+50 ... +70 °C: Derating 2.5%/K
supplied active power typical	36 W
Parallel switching for enhanced performance	Yes
Numbers of parallel switchable units for enhanced performance	2

Efficiency	
Efficiency at Vout rated, Iout rated, approx.	84 %
Power loss at Vout rated, Iout rated, approx.	6.5 W

Closed-loop control	
Dynamic mains compensation (Vin rated ±15 %), max.	0.5 %
Dynamic load smoothing (Iout: 50/100/50 %), Uout ± typ.	5 %

Protection and monitoring	
Output overvoltage protection	< 17.6 V
Current limitation, typ.	3.6 A
property of the output short-circuit proof	Yes
Short-circuit protection	Electronic shutdown, automatic restart
enduring short circuit current RMS value	
• typical	6 A
Overload/short-circuit indicator	-

Safety	
Primary/secondary isolation	Yes
galvanic isolation	Safety extra low output voltage Vout according to EN 60950-1
Protection class	Class I
leakage current	

• maximum	3.5 mA
• typical	1 mA
Degree of protection (EN 60529)	IP20

Approvals	
CE mark	Yes
UL/cUL (CSA) approval	cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cURus (UL 60950-1, CSA C22.2 No. 60950-1), File E151273
Explosion protection	-
certificate of suitability NEC Class 2	No
FM approval	-
CB approval	Yes
Marine approval	-

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

environmental conditions	
ambient temperature	
• during operation	-10 ... +70 °C
— Note	with natural convection
• during transport	-40 ... +85 °C
• during storage	-40 ... +85 °C

Mechanics	
Connection technology	screw-type terminals
Connections	
• Supply input	L, N, PE: 1 screw terminal each for 0.3 ... 1.3 mm² single-core/finely stranded
• Output	+, -: 1 screw terminal each for 0.3 ... 1.3 mm²
• Auxiliary	-
width of the enclosure	97 mm
height of the enclosure	98 mm
depth of the enclosure	38 mm
required spacing	
• top	20 mm
• bottom	0 mm
• left	20 mm
• right	20 mm
Weight, approx.	0.37 kg
Installation	Wall mounting
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)