SIEMENS

Data sheet 6EP1336-1LB00



SITOP PSU100L/1AC/24VDC/20A

SITOP PSU100L 24 V/20 A Stabilized power supply input: 100-240 V AC output: 24 V DC/20 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		
supply voltage at DC	100 240 V		
input voltage at DC	88 370 V		
wide range input	Yes		
buffering time for rated value of the output current in the event of power failure minimum	20 ms		
operating condition of the mains buffering	at Vin = 93/187 V		
line frequency	50/60 Hz		
line frequency	47 63 Hz		
input current			
 at rated input voltage 120 V 	5.55 A		
at rated input voltage 230 V	2.35 A		
current limitation of inrush current at 25 °C maximum	45 A		
duration of inrush current limiting at 25 °C			
• typical	15 ms		
I2t value maximum	3.3 A²·s		
fuse protection type	T 10 A/250 V (not accessible)		
fuse protection type in the feeder	Recommended miniature circuit breaker: from 10 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		
output voltage adjustable	Yes; via potentiometer		
adjustable output voltage	22.8 26.4 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	1 %		
residual ripple			
• maximum	150 mV		
• typical	50 mV		
voltage peak			
• maximum	240 mV		

• typical	100 mV		
display version for normal operation	Green LED for 24 V OK		
behavior of the output voltage when switching on	No overshoot of Vout (soft start)		
response delay maximum	1.5 s		
voltage increase time of the output voltage			
• typical	20 ms		
output current			
rated value	20 A		
rated range	0 20 A; +45 +70 °C: Derating 2.5%/K		
supplied active power typical	480 W		
bridging of equipment	Yes		
number of parallel-switched equipment resources for increasing	2		
the power			
efficiency			
efficiency in percent	92 %		
power loss [W]			
 at rated output voltage for rated value of the output current typical 	45 W		
closed-loop control			
relative control precision of the output voltage with rapid	0.5 %		
fluctuation of the input voltage by +/- 15% typical			
relative control precision of the output voltage at load step of resistive load 10/90/10 % typical	3 %		
setting time			
load step 10 to 90% typical	0.7 ms		
load step 90 to 10% typical	6 ms		
protection and monitoring			
design of the overvoltage protection	< 33 V		
property of the output short-circuit proof	Yes		
design of short-circuit protection	Constant current characteristic		
• typical	24 A		
enduring short circuit current RMS value			
enduring short circuit current RMS value • typical	24 A		
	24 A		
• typical	24 A Yes		
• typical safety			
typical safety galvanic isolation between input and output	Yes		
typical safety galvanic isolation between input and output galvanic isolation	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178		
typical safety galvanic isolation between input and output galvanic isolation operating resource protection class	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178		
• typical safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class I		
typical safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current maximum	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class I 3.5 mA		
typical safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current maximum typical	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class I 3.5 mA 0.8 mA		
typical safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current maximum typical protection class IP	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class I 3.5 mA 0.8 mA		
typical safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current maximum typical protection class IP EMC	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class I 3.5 mA 0.8 mA		
typical safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current maximum typical protection class IP EMC standard	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class I 3.5 mA 0.8 mA IP20		
typical safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class I 3.5 mA 0.8 mA IP20 EN 55022 Class B		
typical safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current maximum typical protection class IP EMC standard for emitted interference for mains harmonics limitation	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class I 3.5 mA 0.8 mA IP20 EN 55022 Class B EN 61000-3-2		
typical safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current maximum typical protection class IP EMC standard for emitted interference for mains harmonics limitation for interference immunity	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class I 3.5 mA 0.8 mA IP20 EN 55022 Class B EN 61000-3-2		
typical safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class I 3.5 mA 0.8 mA IP20 EN 55022 Class B EN 61000-3-2		
typical safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class I 3.5 mA 0.8 mA IP20 EN 55022 Class B EN 61000-3-2 EN 61000-6-2		
typical safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current • maximum • typical protection class IP EMC standard • for emitted interference • for mains harmonics limitation • for interference immunity standards, specifications, approvals certificate of suitability • CE marking	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class I 3.5 mA 0.8 mA IP20 EN 55022 Class B EN 61000-3-2 EN 61000-6-2 Yes		
typical safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current maximum typical protection class IP EMC standard for emitted interference for mains harmonics limitation for interference immunity standards, specifications, approvals certificate of suitability CE marking UL approval	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class I 3.5 mA 0.8 mA IP20 EN 55022 Class B EN 61000-3-2 EN 61000-6-2 Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259		
typical safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class I 3.5 mA 0.8 mA IP20 EN 55022 Class B EN 61000-3-2 EN 61000-6-2 Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259 Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259		
typical safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class I 3.5 mA 0.8 mA IP20 EN 55022 Class B EN 61000-3-2 EN 61000-6-2 Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259 Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259 Yes		
typical safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class I 3.5 mA 0.8 mA IP20 EN 55022 Class B EN 61000-3-2 EN 61000-6-2 Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259 Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259 Yes		
typical safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class I 3.5 mA 0.8 mA IP20 EN 55022 Class B EN 61000-3-2 EN 61000-6-2 Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259 Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259 Yes No		
• typical safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current • maximum • typical protection class IP EMC standard • for emitted interference • for mains harmonics limitation • for interference immunity standards, specifications, approvals certificate of suitability • CE marking • UL approval • CSA approval • EAC approval • NEC Class 2 type of certification • BIS • CB-certificate	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class I 3.5 mA 0.8 mA IP20 EN 55022 Class B EN 61000-3-2 EN 61000-6-2 Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259 Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259 Yes No Yes; R-41184349		
• typical safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current • maximum • typical protection class IP EMC standard • for emitted interference • for mains harmonics limitation • for interference immunity standards, specifications, approvals certificate of suitability • CE marking • UL approval • CSA approval • CSA approval • EAC approval • NEC Class 2 type of certification • BIS • CB-certificate standards, specifications, approvals hazardous environments	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class I 3.5 mA 0.8 mA IP20 EN 55022 Class B EN 61000-3-2 EN 61000-6-2 Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259 Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259 Yes No Yes; R-41184349		
typical safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current • maximum • typical protection class IP EMC standard • for emitted interference • for mains harmonics limitation • for interference immunity standards, specifications, approvals certificate of suitability • CE marking • UL approval • CSA approval • EAC approval • NEC Class 2 type of certification • BIS • CB-certificate standards, specifications, approvals hazardous environments certificate of suitability	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class I 3.5 mA 0.8 mA IP20 EN 55022 Class B EN 61000-3-2 EN 61000-6-2 Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259 Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259 Yes No Yes; R-41184349 Yes		
typical safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current • maximum • typical protection class IP EMC standard • for emitted interference • for mains harmonics limitation • for interference immunity standards, specifications, approvals certificate of suitability • CE marking • UL approval • CSA approval • RAC approval • NEC Class 2 type of certification • BIS • CB-certificate standards, specifications, approvals hazardous environments certificate of suitability • IECEx	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class I 3.5 mA 0.8 mA IP20 EN 55022 Class B EN 61000-3-2 EN 61000-6-2 Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259 Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259 Yes No Yes; R-41184349 Yes		
typical safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current • maximum • typical protection class IP EMC standard • for emitted interference • for mains harmonics limitation • for interference immunity standards, specifications, approvals certificate of suitability • CE marking • UL approval • CSA approval • EAC approval • NEC Class 2 type of certification • BIS • CB-certificate standards, specifications, approvals hazardous environments certificate of suitability	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class I 3.5 mA 0.8 mA IP20 EN 55022 Class B EN 61000-3-2 EN 61000-6-2 Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259 Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259 Yes No Yes; R-41184349 Yes		

• cCSAus, Class 1, Division 2	No		
FM registration	No		
standards, specifications, approvals marine classification			
shipbuilding approval	No		
Marine classification association	140		
American Bureau of Shipping Europe Ltd. (ABS)	No		
French marine classification society (BV)			
Det Norske Veritas (DNV)	No No		
Lloyds Register of Shipping (LRS)	No		
ambient conditions	NO .		
ambient temperature	25 170: with natural convection		
during operation	-25 +70; with natural convection		
during transport	-40 +85		
during storage	-40 +85		
environmental category according to IEC 60721	Climate class 3K3, 5 95% no condensation		
connection method			
type of electrical connection	screw terminal		
• at input	L, N, PE: 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 mm ²		
for auxiliary contacts	•		
mechanical data			
width × height × depth of the enclosure	110 × 125 × 125 mm		
installation width × mounting height	110 mm × 225 mm		
required spacing			
• top	50 mm		
• bottom	50 mm		
• left	0 mm		
right	0 mm		
fastening method	Snaps onto DIN rail EN 60715 35x7.5/15		
DIN-rail mounting	Yes		
S7 rail mounting	No		
wall mounting	No		
housing can be lined up	Yes		
net weight	1.8 kg		
further information internet links			
internet link			
to website: Industry Mall	https://mall.industry.siemens.com		
 to web page: selection aid TIA Selection Tool 	https://www.siemens.com/tstcloud		
• to web page: power supplies	https://siemens.com/sitop		
• to website: CAx-Download-Manager	https://siemens.com/cax		
to website: Industry Online Support	https://support.industry.siemens.com		
additional information			
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)		
security information			
security information	Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit www.siemens.com/cybersecurity-industry. Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under https://www.siemens.com/cert. (V4.7)		

Classifications					
		Version	Classification		
	eClass	14	27-04-07-01		
	eClass	12	27-04-07-01		
	eClass	9.1	27-04-07-01		
	eClass	9	27-04-07-01		
	eClass	8	27-04-90-02		
	eClass	7.1	27-04-90-02		
	eClass	6	27-04-90-02		
	ETIM	9	EC002540		
	ETIM	8	EC002540		
	ETIM	7	EC002540		
	IDEA	4	4130		
	UNSPSC	15	39-12-10-04		

Approvals Certificates

General Product Approval

Manufacturer Declaration Declaration of Conformity



last modified: 11/25/2024 🖸