## **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

nput	
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
supply voltage	
• at DC	100 240 V
input voltage	
• 1 at AC	85 264 V
• at DC	88 370 V
design of input wide range input	Yes
operating condition of the mains buffering	at Vin = 93/187 V
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	
• 1 rated value	50 Hz
2 rated value	60 Hz
line frequency	47 63 Hz
input current	
<ul> <li>at rated input voltage 120 V</li> </ul>	5.55 A
<ul> <li>at rated input voltage 230 V</li> </ul>	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 A <sup>2</sup> ·s
fuse protection type	T 10 A/250 V (not accessible)
• 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
relative overall tolerance of the voltage	3 %
relative control precision of the output voltage	
<ul> <li>on slow fluctuation of input voltage</li> </ul>	0.1 %
<ul> <li>on slow fluctuation of ohm loading</li> </ul>	1 %
residual ripple	
• maximum	150 mV
• typical	50 mV

voltage peak	
• maximum	240 mV
• typical	100 mV
adjustable output voltage	22.8 26.4 V
product function output voltage adjustable	Yes
type of output voltage setting	via potentiometer
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
product feature	V
bridging of equipment	Yes
number of parallel-switched equipment resources for increasing the power	2
Efficiency	
efficiency in percent	92 %
power loss [W]	
at rated output voltage for rated value of the output	45 W
current typical	
Closed-loop control	
relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical	0.5 %
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
<ul> <li>load step 90 to 10% typical</li> </ul>	6 ms
● load step 90 to 10% typical  Protection and monitoring	6 ms
	6 ms < 33 V
Protection and monitoring	
Protection and monitoring design of the overvoltage protection	< 33 V
Protection and monitoring  design of the overvoltage protection  • typical	< 33 V 24 A
Protection and monitoring  design of the overvoltage protection  • typical  property of the output short-circuit proof	< 33 V 24 A Yes
Protection and monitoring  design of the overvoltage protection  • typical  property of the output short-circuit proof  design of short-circuit protection	< 33 V 24 A Yes
Protection and monitoring  design of the overvoltage protection  • typical  property of the output short-circuit proof design of short-circuit protection enduring short circuit current RMS value	< 33 V 24 A Yes Constant current characteristic
Protection and monitoring  design of the overvoltage protection  • typical  property of the output short-circuit proof design of short-circuit protection enduring short circuit current RMS value  • typical	< 33 V 24 A Yes Constant current characteristic
Protection and monitoring  design of the overvoltage protection  • typical  property of the output short-circuit proof  design of short-circuit protection  enduring short circuit current RMS value  • typical  display version for overload and short circuit	< 33 V 24 A Yes Constant current characteristic
Protection and monitoring  design of the overvoltage protection  • typical  property of the output short-circuit proof  design of short-circuit protection  enduring short circuit current RMS value  • typical  display version for overload and short circuit  Safety	< 33 V 24 A Yes Constant current characteristic 24 A
Protection and monitoring  design of the overvoltage protection  • typical  property of the output short-circuit proof  design of short-circuit protection  enduring short circuit current RMS value  • typical  display version for overload and short circuit  Safety  galvanic isolation between input and output	< 33 V 24 A Yes Constant current characteristic  24 A - Yes
Protection and monitoring  design of the overvoltage protection  • typical  property of the output short-circuit proof  design of short-circuit protection  enduring short circuit current RMS value  • typical  display version for overload and short circuit  Safety  galvanic isolation between input and output  galvanic isolation	< 33 V 24 A Yes Constant current characteristic 24 A - Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178
Protection and monitoring  design of the overvoltage protection  • typical  property of the output short-circuit proof  design of short-circuit protection  enduring short circuit current RMS value  • typical  display version for overload and short circuit  Safety  galvanic isolation between input and output  galvanic resource protection class	< 33 V 24 A Yes Constant current characteristic 24 A - Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178
Protection and monitoring  design of the overvoltage protection  • typical  property of the output short-circuit proof  design of short-circuit protection  enduring short circuit current RMS value  • typical  display version for overload and short circuit  Safety  galvanic isolation between input and output  galvanic isolation  operating resource protection class  leakage current	< 33 V 24 A Yes Constant current characteristic 24 A - Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class I
Protection and monitoring  design of the overvoltage protection  • typical  property of the output short-circuit proof  design of short-circuit protection  enduring short circuit current RMS value  • typical  display version for overload and short circuit  Safety  galvanic isolation between input and output  galvanic isolation  operating resource protection class  leakage current  • maximum	< 33 V 24 A Yes Constant current characteristic 24 A - Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class I 3.5 mA
design of the overvoltage protection  • typical  property of the output short-circuit proof design of short-circuit protection enduring short circuit current RMS value • typical display version for overload and short circuit  Safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current • maximum • typical	< 33 V 24 A Yes Constant current characteristic 24 A - Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class I 3.5 mA 0.8 mA
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Protection and monitoring  design of the overvoltage protection  • typical  property of the output short-circuit proof  design of short-circuit protection  enduring short circuit current RMS value  • typical  display version for overload and short circuit  Safety  galvanic isolation between input and output  galvanic isolation  operating resource protection class  leakage current  • maximum  • typical  protection class IP  Approvals  certificate of suitability  • CE marking	< 33 V 24 A Yes Constant current characteristic 24 A - Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class I 3.5 mA 0.8 mA IP20 Yes
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Protection and monitoring  design of the overvoltage protection  • typical  property of the output short-circuit proof  design of short-circuit protection enduring short circuit current RMS value  • typical  display version for overload and short circuit  Safety  galvanic isolation between input and output galvanic isolation operating resource protection class leakage current  • maximum • typical  protection class IP  Approvals  certificate of suitability  • CE marking • UL approval • CSA approval • cCSAus, Class 1, Division 2 • ATEX  certificate of suitability  • IECEx • NEC Class 2	< 33 V 24 A Yes Constant current characteristic 24 A - Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class I 3.5 mA 0.8 mA IP20 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 No
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EAC approval	Yes
certificate of suitability shipbuilding approval	No
shipbuilding approval	-
Marine classification association	
American Bureau of Shipping Europe Ltd. (ABS)	No
<ul> <li>French marine classification society (BV)</li> </ul>	No
DNV GL	No
<ul> <li>Lloyds Register of Shipping (LRS)</li> </ul>	No
<ul> <li>Nippon Kaiji Kyokai (NK)</li> </ul>	No
EMC	
standard	
• for emitted interference	EN 55022 Class B
<ul> <li>for mains harmonics limitation</li> </ul>	EN 61000-3-2
• for interference immunity	EN 61000-6-2
environmental conditions	
ambient temperature	
<ul> <li>during operation</li> </ul>	-25 +70 °C; with natural convection
<ul> <li>during transport</li> </ul>	-40 +85 °C
during storage	-40 +85 °C
environmental category according to IEC 60721	Climate class 3K3, 5 95% no condensation
Mechanics	
type of electrical connection	screw-type terminals
• 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 mm²
for auxiliary contacts	-
width of the enclosure	110 mm
height of the enclosure	125 mm
depth of the enclosure	125 mm
required spacing	
• top	50 mm
• bottom	50 mm
• left	0 mm
• right	0 mm
net weight	1.8 kg
product feature of the enclosure housing can be lined up	Yes
fastening method	Snaps onto DIN rail EN 60715 35x7.5/15
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

