SIEMENS

Product data sheet 6EP1333-1LB00

SITOP PSU100L 24 V/5 A STABILIZED POWER SUPPLY INPUT: 120/230 V AC OUTPUT: 24 V/5 A DC

Technical specifications	
Product	SITOP PSU100L
Power supply, type	24 V/5 A
Input	
Input	1-phase AC
Supply voltage / 1 / at AC / nominal value	120 V
Supply voltage / 2 / at AC / nominal value	230 V
Voltage range	
• Note	Set by means of selector switch on the device
Input voltage / 1 / at AC	93 … 132 V
Input voltage / 2 / at AC	187 … 264 V
Wide-range input	No
Overvoltage resistance	2.3 × Vin rated, 1.3 ms
Mains buffering at Iout rated, min.	20 ms
Mains buffering	at Vin = 93/187 V
Rated line frequency	50 / 60 Hz
Rated line range	47 ... 63 Hz
Input current / at nominal level of the input voltage 120 V	2.1 A
Input current / at nominal level of the input voltage 230 V	1.15 A
Switch-on current limiting (+25 °C), max.	32 A
Duration of current limiting / at 25 °C / typical	3 ms

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I^2t, max.	0.8 $A^2 \cdot s$
Built-in incoming fuse	T 3,15 A/250 V (not accessible)
Protection in the mains power input (IEC 898)	Recommended miniature circuit breaker: from 6 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.	0.5 %
Residual ripple peak-peak, max.	150 mV
Residual ripple peak-peak, typ.	50 mV
Spikes peak-peak, max. (bandwidth: 20 MHz)	240 mV
Spikes peak-peak, typ. (bandwidth: 20 MHz)	150 mV
Adjustment range	22.8 … 26.4 V
Product feature / output voltage adjustable	Yes
Output voltage setting	via potentiometer
Status display	Green LED for 24 V OK
On/off behavior	Overshoot of Vout approx. 4 %
Startup delay, max.	1.5 s
Voltage rise, typ.	130 ms
Rated current value Iout rated	5 A
Current range	0 … 5 A
• Note	5 A up to +45 °C, 3.5 A up to +60 °C
delivered active power / typ.	120 W
Parallel switching for enhanced performance	Yes
Numbers of parallel switchable units for enhanced performance	2
Efficiency	
Efficiency at Vout rated, Iout rated, approx.	86 %
Power loss at Vout rated, Iout rated, approx.	17 W
Closed-loop control	
Dynamic mains compensation (Vin rated ±15 %), max.	0.3 %
Dynamic load smoothing (Iout: 10/90/10 %), Uout ± typ.	2 %
Load step setting time 10 to 90%, typ.	0.4 ms
Load step setting time 90 to 10%, typ.	0.4 ms
Protection and monitoring	
Output overvoltage protection	< 33 V
Current limitation, typ.	5.25 A
Characteristic feature of the output / short-circuit protected	Yes
Short-circuit protection	Constant current characteristic

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Enduring short circuit current / Effective level / typical	8 A
Overload/short-circuit indicator	-
Safety	
Primary/secondary isolation	Yes
Potential separation	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178
Protection class	Class I
stray current / maximum	3.5 mA
stray current / typical	0.4 mA
CE mark	Yes
UL/CSA approval	Yes
UL/cUL (CSA) approval	cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259
Explosion protection	-
FM approval	-
Marine approval	-
Degree of protection (EN 60529)	IP20
EMC	
Emitted interference	EN 55022 Class A
Supply harmonics limitation	-
Noise immunity	EN 61000-6-2
Operating data	
Ambient temperature / in operation	0 … 60 °C
• Note	with natural convection
Ambient temparature / on transport	-40 … +85 °C
Ambient temparature / in storage	-40 … +85 °C
Humidity class according to EN 60721	Climate class 3K3, no condensation
Mechanics	
Connection technology	screw-type terminals
Connections / Supply input	L, N, PE: 1 screw terminal each for 0.5 ... 2.5 mm² single-core/finely stranded
Connections / Output	+, -: 2 screw terminals each for 0.5 ... 2.5 mm²
Connections / Auxiliary	-
Width / of the housing	50 mm
Height / of the housing	125 mm
Depth / of the housing	125 mm
Installation width	50 mm
Mounting height	225 mm
Weight, approx.	0.5 kg
Product feature / of the housing / housing for side-by-side mounting	Yes
Type of mounting / wall mounting	No

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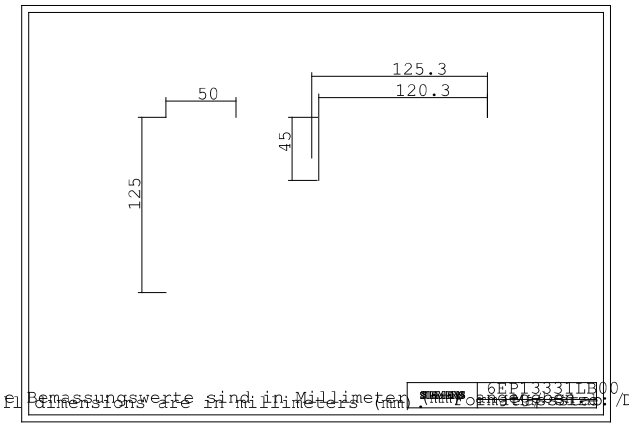
Type of fixing / cap rail mounting	Yes
Type of mounting / S7-300 rail mounting	No
Installation	Snaps onto DIN rail EN 60715 35x7.5/15
Other information  	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

letzte Änderung:	Jul 25, 2012

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