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	
Input	1-phase AC or DC
Rated voltage value Vin rated	100 ... 240 V
supply voltage	
● at DC	100 ... 240 V
input voltage	
● 1 at AC	85 ... 264 V
● at DC	88 ... 370 V
Wide-range input	Yes
Mains buffering	at Vin = 93/187 V
Mains buffering at Iout rated, min.	20 ms; at Vin = 93/187 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 120 V	5.55 A
● at rated input voltage 230 V	2.35 A
Switch-on current limiting (+25 °C), max.	45 A
duration of inrush current limiting at 25 °C	
● typical	15 ms
I^2t, max.	3.3 $A^2 \cdot s$
Built-in incoming fuse	T 10 A/250 V (not accessible)
Protection in the mains power input (IEC 898)	Recommended miniature circuit breaker: from 10 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.	1 %
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)	100 mV
Adjustment range	22.8 ... 26.4 V

product function output voltage adjustable	Yes
Output voltage setting	via potentiometer
Status display	Green LED for 24 V OK
On/off behavior	No overshoot of Vout (soft start)
Startup delay, max.	1.5 s
Voltage rise, typ.	20 ms
Rated current value Iout rated	20 A
Current range	0 ... 20 A
● Note	+45 ... +70 °C: Derating 2.5%/K
supplied active power typical	480 W
Parallel switching for enhanced performance	Yes
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.	45 W
Closed-loop control	
Dynamic mains compensation (Vin rated ±15 %), max.	0.5 %
Dynamic load smoothing (Iout: 10/90/10 %), Uout ± typ.	3 %
Load step setting time 10 to 90%, typ.	0.7 ms
Load step setting time 90 to 10%, typ.	6 ms
Protection and monitoring	
Output overvoltage protection	< 33 V
Current limitation, typ.	24 A
property of the output short-circuit proof	Yes
Short-circuit protection	Constant current characteristic
enduring short circuit current RMS value	
● typical	24 A
Overload/short-circuit indicator	-
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	3.5 mA
● typical	0.8 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
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	EN 61000-3-2
Noise immunity	EN 61000-6-2
environmental conditions	
ambient temperature	
● during operation	-25 ... +70 °C
— Note	with natural convection
● during transport	-40 ... +85 °C
● during storage	-40 ... +85 °C
Humidity class according to EN 60721	Climate class 3K3, 5 … 95% 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
● Output	+, -: 2 screw terminals each for 0.5 ... 2.5 mm²
● Auxiliary	-
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
Weight, approx.	1.8 kg
product feature of the enclosure housing can be lined up	Yes
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)