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Data sheet 6EP1331-5BA00

SITOP PSU100C/1ACDC/24VDC/0.6A

SITOP PSU100C 24 V/0.6 A
Stabilized power supply input:
100-230 V AC (DC 110-300 V)
output: DC 24 V/0,6 A

Input	
Input	1-phase AC or DC
Rated voltage value Vin rated	100 ... 230 V
Voltage range AC	85 ... 264 V
input voltage	
● at DC	110 ... 300 V
Wide-range input	Yes
Overvoltage resistance	2.3 × Vin rated, 1.3 ms
Mains buffering	at Vin = 230 V
Mains buffering at Iout rated, min.	20 ms; at Vin = 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	0.28 A
● at rated input voltage 230 V	0.18 A
Switch-on current limiting (+25 °C), max.	28 A
I^2t, max.	0.7 $A^2 \cdot s$
Built-in incoming fuse	internal
Protection in the mains power input (IEC 898)	Recommended miniature circuit breaker: from 16 A characteristic B or from 10 A characteristic C
Output	
Output	Controlled, isolated DC voltage
Rated voltage Vout DC	24 V
● output voltage at output 1 at DC rated value	24 V
Total tolerance, static ±	3 %
Static mains compensation, approx.	0.1 %
Static load balancing, approx.	0.2 %
Residual ripple peak-peak, max.	200 mV
Residual ripple peak-peak, typ.	40 mV
Spikes peak-peak, max. (bandwidth: 20 MHz)	300 mV
Spikes peak-peak, typ. (bandwidth: 20 MHz)	20 mV
product function output voltage adjustable	No
Output voltage setting	-
Status display	Green LED for output voltage OK
On/off behavior	Overshoot of Vout approx. 5 %
Startup delay, max.	1 s
Voltage rise, typ.	25 ms
Rated current value Iout rated	0.6 A
Current range	0 ... 0.6 A
supplied active power typical	14 W
short-term overload current	
● at short-circuit during operation typical	1 A
Parallel switching for enhanced performance	No
Efficiency	
Efficiency at Vout rated, Iout rated, approx.	82 %

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Power loss at Vout rated, Iout rated, approx.	2.6 W
power loss [W] during no-load operation maximum	0.75 W
Closed-loop control	
Dynamic mains compensation (Vin rated ±15 %), max.	0.1 %
Dynamic load smoothing (Iout: 10/90/10 %), Uout ± typ.	3 %
Load step setting time 10 to 90%, typ.	3 ms
Load step setting time 90 to 10%, typ.	3 ms
Protection and monitoring	
Output overvoltage protection	Yes, according to EN 60950-1
Current limitation, typ.	0.7 A
property of the output short-circuit proof	Yes
Short-circuit protection	Electronic shutdown, automatic restart
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	0.4 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-Recognized (UL 60950, CSA C22.2 No. 60950), File E151273, NEC class 2 (acc. to UL 1310)
Explosion protection	IECEx Ex nA IIC T4 Gc; ATEX (EX) II 3G Ex nA IIC T4; cCSAus (CSA C22.2 No. 213, ANSI/ISA-12.12.01) Class I, Div. 2, Group ABCD, T4
certificate of suitability NEC Class 2	Yes
FM approval	-
CB approval	Yes
certificate of suitability EAC approval	Yes
Marine approval	ABS, DNV GL
EMC	
Emitted interference	EN 55022 Class B
Supply harmonics limitation	not applicable
Noise immunity	EN 61000-6-2
environmental conditions	
ambient temperature	
● during operation	-20 ... +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: Removable screw terminal, each for 1 x 0.5 ... 2.5 mm²
● Output	+: 1 screw terminal for 0.5 ... 2.5 mm²; -: 2 screw terminals for 0.5 ... 2.5 mm²
● Auxiliary	-
width of the enclosure	22.5 mm
height of the enclosure	80 mm
depth of the enclosure	100 mm
required spacing	
● top	50 mm
● bottom	50 mm
● left	0 mm

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● right	0 mm
Weight, approx.	0.12 kg
product feature of the enclosure housing can be lined up	Yes
Installation	Snaps onto DIN rail EN 60715 35x7.5/15
electrical accessories	Removable spring-type terminal 6EP1971-5BA00
MTBF at 40 °C	3 910 833 h
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

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