



SITOP PSU100D/1AC/12VDC/3A

PSU100D 12 V/3 A Stabilized power supply input: 100-240 V AC output: 12 V DC/3 A

input	
type of the power supply network	1-phase AC
supply voltage at AC	
• minimum rated value	100 V
• maximum rated value	240 V
• initial value	90 V
• full-scale value	264 V
wide range input	Yes
overvoltage overload capability	1.25 × Vin rated, 500 ms
buffering time for rated value of the output current in the event of power failure minimum	16 ms
operating condition of the mains buffering	at Vin = 115/230 V
line frequency	50/60 Hz
line frequency	47 ... 63 Hz
input current	
• at rated input voltage 100 V	0.85 A
• at rated input voltage 240 V	0.5 A
current limitation of inrush current at 25 °C maximum	45 A
I2t value maximum	1.5 A²·s
fuse protection type	T3.15AL250V (internal)
fuse protection type in the feeder	Recommended miniature circuit breaker: from 16 A characteristic B, from 20 A characteristic B (for North America)
output	
voltage curve at output	Controlled, isolated DC voltage
output voltage at DC rated value	12 V
output voltage	
• at output 1 at DC rated value	12 V
output voltage adjustable	Yes; via potentiometer
adjustable output voltage	10.8 ... 13.2 V
relative overall tolerance of the voltage	1 %
relative control precision of the output voltage	
• on slow fluctuation of input voltage	0.5 %
• on slow fluctuation of ohm loading	0.5 %
voltage peak	
• maximum	120 mV
display version for normal operation	Green LED for 12 V OK
behavior of the output voltage when switching on	Overshoot of Vout < 10 %
response delay maximum	1 s
voltage increase time of the output voltage	
• maximum	30 ms

output current	
• rated value	3 A
• rated range	0 ... 3 A; +50 ... +70 °C: Derating 2.0%/K
supplied active power typical	35 W
bridging of equipment	No
efficiency	
efficiency in percent	86 %
power loss [W]	
• at rated output voltage for rated value of the output current typical	5.7 W
closed-loop control	
relative control precision of the output voltage load step of resistive load 50/100/50 % typical	10 %
setting time	
• load step 50 to 100% typical	4 ms
• load step 100 to 50% typical	4 ms
protection and monitoring	
design of the overvoltage protection	< 17.4 V
property of the output short-circuit proof	Yes
design of short-circuit protection	Electronic shutdown, automatic restart
response value current limitation	3.3 ... 5.25 A
enduring short circuit current RMS value	
• typical	4 A
safety	
galvanic isolation between input and output	Yes
galvanic isolation	Safety extra low output voltage Vout according to EN 62368-1
operating resource protection class	Class I
leakage current	
• maximum	0.5 mA
EMC	
standard	
• for emitted interference	EN 55032 Class B
• for mains harmonics limitation	IEC 61000-3-2
• for interference immunity	EN 55035
standards, specifications, approvals	
certificate of suitability	
• CE marking	Yes
• UL approval	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cURus (UL 62368-1, CSA C22.2 NO 62368-1-14), File E151273
• CSA approval	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cURus (UL 62368-1, CSA C22.2 NO 62368-1-14), File E151273
• UKCA marking	Yes
• EAC approval	No
• NEC Class 2	No
type of certification	
• BIS	Yes; R-611003204
• CB-certificate	Yes
MTBF at 25 °C	700 000 h; according to SR-332, 100% full load (12 V, 3 A), input voltage: 115 V / 230 V AC
standards, specifications, approvals hazardous environments	
certificate of suitability	
• IECEx	No
• ATEX	No
• ULhazloc approval	No
• cCSAus, Class 1, Division 2	No
• FM registration	No
standards, specifications, approvals marine classification	
shipbuilding approval	No
Marine classification association	
• American Bureau of Shipping Europe Ltd. (ABS)	No
• French marine classification society (BV)	No

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	Environment
--------------------------	-------------

[Manufacturer Declaration](#)



last modified:

11/25/2024