



SITOP PSU4200/1AC/24VDC/10A

SITOP PSU4200 1AC 24 V/10 A stabilized power supply PSU4200 input: 120/240 V AC output: 24 V DC/ 10 A

Input	
type of the power supply network	1-phase AC
supply voltage at AC	
• initial value	Automatic range selection
supply voltage	
• 1 at AC	100 ... 120 V
• 2 at AC	200 ... 240 V
input voltage	
• 1 at AC	85 ... 132 V
• 2 at AC	187 ... 264 V
design of input wide range input	No
operating condition of the mains buffering	at $V_{in} = 120/240$ V
buffering time for rated value of the output current in the event of power failure minimum	15 ms
operating condition of the mains buffering	at $V_{in} = 120/240$ V
line frequency	
• 1 rated value	50 Hz
• 2 rated value	60 Hz
line frequency	47 ... 63 Hz
input current	
• at rated input voltage 100 V	5 A
• at rated input voltage 120 V	4.3 A
• at rated input voltage 230 V	2.5 A
• at rated input voltage 240 V	2.4 A
current limitation of inrush current at 25 °C maximum	60 A
duration of inrush current limiting at 25 °C	
• typical	20 ms
I ² t value maximum	3.2 A ² ·s
fuse protection type	6.3 A
• in the feeder	Recommended miniature circuit breaker: from 6 A characteristic C to from 16 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	
• on slow fluctuation of input voltage	0.2 %
• on slow fluctuation of ohm loading	0.3 %
residual ripple	

<ul style="list-style-type: none"> • maximum 	150 mV
<ul style="list-style-type: none"> • typical 	25 mV
voltage peak	
<ul style="list-style-type: none"> • maximum 	240 mV
<ul style="list-style-type: none"> • typical 	20 mV
adjustable output voltage	24 ... 28 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
type of signal at output	Signal contact (signal load capacity: 5 mA) for DC 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	
<ul style="list-style-type: none"> • typical 	130 ms
<ul style="list-style-type: none"> • maximum 	500 ms
output current	
<ul style="list-style-type: none"> • rated value 	10 A
<ul style="list-style-type: none"> • rated range 	0 ... 10 A; +60 ... +70 °C: Derating 4%/K
supplied active power typical	240 W
product feature	
<ul style="list-style-type: none"> • bridging of equipment 	Yes
number of parallel-switched equipment resources for increasing the power	2
Efficiency	
efficiency in percent	90 %
power loss [W]	
<ul style="list-style-type: none"> • at rated output voltage for rated value of the output current typical 	27 W
<ul style="list-style-type: none"> • during no-load operation maximum 	3 W
Closed-loop control	
relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical	0.2 %
relative control precision of the output voltage load step of resistive load 50/100/50 % typical	2 %
relative control precision of the output voltage at load step of resistive load 10/90/10 % typical	3 %
setting time	
<ul style="list-style-type: none"> • load step 10 to 90% typical 	1 ms
<ul style="list-style-type: none"> • load step 90 to 10% typical 	1 ms
Protection and monitoring	
design of the overvoltage protection	< 32 V
<ul style="list-style-type: none"> • typical 	12.5 A
property of the output short-circuit proof	Yes
design of short-circuit protection	Constant current characteristic
enduring short circuit current RMS value	
<ul style="list-style-type: none"> • typical 	12.5 A
Safety	
galvanic isolation between input and output	Yes
galvanic isolation	ES1 output voltage Vout according to EN 62368-1 (Safety extra low output voltage Vout according to EN 60950-1)
operating resource protection class	Class I
leakage current	
<ul style="list-style-type: none"> • maximum 	1.3 mA
<ul style="list-style-type: none"> • typical 	0.7 mA
protection class IP	IP20
Approvals	
certificate of suitability	
<ul style="list-style-type: none"> • CE marking 	Yes
<ul style="list-style-type: none"> • UL approval 	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cURus (UL 60950-1, CSA C22.2 No. 60950-1), File E151273
<ul style="list-style-type: none"> • CSA approval 	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cURus (UL 60950-1, CSA C22.2 No. 60950-1), File E151273
<ul style="list-style-type: none"> • cCSAus, Class 1, Division 2 	No

<ul style="list-style-type: none"> • ATEX 	No
certificate of suitability	
<ul style="list-style-type: none"> • IECEx • NEC Class 2 • ULhazloc approval • FM registration 	No No No No
type of certification CB-certificate	Yes
certificate of suitability	
<ul style="list-style-type: none"> • EAC approval • Regulatory Compliance Mark (RCM) • UKCA marking 	Yes Yes Yes
type of certification BIS	No
certificate of suitability shipbuilding approval	No
Marine classification association	
<ul style="list-style-type: none"> • American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (BV) • DNV GL • Lloyds Register of Shipping (LRS) • Nippon Kaiji Kyokai (NK) 	No No No No No
EMC	
standard	
<ul style="list-style-type: none"> • for emitted interference • for mains harmonics limitation • for interference immunity 	EN 55032 EN 61000-3-2 EN 61000-6-2
environmental conditions	
ambient temperature	
<ul style="list-style-type: none"> • during operation • during transport • during storage 	-25 ... +70 °C; with natural convection -40 ... +85 °C -40 ... +85 °C
environmental category according to IEC 60721	Climate class 3K3, 5 ... 95% no condensation
Mechanics	
type of electrical connection	push-in terminals
<ul style="list-style-type: none"> • at input • at output • for signaling contact 	L, N, PE: push-in for 0.5 ... 4 mm ² +, -: push-in for 0.5 ... 2.5 mm ² 13, 14: push-in for 0.2 ... 1.5 mm ²
width of the enclosure	70 mm
height of the enclosure	135 mm
depth of the enclosure	125 mm
required spacing	
<ul style="list-style-type: none"> • top • bottom • left • right 	45 mm 45 mm 0 mm 0 mm
net weight	0.65 kg
product feature of the enclosure housing can be lined up	Yes
fastening method	Snaps onto DIN rail EN 60715 35x7.5/15
MTBF at 40 °C	1 220 530 h
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

