



SITOP PSU4200/1AC/24VDC/20A

SITOP PSU4200 1AC 24 V/20 A stabilized power supply PSU4200 input: 120/240 V AC output: 24 V DC/20 A

input	
type of the power supply network	1-phase AC
supply voltage at AC	
• minimum rated value	120 V
• maximum rated value	240 V
• initial value	85 V
• full-scale value	264 V
wide range input	Yes
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 $V_{in} = 120/240 \text{ V}$
line frequency	50/60 Hz
line frequency	47 ... 63 Hz
input current	
• at rated input voltage 100 V	5.4 A
• at rated input voltage 120 V	4.5 A
• at rated input voltage 200 V	2.6 A
• at rated input voltage 230 V	2.4 A
• at rated input voltage 240 V	2.3 A
current limitation of inrush current at 25 °C maximum	20 A
duration of inrush current limiting at 25 °C	
• typical	40 ms
I ² t value maximum	3 A ² ·s
fuse protection type	6.3 A
fuse protection type in the feeder	Recommended miniature circuit breaker: from 10 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
output voltage adjustable	Yes; via potentiometer
adjustable output voltage	24 ... 28 V
relative overall tolerance of the voltage	3 %
relative control precision of the output voltage	
• on slow fluctuation of input voltage	0.1 %
• on slow fluctuation of ohm loading	1 %
residual ripple	
• maximum	150 mV
• typical	35 mV

voltage peak	
• maximum	240 mV
• typical	67 mV
display version for normal operation	Green LED for 24 V OK
type of signal at output	Signal contact (signal load capacity: 10 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	
• typical	33 ms
• maximum	500 ms
output current	
• rated value	20 A
• rated range	0 ... 20 A; +60 ... +70 °C: Derating 3%/K
supplied active power typical	480 W
bridging of equipment	Yes
number of parallel-switched equipment resources for increasing the power	2
efficiency	
efficiency in percent	93 %
power loss [W]	
• at rated output voltage for rated value of the output current typical	37 W
• 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	
• load step 10 to 90% typical	1 ms
• load step 90 to 10% typical	1 ms
protection and monitoring	
design of the overvoltage protection	< 32 V
property of the output short-circuit proof	Yes
design of short-circuit protection	Shutdown and periodic restart attempts
• typical	23.1 A
enduring short circuit current RMS value	
• typical	6 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	
• maximum	0.7 mA
• typical	0.5 mA
protection class IP	IP20
EMC	
standard	
• for emitted interference	EN 55032 Class A
• for mains harmonics limitation	EN 61000-3-2
• for interference immunity	EN 61000-6-2
standards, specifications, approvals	
certificate of suitability	
• CE marking	Yes
• UL approval	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (UL 62368-1, CSA C22.2 No. 62368-1-19)
• CSA approval	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (UL 62368-1, CSA C22.2 No. 62368-1-19)
• UKCA marking	Yes

<ul style="list-style-type: none"> • EAC approval • Regulatory Compliance Mark (RCM) • NEC Class 2 	Yes Yes No
type of certification	
<ul style="list-style-type: none"> • BIS • CB-certificate 	Yes; R-41282421 Yes
MTBF at 40 °C	1 065 000 h
standards, specifications, approvals hazardous environments	
certificate of suitability	
<ul style="list-style-type: none"> • IECEx • ATEX • ULhazloc approval • cCSAus, Class 1, Division 2 • FM registration 	No No No No No
standards, specifications, approvals marine classification	
shipbuilding approval	No
Marine classification association	
<ul style="list-style-type: none"> • American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (BV) • Det Norske Veritas (DNV) • Lloyds Register of Shipping (LRS) 	No No No No
standards, specifications, approvals Environmental Product Declaration	
Environmental Product Declaration	Yes
global warming potential [CO2 eq]	
<ul style="list-style-type: none"> • total • during manufacturing • during operation • after end of life 	1 078.9 kg 47.4 kg 1 029.9 kg 0.72 kg
ambient 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
connection method	
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 mm² +, -: push-in for 0.5 ... 6 mm² 13, 14: push-in for 0.2 ... 1.5 mm²
mechanical data	
width × height × depth of the enclosure	70 × 135 × 125 mm
installation width × mounting height	70 mm × 225 mm
required spacing	
<ul style="list-style-type: none"> • top • bottom • left • right 	45 mm 45 mm 0 mm 0 mm
fastening method	Snaps onto DIN rail EN 60715 35x7.5/15
<ul style="list-style-type: none"> • DIN-rail mounting • S7 rail mounting • wall mounting 	Yes No No
housing can be lined up	Yes
net weight	0.93 kg
further information internet links	
internet link	
<ul style="list-style-type: none"> • to website: Industry Mall • to web page: selection aid TIA Selection Tool • to web page: power supplies • to website: CAX-Download-Manager • to website: Industry Online Support 	https://mall.industry.siemens.com https://www.siemens.com/tstcloud https://siemens.com/sitop https://siemens.com/cax https://support.industry.siemens.com