

Siemens
EcoTech



SITOP PSU4200/3AC/24VDC/20A

SITOP PSU4200 3AC 24 V/20 A stabilized power supply PSU4200 input: 400/500 V AC output: 24 V DC/20 A



input	
type of the power supply network	3-phase AC
supply voltage at AC minimum rated value	400 ... 500 V
supply voltage at AC maximum rated value	
supply voltage at AC initial value	320 ... 550 V
supply voltage at AC full-scale value	
wide range input	Yes
buffering time for rated value of the output current in the event of power failure minimum	5 ms
operating condition of the mains buffering	at $V_{in} = 400/500$ V
line frequency	50/60 Hz
line frequency initial value	47 ... 63 Hz
line frequency full-scale value	
input current	
• at rated input voltage 400 V	1.4 A
• at rated input voltage 500 V	1.2 A
current limitation of inrush current at 25 °C maximum	36 A
duration of inrush current limiting at 25 °C	
• typical	20 ms
I ² t value maximum	0.9 A ² ·s
fuse protection type in the feeder	three-poled coupled circuit breaker from 6 A characteristic C to 16 A characteristic C or circuit breaker 3RV2011-1EA10 (setting 6 A) or 3RV2711-1ED10 (UL 489)
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 initial value	24 V
adjustable output voltage full-scale value	28 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	
• maximum	150 mV
• typical	25 mV

voltage peak	
• maximum	240 mV
• typical	10 mV
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	
• typical	230 ms
• maximum	500 ms
output current	
• rated value	20 A
• rated range	0 ... 20 A; +60 ... +70 °C: Derating 1%/K
supplied active power typical	480 W
bridging of equipment	Yes
number of parallel-switched equipment resources for increasing the power	2
efficiency in percent	91 %
power loss [W]	
• at rated output voltage for rated value of the output current typical	48 W
• during no-load operation maximum	3.5 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	0.5 %
relative control precision of the output voltage at load step of resistive load 10/90/10 % typical	1 %
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	Constant current characteristic
• response value current limitation typical	23.4 A
enduring short circuit current RMS value	
• typical	23.5 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	
• maximum	0.8 mA
• typical	0.4 mA
protection class IP	IP20
standard	
• for emitted interference	EN 55032
• 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; cURus (UL 60950-1, CSA C22.2 No. 60950-1), File E151273
• 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
• UKCA marking	Yes
• EAC approval	Yes
• Regulatory Compliance Mark (RCM)	Yes

• NEC Class 2	No
type of certification	
• BIS	No
• CB-certificate	Yes
MTBF at 40 °C	817 921 h
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
• Det Norske Veritas (DNV)	No
• Lloyds Register of Shipping (LRS)	No
standards, specifications, approvals Environmental Product Declaration	
Environmental Product Declaration	Yes
Global Warming Potential [CO2 eq]	
• total	1 054.8 kg
• during manufacturing	32.8 kg
• during operation	1 020.9 kg
• after end of life	0.5 kg
Siemens Eco Profile (SEP)	Siemens EcoTech
ambient conditions	
ambient temperature	
• during operation	-25 ... +70 °C; with natural convection
• during transport	-40 ... +85 °C
• during storage	-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
• at input	L1, L2, L3, PE: push-in for 0.5 ... 4 mm ²
• at output	+, -: push-in for 0.5 ... 6 mm ²
• for signaling contact	13, 14: push-in for 0.2 ... 1.5 mm ²
mechanical data	
width × height × depth of the enclosure	95 × 135 × 150 mm
installation width × mounting height	95 × 225 mm
required spacing	
• top	45 mm
• bottom	45 mm
• left	0 mm
• right	0 mm
fastening method	Snaps onto DIN rail EN 60715 35x7.5/15
• standard rail mounting	Yes
• S7 rail mounting	No
• wall mounting	No
housing can be lined up	Yes
net weight	1.66 kg
further information internet links	
internet link	
• to web page: selection aid TIA Selection Tool	https://siemens.com/tst
• to website: Industrial communication	http://www.siemens.com/simatic-net
• to website: CAx-Download-Manager	http://www.siemens.com/cax
additional information	
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

security information

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Classifications

	Version	Classification
eClass	12	27-04-07-01
eClass	9.1	27-04-07-01
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](#)



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