

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	
<ul style="list-style-type: none"> • minimum rated value • maximum rated value • initial value • full-scale value 	400 V 500 V 320 V 550 V
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 $V_{in} = 400/500\text{ V}$
line frequency	50/60 Hz
line frequency	47 ... 63 Hz
input current	
<ul style="list-style-type: none"> • at rated input voltage 400 V • at rated input voltage 500 V 	1.4 A 1.2 A
current limitation of inrush current at 25 °C maximum	36 A
duration of inrush current limiting at 25 °C	
<ul style="list-style-type: none"> • 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 3RV2011-1GA10 (setting 6 A) or 3RV2711-1GD10 (UL 489)
output	
voltage curve at output	Controlled, isolated DC voltage
output voltage at DC rated value	24 V
output voltage	
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • on slow fluctuation of input voltage • on slow fluctuation of ohm loading 	0.2 % 0.3 %
residual ripple	
<ul style="list-style-type: none"> • maximum • typical 	150 mV 25 mV
voltage peak	

<ul style="list-style-type: none"> • maximum 	240 mV
<ul style="list-style-type: none"> • 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	Overshoot of Vout approx. 1 %
response delay maximum	1.5 s
voltage increase time of the output voltage	
<ul style="list-style-type: none"> • typical 	230 ms
<ul style="list-style-type: none"> • maximum 	500 ms
output current	
<ul style="list-style-type: none"> • rated value 	20 A
<ul style="list-style-type: none"> • rated range 	0 ... 20 A; +55 ... +70 °C: Derating 2%/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	91 %
power loss [W]	
<ul style="list-style-type: none"> • at rated output voltage for rated value of the output current typical 	48 W
<ul style="list-style-type: none"> • 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	
<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
property of the output short-circuit proof	Yes
design of short-circuit protection	Constant current characteristic
<ul style="list-style-type: none"> • typical 	23.4 A
enduring short circuit current RMS value	
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • maximum 	0.8 mA
<ul style="list-style-type: none"> • typical 	0.4 mA
protection class IP	IP20
EMC	
standard	
<ul style="list-style-type: none"> • for emitted interference 	EN 55032 Class A
<ul style="list-style-type: none"> • for mains harmonics limitation 	EN 61000-3-2
<ul style="list-style-type: none"> • for interference immunity 	EN 61000-6-2
standards, specifications, 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; cCSAus (UL 62368-1, CSA C22.2 No. 62368-1-19)
<ul style="list-style-type: none"> • 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)
<ul style="list-style-type: none"> • UKCA marking 	Yes
<ul style="list-style-type: none"> • EAC approval 	Yes

<ul style="list-style-type: none"> Regulatory Compliance Mark (RCM) NEC Class 2 	<p>Yes</p> <p>No</p>
type of certification	
<ul style="list-style-type: none"> BIS CB-certificate 	<p>No</p> <p>Yes</p>
MTBF at 40 °C	815 000 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 	<p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p>
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) 	<p>No</p> <p>No</p> <p>No</p> <p>No</p>
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 	<p>1 054.8 kg</p> <p>32.8 kg</p> <p>1 020.9 kg</p> <p>0.5 kg</p>
Siemens Eco Profile (SEP)	Siemens EcoTech
ambient conditions	
ambient temperature	
<ul style="list-style-type: none"> during operation during transport during storage 	<p>-25 ... +70; with natural convection</p> <p>-40 ... +85</p> <p>-40 ... +85</p>
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 	<p>L1, L2, L3, PE: push-in for 0.5 ... 4 mm²</p> <p>+, -: push-in for 0.5 ... 6 mm²</p> <p>13, 14: push-in for 0.2 ... 1.5 mm²</p>
mechanical data	
width × height × depth of the enclosure	95 × 135 × 150 mm
installation width × mounting height	95 mm × 225 mm
required spacing	
<ul style="list-style-type: none"> top bottom left right 	<p>45 mm</p> <p>45 mm</p> <p>0 mm</p> <p>0 mm</p>
fastening method	Snaps onto DIN rail EN 60715 35x7.5/15
<ul style="list-style-type: none"> standard rail mounting S7 rail mounting wall mounting 	<p>Yes</p> <p>No</p> <p>No</p>
housing can be lined up	Yes
net weight	1.66 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 	<p>https://mall.industry.siemens.com</p> <p>https://www.siemens.com/tstcloud</p> <p>https://siemens.com/sitop</p> <p>https://siemens.com/cax</p> <p>https://support.industry.siemens.com</p>

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	14	27-04-07-01
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



[Manufacturer Declaration](#)



[BIS CRS](#)

Environment



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