

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

General information

Technical Product Detail Page

<https://i.siemens.com/1P6EP3436-3SB00-0AX0>

input

type of the power supply network	3-phase AC
supply voltage at AC	
• minimum rated value	400 V
• maximum rated value	500 V
• initial value	320 V
• full-scale value	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 $V_{in} = 400/500$ V
line frequency	50/60 Hz
line frequency	47 ... 63 Hz
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 3RV2011-1GA10 (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	
• 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	0.2 %
• 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	Overshoot of Vout approx. 1 %
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; +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]	
• 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
• typical	23.4 A
enduring short circuit current RMS value	
• typical	23.5 A
safety	
galvanic isolation between input and output	Yes
galvanic isolation	Output voltage: SELV, ES1 (IEC 62368-1), DVC As (IEC 61204-7)
operating resource protection class	Class I
leakage current	
• maximum	0.8 mA
• typical	0.4 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

• UKCA marking • EAC approval • Regulatory Compliance Mark (RCM) • NEC Class 2	Yes Yes Yes No
type of certification	
• BIS • CB-certificate	No Yes
MTBF at 40 °C	815 000 h
standards, specifications, approvals hazardous environments	
certificate of suitability	
• IECEx • ATEX • ULhazloc approval • FM registration	No No No No
standards, specifications, approvals marine classification	
shipbuilding approval	No
Marine classification association	
• 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]	
• total • during manufacturing • during operation • after end of life	1 054.8 kg 32.8 kg 1 020.9 kg 0.5 kg
Siemens Eco Profile (SEP)	Siemens EcoTech
ambient conditions	
ambient temperature	
• 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
• at input • at output • for signaling contact	L1, L2, L3, 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	95 × 135 × 150 mm
installation width × mounting height	95 mm × 225 mm
required spacing	
• top • bottom • left • right	45 mm 45 mm 0 mm 0 mm
fastening method	Snaps onto DIN rail EN 60715 35x7.5/15
• DIN-rail mounting • S7 rail mounting • wall mounting	Yes No No
housing can be lined up	Yes
net weight	1.66 kg
further information internet links	
internet link	
• to website: Industry Mall • to web page: selection aid TIA Selection Tool	https://mall.industry.siemens.com https://www.siemens.com/tstcloud

- to web page: power supplies
- to website: CAX-Download-Manager
- to website: Industry Online Support

<https://siemens.com/sitop>
<https://siemens.com/cax>
<https://support.industry.siemens.com>

additional information

other information

Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

security information

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	10	EC002540
ETIM	9	EC002540
ETIM	8	EC002540
ETIM	7	EC002540
IDEA	4	4130
UNSPSC	15	39-12-10-04

Approvals Certificates

Environmental Product Declaration

- | | |
|--|-----------|
| • global warming potential [CO2 eq] / during manufacturing | 32.8 kg |
| • global warming potential [CO2 eq] / during operation | 1020.9 kg |
| • global warming potential [CO2 eq] / after end of life | 0.5 kg |
| • global warming potential [CO2 eq] / total | 1054.8 kg |

Environment

General Product Approval

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[Manufacturer Declaration](#)

[China RoHS](#)



General Product Approval



[BIS CRS](#)

