SIEMENS

Data sheet

input

6EP3434-3SB00-0AX0



SITOP PSU4200/3AC/24VDC/10A

Siemens EcoTech

SITOP PSU4200 3AC 24 V/10 A stabilized power supply PSU4200 input: 400/500 V AC output: 24 V DC/ 10 A



nput		
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 Vin = 400/500 V	
line frequency	50/60 Hz	
line frequency	47 63 Hz	
input current		
 at rated input voltage 400 V 	0.7 A	
 at rated input voltage 500 V 	0.6 A	
current limitation of inrush current at 25 °C maximum	50 A	
duration of inrush current limiting at 25 °C		
• typical	20 ms	
l2t value maximum	0.9 A ² ·s	
fuse protection type in the feeder	three-poled coupled circuit breaker from 3 A characteristic C to 16 A characteristic C or circuit breaker 3RV2011-1EA10 (setting 3 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	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	48 mV	
voltage peak		

• maximum	240 mV	
• typical	30 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	210 ms	
• maximum	500 ms	
output current		
• rated value	10 A	
rated range	0 10 A; +60 +70 °C: Derating 3%/K	
supplied active power typical	240 W	
bridging of equipment	Yes	
number of parallel-switched equipment resources for increasing the power	2	
efficiency		
efficiency in percent	90 %	
power loss [W]		
at rated output voltage for rated value of the output current typical	27 W	
during no-load operation maximum	3 W	
closed-loop control		
relative control precision of the output voltage with rapid	0.2 %	
fluctuation of the input voltage by +/- 15% typical	 	
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	1.5 %	
setting time		
• load step 10 to 90% typical	1 ms	
 load step 90 to 10% typical 	1 ms	
protection and monitoring		
protection and monitoring design of the overvoltage protection	< 32 V	
	< 32 V Yes	
design of the overvoltage protection		
design of the overvoltage protection property of the output short-circuit proof	Yes	
design of the overvoltage protection property of the output short-circuit proof design of short-circuit protection	Yes Constant current characteristic	
design of the overvoltage protection property of the output short-circuit proof design of short-circuit protection • typical	Yes Constant current characteristic	
design of the overvoltage protection property of the output short-circuit proof design of short-circuit protection • typical enduring short circuit current RMS value	Yes Constant current characteristic 12.2 A	
design of the overvoltage protection property of the output short-circuit proof design of short-circuit protection • typical enduring short circuit current RMS value • typical	Yes Constant current characteristic 12.2 A	
design of the overvoltage protection property of the output short-circuit proof design of short-circuit protection • typical enduring short circuit current RMS value • typical safety	Yes Constant current characteristic 12.2 A 12.5 A	
design of the overvoltage protection property of the output short-circuit proof design of short-circuit protection • typical enduring short circuit current RMS value • typical safety galvanic isolation between input and output	Yes Constant current characteristic 12.2 A 12.5 A Yes ES1 output voltage Vout according to EN 62368-1 (Safety extra low output	
design of the overvoltage protection property of the output short-circuit proof design of short-circuit protection • typical enduring short circuit current RMS value • typical safety galvanic isolation between input and output galvanic isolation	Yes Constant current characteristic 12.2 A 12.5 A Yes ES1 output voltage Vout according to EN 62368-1 (Safety extra low output voltage Vout according to EN 60950-1)	
design of the overvoltage protection property of the output short-circuit proof design of short-circuit protection • typical enduring short circuit current RMS value • typical safety galvanic isolation between input and output galvanic resource protection class	Yes Constant current characteristic 12.2 A 12.5 A Yes ES1 output voltage Vout according to EN 62368-1 (Safety extra low output voltage Vout according to EN 60950-1)	
design of the overvoltage protection property of the output short-circuit proof design of short-circuit protection • typical enduring short circuit current RMS value • typical safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current	Yes Constant current characteristic 12.2 A 12.5 A Yes ES1 output voltage Vout according to EN 62368-1 (Safety extra low output voltage Vout according to EN 60950-1) Class I	
design of the overvoltage protection property of the output short-circuit proof design of short-circuit protection • typical enduring short circuit current RMS value • typical safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current • maximum	Yes Constant current characteristic 12.2 A 12.5 A Yes ES1 output voltage Vout according to EN 62368-1 (Safety extra low output voltage Vout according to EN 60950-1) Class I 0.8 mA	
design of the overvoltage protection property of the output short-circuit proof design of short-circuit protection • typical enduring short circuit current RMS value • typical safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current • maximum • typical	Yes Constant current characteristic 12.2 A 12.5 A Yes ES1 output voltage Vout according to EN 62368-1 (Safety extra low output voltage Vout according to EN 60950-1) Class I 0.8 mA 0.4 mA	
design of the overvoltage protection property of the output short-circuit proof design of short-circuit protection • typical enduring short circuit current RMS value • typical safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current • maximum • typical protection class IP	Yes Constant current characteristic 12.2 A 12.5 A Yes ES1 output voltage Vout according to EN 62368-1 (Safety extra low output voltage Vout according to EN 60950-1) Class I 0.8 mA 0.4 mA	
design of the overvoltage protection property of the output short-circuit proof design of short-circuit protection • typical enduring short circuit current RMS value • typical safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current • maximum • typical protection class IP EMC	Yes Constant current characteristic 12.2 A 12.5 A Yes ES1 output voltage Vout according to EN 62368-1 (Safety extra low output voltage Vout according to EN 60950-1) Class I 0.8 mA 0.4 mA	
design of the overvoltage protection property of the output short-circuit proof design of short-circuit protection • typical enduring short circuit current RMS value • typical safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current • maximum • typical protection class IP EMC standard	Yes Constant current characteristic 12.2 A 12.5 A Yes ES1 output voltage Vout according to EN 62368-1 (Safety extra low output voltage Vout according to EN 60950-1) Class I 0.8 mA 0.4 mA IP20	
design of the overvoltage protection property of the output short-circuit proof design of short-circuit protection • typical enduring short circuit current RMS value • typical safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current • maximum • typical protection class IP EMC standard • for emitted interference	Yes Constant current characteristic 12.2 A 12.5 A Yes ES1 output voltage Vout according to EN 62368-1 (Safety extra low output voltage Vout according to EN 60950-1) Class I 0.8 mA 0.4 mA IP20 EN 55032 Class A	
design of the overvoltage protection property of the output short-circuit proof design of short-circuit protection • typical enduring short circuit current RMS value • typical safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current • maximum • typical protection class IP EMC standard • for emitted interference • for mains harmonics limitation	Yes Constant current characteristic 12.2 A 12.5 A Yes ES1 output voltage Vout according to EN 62368-1 (Safety extra low output voltage Vout according to EN 60950-1) Class I 0.8 mA 0.4 mA IP20 EN 55032 Class A EN 61000-3-2	
design of the overvoltage protection property of the output short-circuit proof design of short-circuit protection • typical enduring short circuit current RMS value • typical safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current • maximum • typical protection class IP EMC standard • for emitted interference • for mains harmonics limitation • for interference immunity	Yes Constant current characteristic 12.2 A 12.5 A Yes ES1 output voltage Vout according to EN 62368-1 (Safety extra low output voltage Vout according to EN 60950-1) Class I 0.8 mA 0.4 mA IP20 EN 55032 Class A EN 61000-3-2	
design of the overvoltage protection property of the output short-circuit proof design of short-circuit protection • typical enduring short circuit current RMS value • typical safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current • maximum • typical protection class IP EMC standard • for emitted interference • for mains harmonics limitation • for interference immunity standards, specifications, approvals	Yes Constant current characteristic 12.2 A 12.5 A Yes ES1 output voltage Vout according to EN 62368-1 (Safety extra low output voltage Vout according to EN 60950-1) Class I 0.8 mA 0.4 mA IP20 EN 55032 Class A EN 61000-3-2	
design of the overvoltage protection property of the output short-circuit proof design of short-circuit protection • typical enduring short circuit current RMS value • typical safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current • maximum • typical protection class IP EMC standard • for emitted interference • for mains harmonics limitation • for interference immunity standards, specifications, approvals certificate of suitability	Yes Constant current characteristic 12.2 A 12.5 A Yes ES1 output voltage Vout according to EN 62368-1 (Safety extra low output voltage Vout according to EN 60950-1) Class I 0.8 mA 0.4 mA IP20 EN 55032 Class A EN 61000-3-2 EN 61000-6-2	
design of the overvoltage protection property of the output short-circuit proof design of short-circuit protection • typical enduring short circuit current RMS value • typical safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current • maximum • typical protection class IP EMC standard • for emitted interference • for mains harmonics limitation • for interference immunity standards, specifications, approvals certificate of suitability • CE marking	Yes Constant current characteristic 12.2 A 12.5 A Yes ES1 output voltage Vout according to EN 62368-1 (Safety extra low output voltage Vout according to EN 60950-1) Class I 0.8 mA 0.4 mA IP20 EN 55032 Class A EN 61000-3-2 EN 61000-6-2 Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (UL 62368-1, CSA C22.2 No. 62368-1-19) Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (UL	
design of the overvoltage protection property of the output short-circuit proof design of short-circuit protection • typical enduring short circuit current RMS value • typical safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current • maximum • typical protection class IP EMC standard • for emitted interference • for mains harmonics limitation • for interference immunity standards, specifications, approvals certificate of suitability • CE marking • UL approval • CSA approval	Yes Constant current characteristic 12.2 A 12.5 A Yes ES1 output voltage Vout according to EN 62368-1 (Safety extra low output voltage Vout according to EN 60950-1) Class I 0.8 mA 0.4 mA IP20 EN 55032 Class A EN 61000-3-2 EN 61000-6-2 Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (UL 62368-1, CSA C22.2 No. 62368-1-19) Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (UL 62368-1, CSA C22.2 No. 62368-1-19)	
design of the overvoltage protection property of the output short-circuit proof design of short-circuit protection • typical enduring short circuit current RMS value • typical safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current • maximum • typical protection class IP EMC standard • for emitted interference • for mains harmonics limitation • for interference immunity standards, specifications, approvals certificate of suitability • CE marking • UL approval	Yes Constant current characteristic 12.2 A 12.5 A Yes ES1 output voltage Vout according to EN 62368-1 (Safety extra low output voltage Vout according to EN 60950-1) Class I 0.8 mA 0.4 mA IP20 EN 55032 Class A EN 61000-3-2 EN 61000-6-2 Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (UL 62368-1, CSA C22.2 No. 62368-1-19) Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (UL	

 Regulatory Compliance Mark (RCM) 	Yes	
NEC Class 2	No	
type of certification		
• BIS	Yes; R-41183539	
CB-certificate	Yes	
MTBF at 40 °C	1 330 000 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 Dec	claration	
Environmental Product Declaration	Yes	
global warming potential [CO2 eq]		
• total	702 kg	
during manufacturing	20.7 kg	
during operation	680.6 kg	
after end of life	0.57 kg	
Siemens Eco Profile (SEP)	Siemens EcoTech	
ambient conditions		
ambient temperature		
during operation	-25 +70; with natural convection	
during transport	-40 +85	
during storage	-40 +85	
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 2.5 mm ²	
for signaling contact	13, 14: push-in for 0.2 1.5 mm ²	
mechanical data	13, 14. pusit-iii 10i 0.2 1.3 iiiiii	
width × height × depth of the enclosure	70 × 135 × 125 mm	
installation width × mounting height	70 mm × 225 mm	
required spacing	45 mm	
• top	45 mm	
• bottom	45 mm	
• left	0 mm	
• right	0 mm	
fastening method	Snaps onto DIN rail EN 60715 35x7.5/15	
DIN-rail mounting S7 rail mounting	Yes	
S7 rail mounting	No	
wall mounting	Yes	
housing can be lined up	Yes	
net weight	0.64 kg	
further information internet links		
internet link		
to website: Industry Mall	https://mall.industry.siemens.com	
 to web page: selection aid TIA Selection Tool 	https://www.siemens.com/tstcloud	
to web page: power supplies	https://siemens.com/sitop	
 to website: CAx-Download-Manager to website: Industry Online Support 	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

Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit www.siemens.com/cybersecurity-industry. Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under https://www.siemens.com/cert. (V4.7)

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



Siemens EcoTech



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2/16/2025