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 A²·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 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	1.5 %		
setting time			
load step 10 to 90% typical	1 ms		
 load step 90 to 10% typical 	1 ms		
- read step so to reverypred.			
protection and monitoring			
	< 32 V		
protection and monitoring			
protection and monitoring design of the overvoltage protection	< 32 V		
protection and monitoring design of the overvoltage protection property of the output short-circuit proof	< 32 V Yes		
protection and monitoring design of the overvoltage protection property of the output short-circuit proof design of short-circuit protection	< 32 V Yes Constant current characteristic		
protection and monitoring 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	< 32 V Yes Constant current characteristic		
protection and monitoring design of the overvoltage protection property of the output short-circuit proof design of short-circuit protection • typical enduring short circuit current RMS value	< 32 V Yes Constant current characteristic 12.2 A		
protection and monitoring 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	< 32 V Yes Constant current characteristic 12.2 A		
protection and monitoring 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	< 32 V 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	< 32 V 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 resource protection class leakage current	< 32 V 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	< 32 V 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	< 32 V 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	< 32 V 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 protection class IP standard	< 32 V 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 standard • for emitted interference	< 32 V 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 standard • for emitted interference • for mains harmonics limitation	< 32 V 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		
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NEC Class 2	No		
type of certification			
BIS	Yes; R-41183539		
CB-certificate			
MTBF at 40 °C	Yes 1 330 000 h		
standards, specifications, approvals hazardous environments	1 330 000 11		
certificate of suitability	No		
• 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 De	eclaration		
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 °C; with natural convection		
	-40 +85 °C		
during transport	-40 +65 °C		
during storage during storage			
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 mm²		
• 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			
width × height × depth of the enclosure	70 × 135 × 125 mm		
installation width × mounting height	70 mm × 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	Yes		
housing can be lined up	Yes		
net weight	0.64 kg		
further information internet links			
internet link			
	https://mall.industry.sigmons.com		
to website: Industry Mall to website: Industrial communication	https://mall.industry.siemens.com		
to website: Industrial communication to website: CAy Developed Manager	https://siemens.com/industrial-communication		
• to website: CAx-Download-Manager	https://siemens.com/cax		
to website: Industry Online Support	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

Environment



Manufacturer Declaration





BIS CRS



Environment





last modified:

6/26/2024