Data sheet

6EP3437-7SB00-3AX0



SITOP PSU6200/3AC/24VDC/40A

SITOP PSU6200 24 V/40 A stabilized power supply input: 400 - 500 V AC output: 24 V DC/40 A with diagnostic interface

Input	
type of the power supply network	3-phase AC or DC
supply voltage at AC	
minimum rated value	400 V
 maximum rated value 	500 V
• initial value	323 V
• full-scale value	576 V
input voltage	
• at DC	450 600 V
operating condition of the mains buffering	at Vin = 400 V
buffering time for rated value of the output current in the event of power failure minimum	18 ms
operating condition of the mains buffering	at Vin = 400 V
line frequency	
• 1 rated value	50 Hz
2 rated value	60 Hz
line frequency	47 63 Hz
input current	
 at rated input voltage 400 V 	1.5 A
• at rated input voltage 500 V	1.2 A
current limitation of inrush current at 25 °C maximum	10 A
fuse protection type	
• in the feeder	three-poled coupled circuit breaker from 4 A characteristic C to 16 A characteristic C or circuit breaker 3RV2011-1EA10 (setting 4 A) or 3RV2711-1ED10 (UL 489)
Output	
voltage curve at output	Controlled, isolated DC voltage
number of outputs	1
output voltage at DC rated value	24 V
output voltage	
at output 1 at DC rated value	24 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	0.1 %
residual ripple	
• maximum	80 mV
• typical	50 mV
voltage peak	
• maximum	80 mV
• typical	30 mV

adjustable output veltare	24 20 \/
adjustable output voltage	24 28 V
product function output voltage adjustable	Yes
type of output voltage setting	via potentiometer; max. 960 W (1152 W up to 45°C)
display version for normal operation	Green LED for 24 V OK
type of signal at output	Electronic contact (NO contact, contact rating 30 V DC/0.1 A) for DC O.K. or diagnostic interface
behavior of the output voltage when switching on	Overshoot of Vout < 2 %
response delay maximum	0.5 s
voltage increase time of the output voltage	
• typical	100 ms
output current	
rated value	40 A
rated range	0 40 A; 48 A up to +45°C; +60 +70 °C: Derating 3%/K
supplied active power typical	960 W
short-term overload current	
 on short-circuiting during the start-up typical 	48 A
at short-circuit during operation typical	48 A
product feature	
 parallel switching of outputs 	can be set with DIP switch
bridging of equipment	Yes; switchable characteristic
number of parallel-switched equipment resources for increasing	2
the power	
Efficiency	2004
efficiency in percent	96 %
power loss [W]	
 at rated output voltage for rated value of the output current typical 	40 W
during no-load operation maximum	4.5 W
Closed-loop control	7.0 **
relative control precision of the output voltage at load step of	2 %
resistive load 10/90/10 % typical	2 /0
setting time	
• load step 10 to 90% typical	2 ms
• load step 90 to 10% typical	10 ms
load step 90 to 10% typicalmaximum	
load step 90 to 10% typicalmaximumProtection and monitoring	10 ms 10 ms
load step 90 to 10% typicalmaximum	10 ms 10 ms < 32 V
load step 90 to 10% typical maximum Protection and monitoring design of the overvoltage protection typical	10 ms 10 ms < 32 V 48 A
load step 90 to 10% typical maximum Protection and monitoring design of the overvoltage protection typical property of the output short-circuit proof	10 ms 10 ms < 32 V 48 A Yes
load step 90 to 10% typical maximum Protection and monitoring design of the overvoltage protection typical	10 ms 10 ms < 32 V 48 A
load step 90 to 10% typical maximum Protection and monitoring design of the overvoltage protection typical property of the output short-circuit proof design of short-circuit protection overcurrent overload capability in normal operation	10 ms 10 ms < 32 V 48 A Yes
I load step 90 to 10% typical maximum Protection and monitoring design of the overvoltage protection typical property of the output short-circuit proof design of short-circuit protection	10 ms 10 ms < 32 V 48 A Yes Shutdown and periodic restart attempts
load step 90 to 10% typical maximum Protection and monitoring design of the overvoltage protection typical property of the output short-circuit proof design of short-circuit protection overcurrent overload capability in normal operation	10 ms 10 ms < 32 V 48 A Yes Shutdown and periodic restart attempts
load step 90 to 10% typical maximum Protection and monitoring design of the overvoltage protection typical property of the output short-circuit proof design of short-circuit protection overcurrent overload capability in normal operation Safety	10 ms 10 ms 10 ms < 32 V 48 A Yes Shutdown and periodic restart attempts overload capability 150 % lout rated up to 5 s/min
load step 90 to 10% typical maximum Protection and monitoring design of the overvoltage protection typical property of the output short-circuit proof design of short-circuit protection overcurrent overload capability in normal operation Safety galvanic isolation between input and output	10 ms 10 ms < 32 V 48 A Yes Shutdown and periodic restart attempts overload capability 150 % lout rated up to 5 s/min Yes
load step 90 to 10% typical maximum Protection and monitoring design of the overvoltage protection typical property of the output short-circuit proof design of short-circuit protection overcurrent overload capability in normal operation Safety galvanic isolation between input and output galvanic isolation	10 ms 10 ms < 32 V 48 A Yes Shutdown and periodic restart attempts overload capability 150 % lout rated up to 5 s/min Yes Safety extra low output voltage Vout according to EN 60950-1
I load step 90 to 10% typical maximum Protection and monitoring design of the overvoltage protection typical property of the output short-circuit proof design of short-circuit protection overcurrent overload capability in normal operation Safety galvanic isolation between input and output galvanic resource protection class	10 ms 10 ms < 32 V 48 A Yes Shutdown and periodic restart attempts overload capability 150 % lout rated up to 5 s/min Yes Safety extra low output voltage Vout according to EN 60950-1
load step 90 to 10% typical maximum Protection and monitoring design of the overvoltage protection typical property of the output short-circuit proof design of short-circuit protection overcurrent overload capability in normal operation Safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current	10 ms 10 ms 432 V 48 A Yes Shutdown and periodic restart attempts overload capability 150 % lout rated up to 5 s/min Yes Safety extra low output voltage Vout according to EN 60950-1 Class I
I load step 90 to 10% typical maximum Protection and monitoring design of the overvoltage protection typical property of the output short-circuit proof design of short-circuit protection overcurrent overload capability in normal operation Safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current maximum	10 ms 10 ms < 32 V 48 A Yes Shutdown and periodic restart attempts overload capability 150 % lout rated up to 5 s/min Yes Safety extra low output voltage Vout according to EN 60950-1 Class I 3.5 mA
I load step 90 to 10% typical maximum Protection and monitoring design of the overvoltage protection typical property of the output short-circuit proof design of short-circuit protection overcurrent overload capability in normal operation Safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current maximum protection class IP	10 ms 10 ms < 32 V 48 A Yes Shutdown and periodic restart attempts overload capability 150 % lout rated up to 5 s/min Yes Safety extra low output voltage Vout according to EN 60950-1 Class I 3.5 mA
I load step 90 to 10% typical maximum Protection and monitoring design of the overvoltage protection typical property of the output short-circuit proof design of short-circuit protection overcurrent overload capability in normal operation Safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current maximum protection class IP Approvals	10 ms 10 ms < 32 V 48 A Yes Shutdown and periodic restart attempts overload capability 150 % lout rated up to 5 s/min Yes Safety extra low output voltage Vout according to EN 60950-1 Class I 3.5 mA
I load step 90 to 10% typical maximum Protection and monitoring design of the overvoltage protection typical property of the output short-circuit proof design of short-circuit protection overcurrent overload capability in normal operation Safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current maximum protection class IP Approvals certificate of suitability	10 ms 10 ms < 32 V 48 A Yes Shutdown and periodic restart attempts overload capability 150 % lout rated up to 5 s/min Yes Safety extra low output voltage Vout according to EN 60950-1 Class I 3.5 mA IP20
I load step 90 to 10% typical maximum Protection and monitoring design of the overvoltage protection typical property of the output short-circuit proof design of short-circuit protection overcurrent overload capability in normal operation Safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current maximum protection class IP Approvals certificate of suitability CE marking	10 ms 10 ms 10 ms < 32 V 48 A Yes Shutdown and periodic restart attempts overload capability 150 % lout rated up to 5 s/min Yes Safety extra low output voltage Vout according to EN 60950-1 Class I 3.5 mA IP20 Yes Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus
I load step 90 to 10% typical maximum Protection and monitoring design of the overvoltage protection typical property of the output short-circuit proof design of short-circuit protection overcurrent overload capability in normal operation Safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current maximum protection class IP Approvals certificate of suitability CE marking UL approval	10 ms 10
I load step 90 to 10% typical maximum Protection and monitoring design of the overvoltage protection typical property of the output short-circuit proof design of short-circuit protection overcurrent overload capability in normal operation Safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current maximum protection class IP Approvals certificate of suitability CE marking UL approval CSA approval	10 ms 10
I load step 90 to 10% typical maximum Protection and monitoring design of the overvoltage protection typical property of the output short-circuit proof design of short-circuit protection overcurrent overload capability in normal operation Safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current maximum protection class IP Approvals certificate of suitability CE marking UL approval CSA approval CSA approval cCSAus, Class 1, Division 2 ATEX	10 ms 10 ms 10 ms < 32 V 48 A Yes Shutdown and periodic restart attempts overload capability 150 % lout rated up to 5 s/min Yes Safety extra low output voltage Vout according to EN 60950-1 Class I 3.5 mA IP20 Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) No
I load step 90 to 10% typical maximum Protection and monitoring design of the overvoltage protection typical property of the output short-circuit proof design of short-circuit protection overcurrent overload capability in normal operation Safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current maximum protection class IP Approvals certificate of suitability CE marking UL approval CSA approval CSA approval CCSAus, Class 1, Division 2 ATEX certificate of suitability	10 ms 10 ms 10 ms
I load step 90 to 10% typical maximum Protection and monitoring design of the overvoltage protection typical property of the output short-circuit proof design of short-circuit protection overcurrent overload capability in normal operation Safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current maximum protection class IP Approvals certificate of suitability CE marking UL approval CSA approval CSA approval cCSAus, Class 1, Division 2 ATEX certificate of suitability IECEx	10 ms 10 ms 10 ms 10 ms 10 ms <a <="" href="#" td="">
I load step 90 to 10% typical maximum Protection and monitoring design of the overvoltage protection typical property of the output short-circuit proof design of short-circuit protection overcurrent overload capability in normal operation Safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current maximum protection class IP Approvals certificate of suitability CE marking UL approval CSA approval CSA approval CSA approval CCSAus, Class 1, Division 2 ATEX certificate of suitability IECEX NEC Class 2	10 ms
I load step 90 to 10% typical maximum Protection and monitoring design of the overvoltage protection typical property of the output short-circuit proof design of short-circuit protection overcurrent overload capability in normal operation Safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current maximum protection class IP Approvals certificate of suitability CE marking UL approval CSA approval CSA approval cCSAus, Class 1, Division 2 ATEX certificate of suitability IECEx	10 ms 10 ms 10 ms 10 ms 10 ms <a <="" href="#" td="">

type of certification CB-certificate	Yes
certificate of suitability	
EAC approval	Yes
 KC approval 	No
• C-Tick	No
 Regulatory Compliance Mark (RCM) 	No
certificate of suitability shipbuilding approval	Yes
shipbuilding approval	ABS; in process: DNV
Marine classification association	
 American Bureau of Shipping Europe Ltd. (ABS) 	Yes
 French marine classification society (BV) 	No
DNV GL	No
 Lloyds Register of Shipping (LRS) 	No
 Nippon Kaiji Kyokai (NK) 	No
EMC	
standard	
for emitted interference	EN 55022 Class B
• for mains harmonics limitation	EN 61000-3-2
• for interference immunity	EN 61000-6-2
environmental conditions	
ambient temperature	
during operation	-30 +70 °C; with natural convection a monotonically increasing start-up from -25 °C, safe start-up from -40 °C
during transport	-40 +85 °C
during storage	-40 +85 °C
environmental category according to IEC 60721	Climate class 3K3, 5 95% no condensation
Mechanics	
type of electrical connection	push-in terminals
• at input	L1, L2, L3, PE: push-in for 0.5 10 mm ²
at output	+1, +2, -1, -2, -3: push-in for 0.75 16 mm ²
for auxiliary contacts	13, 14 (alarm signal): 1 push-in terminal each for 0.2 1.5 mm ²
width of the enclosure	95 mm
height of the enclosure	135 mm
depth of the enclosure	155 mm
required spacing	
• top	45 mm
• bottom	45 mm
• left	0 mm
• right	0 mm
net weight	2.1 kg
product feature of the enclosure housing can be lined up	Yes
fastening method	Snaps onto DIN rail EN 60715 35x7.5/15
electrical accessories	Buffer module, redundancy module
mechanical accessories	Identification labels SIMATIC ET 200SP 6ES7193-6LF30-0AW0
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless
	otherwise specified)

