## SIEMENS

## Data sheet

## 6EP3336-7SC00-3AX0



SITOP PSU6200/1AC/DC24V/20A/EX

SITOP PSU6200 Ex 20 A stabilized power supply input: 120/230 V AC output: 24 V DC/20 A with diagnostic interface with painted printed circuit boards

Figure similar

Input	
type of the power supply network	1-phase AC or DC
supply voltage at AC	
minimum rated value	120 V
maximum rated value	240 V
• initial value	85 V
• full-scale value	264 V
supply voltage	
• at DC	110 240 V
input voltage	
• at DC	85 275 V
design of input wide range input	Yes
overvoltage overload capability	300 V AC for 30 s
operating condition of the mains buffering	at Vin = 240 V
buffering time for rated value of the output current in the event of power failure minimum	25 ms
operating condition of the mains buffering	at Vin = 240 V
line frequency	
• 1 rated value	50 Hz
• 2 rated value	60 Hz
line frequency	47 63 Hz
input current	
<ul> <li>at rated input voltage 120 V</li> </ul>	4.3 A
<ul> <li>at rated input voltage 240 V</li> </ul>	2.3 A
current limitation of inrush current at 25 °C maximum	12 A
fuse protection type	10 A
• in the feeder	Circuit breaker from 6 A characteristic B to 16 A characteristic C or circuit breaker 3RV2011-1HA10 (setting 8A) or 3RV2711-1HD10 (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	
<ul> <li>at output 1 at DC rated value</li> </ul>	24 V
relative overall tolerance of the voltage	3 %
relative control precision of the output voltage	
<ul> <li>on slow fluctuation of input voltage</li> </ul>	0.2 %
<ul> <li>on slow fluctuation of ohm loading</li> </ul>	0.2 %
residual ripple	
• maximum	80 mV

typical	50 mV
voltage peak • maximum	100 mV
typical	60 mV
adjustable output voltage	24 28 V
product function output voltage adjustable	Yes
type of output voltage setting	via potentiometer; max. 480 W (576 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 approx. 3 %
response delay maximum	0.5 s
voltage increase time of the output voltage	
• typical	100 ms
output current	
rated value	20 A
rated range	0 20 A; 24 A up to +45°C; +60 +70 °C: Derating 3%/K
supplied active power typical	480 W
short-term overload current	
<ul> <li>on short-circuiting during the start-up typical</li> </ul>	30 A
<ul> <li>at short-circuit during operation typical</li> </ul>	30 A
product feature	
<ul> <li>parallel switching of outputs</li> </ul>	can be set with DIP switch
<ul> <li>bridging of equipment</li> </ul>	Yes; switchable characteristic
number of parallel-switched equipment resources for increasing the power	2
Efficiency	
efficiency in percent	95.5 %
power loss [W]	
<ul> <li>at rated output voltage for rated value of the output current typical</li> </ul>	25 W
	0.014/
<ul> <li>during no-load operation maximum</li> </ul>	2.6 W
during no-load operation maximum Closed-loop control	2.6 VV
	2.6 W 3 %
Closed-loop control relative control precision of the output voltage at load step of	
Closed-loop control relative control precision of the output voltage at load step of resistive load 10/90/10 % typical	
Closed-loop control relative control precision of the output voltage at load step of resistive load 10/90/10 % typical setting time	3 %
Closed-loop control relative control precision of the output voltage at load step of resistive load 10/90/10 % typical setting time • load step 10 to 90% typical	3 % 0.5 ms
Closed-loop control relative control precision of the output voltage at load step of resistive load 10/90/10 % typical setting time • load step 10 to 90% typical • load step 90 to 10% typical	3 % 0.5 ms 0.5 ms
Closed-loop control relative control precision of the output voltage at load step of resistive load 10/90/10 % typical setting time • load step 10 to 90% typical • load step 90 to 10% typical • maximum	3 % 0.5 ms 0.5 ms
Closed-loop control relative control precision of the output voltage at load step of resistive load 10/90/10 % typical setting time • load step 10 to 90% typical • load step 90 to 10% typical • maximum Protection and monitoring	3 % 0.5 ms 0.5 ms 1 ms
Closed-loop control relative control precision of the output voltage at load step of resistive load 10/90/10 % typical setting time load step 10 to 90% typical load step 90 to 10% typical maximum Protection and monitoring design of the overvoltage protection	3 % 0.5 ms 0.5 ms 1 ms < 32 V
Closed-loop control relative control precision of the output voltage at load step of resistive load 10/90/10 % typical setting time load step 10 to 90% typical load step 90 to 10% typical maximum Protection and monitoring design of the overvoltage protection typical	3 % 0.5 ms 0.5 ms 1 ms < 32 V 30 A
Closed-loop control relative control precision of the output voltage at load step of resistive load 10/90/10 % typical setting time load step 10 to 90% typical load step 90 to 10% typical maximum Protection and monitoring design of the overvoltage protection typical property of the output short-circuit proof	3 % 0.5 ms 0.5 ms 1 ms < 32 V 30 A Yes
Closed-loop control relative control precision of the output voltage at load step of resistive load 10/90/10 % typical setting time load step 10 to 90% typical 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	3 % 0.5 ms 0.5 ms 1 ms < 32 V 30 A Yes Shutdown and periodic restart attempts
Closed-loop control         relative control precision of the output voltage at load step of resistive load 10/90/10 % typical         setting time         • load step 10 to 90% typical         • 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	3 % 0.5 ms 0.5 ms 1 ms < 32 V 30 A Yes Shutdown and periodic restart attempts
Closed-loop control         relative control precision of the output voltage at load step of         resistive load 10/90/10 % typical         setting time         • load step 10 to 90% typical         • 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	3 % 0.5 ms 0.5 ms 1 ms < 32 V 30 A Yes Shutdown and periodic restart attempts overload capability 150 % lout rated up to 5 s/min
Closed-loop control         relative control precision of the output voltage at load step of         resistive load 10/90/10 % typical         setting time         • load step 10 to 90% typical         • 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	3 % 0.5 ms 0.5 ms 1 ms < 32 V 30 A Yes Shutdown and periodic restart attempts overload capability 150 % lout rated up to 5 s/min Yes
Closed-loop control         relative control precision of the output voltage at load step of         resistive load 10/90/10 % typical         setting time         • load step 10 to 90% typical         • 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	3 % 0.5 ms 0.5 ms 1 ms < 32 V 30 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
Closed-loop control         relative control precision of the output voltage at load step of         resistive load 10/90/10 % typical         setting time         • load step 10 to 90% typical         • 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	3 % 0.5 ms 0.5 ms 1 ms < 32 V 30 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
Closed-loop control         relative control precision of the output voltage at load step of resistive load 10/90/10 % typical         setting time         • load step 10 to 90% typical         • load step 90 to 10% typical         • 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	3 % 0.5 ms 0.5 ms 1 ms < 32 V 30 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
Closed-loop control         relative control precision of the output voltage at load step of         resistive load 10/90/10 % typical         setting time         • load step 10 to 90% typical         • 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	3 % 0.5 ms 0.5 ms 1 ms < 32 V 30 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
Closed-loop control         relative control precision of the output voltage at load step of resistive load 10/90/10 % typical         setting time         • load step 10 to 90% typical         • 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	3 % 0.5 ms 0.5 ms 1 ms < 32 V 30 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
Closed-loop control         relative control precision of the output voltage at load step of resistive load 10/90/10 % typical         setting time         • load step 10 to 90% typical         • 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	3 % 0.5 ms 0.5 ms 1 ms < 32 V 30 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
Closed-loop control         relative control precision of the output voltage at load step of resistive load 10/90/10 % typical         setting time         • load step 10 to 90% typical         • 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	3 % 0.5 ms 0.5 ms 1 ms < 32 V 30 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
Closed-loop control         relative control precision of the output voltage at load step of         resistive load 10/90/10 % typical         setting time         • load step 10 to 90% typical         • 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	3 % 0.5 ms 0.5 ms 1 ms < 32 V 30 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
Closed-loop control         relative control precision of the output voltage at load step of         resistive load 10/90/10 % typical         setting time         • load step 10 to 90% typical         • 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	3 % 0.5 ms 0.5 ms 1 ms < 32 V 30 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
Closed-loop control         relative control precision of the output voltage at load step of resistive load 10/90/10 % typical         setting time         • load step 10 to 90% typical         • load step 90 to 10% typical         • 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	3 %         0.5 ms         0.5 ms         1 ms            30 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 (CLus-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)         Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1)
Closed-loop control         relative control precision of the output voltage at load step of         resistive load 10/90/10 % typical         setting time         • load step 10 to 90% typical         • 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         • cCSAus, Class 1, Division 2	3 %         0.5 ms         0.5 ms         1 ms         < 32 V

<ul> <li>relating to ATEX</li> </ul>	IECEx Ex ec nC IIC T3 Gc; ATEX (EX) II 3G Ex ec nA nC IIC T4 Gc
• IECEX	Yes; IECEx Ex ec nC IIC T3 Gc
NEC Class 2	No
ULhazloc approval	No
FM registration	No
certificate of suitability shipbuilding approval	Yes
shipbuilding approval	ABS; in process: DNV
Marine classification association	
American Bureau of Shipping Europe Ltd. (ABS)	Yes
<ul> <li>French marine classification society (BV)</li> </ul>	No
• DNV GL	No
Lloyds Register of Shipping (LRS)	No
<ul> <li>Nippon Kaiji Kyokai (NK)</li> </ul>	No
EMC	
standard	
for emitted interference	EN 55022 Class B
<ul> <li>for mains harmonics limitation</li> </ul>	EN 61000-3-2
<ul> <li>for interference immunity</li> </ul>	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
<ul> <li>during transport</li> </ul>	-40 +85 °C
<ul> <li>during storage</li> </ul>	-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/N/-, PE: push-in for 0.5 4 mm <sup>2</sup> single-core/finely stranded
at output	+1, +2, -1, -2, -3: push-in for 0.5 6 mm <sup>2</sup>
<ul> <li>for auxiliary contacts</li> </ul>	13, 14 (alarm signal): 1 push-in terminal each for 0.2 1.5 mm <sup>2</sup>
width of the enclosure	70 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	1.5 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 $^\circ \rm C$ (unless otherwise specified)

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