SIEMENS

Data sheet

6EP1333-3BA10



SITOP PSU200M/1-2AC/24VDC/5A

SITOP PSU200M 5 A stabilized power supply input: 120/230-500 V AC output: 24 V DC/5 A *Ex approval no longer available*

Input	
type of the power supply network	1-phase and 2-phase AC
supply voltage at AC	
• initial value	Set by means of selector switch on the device; starting from Vin > 90/180 V
supply voltage	
• 1 at AC	120 230 V
• 2 at AC	230 500 V
input voltage	
• 1 at AC	85 264 V
• 2 at AC	176 550 V
design of input wide range input	Yes
overvoltage overload capability	1300 Vpeak, 1.3 ms
operating condition of the mains buffering	at Vin = 120/230 V, typ. 150 ms at Vin = 400 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 = 120/230 V, typ. 150 ms 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 120 V 	2.2 A
 at rated input voltage 230 V 	1.2 A
 at rated input voltage 500 V 	0.61 A
current limitation of inrush current at 25 °C maximum	35 A
l2t value maximum	1.7 A ² ·s
fuse protection type	T 3.15 A (not accessible)
• in the feeder	Recommended miniature circuit breaker at 1-phase operation: from 6 A (10 A) characteristic C (B); required at 2-phase operation: circuit breaker 2-pole connected or circuit breaker 3RV2011-1EA10 (setting 3.8 A) or 3RV2711-1ED10 (UL 489) at 230 V; 3RV2011-1DA10 (setting 3 A) or 3RV2711-1DD10 (UL 489) at 400/500 V
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
relative overall tolerance of the voltage	3 %
relative control precision of the output voltage	
 on slow fluctuation of input voltage 	0.1 %
 on slow fluctuation of ohm loading 	0.1 %
residual ripple	

• maximum	50 mV
voltage peak	
• maximum	200 mV
adjustable output voltage	24 28.8 V
product function output voltage adjustable	Yes
type of output voltage setting	via potentiometer
display version for normal operation	Green LED for 24 V OK
type of signal at output	Relay contact (NO contact, rating 60 V DC/ 0.3 A) for "24 V OK"
behavior of the output voltage when switching on	Overshoot of Vout approx. 3 %
response delay maximum	1s
voltage increase time of the output voltage	
• typical	50 ms
output current	
rated value	5 A
rated range	05A
supplied active power typical	120 W
short-term overload current	
at short-circuit during operation typical	15 A
duration of overloading capability for excess current	25 ms
at short-circuit during operation	25 ms
constant overload current	6.4
on short-circuiting during the start-up typical	6 A
product feature	
bridging of equipment	Yes; switchable characteristic
number of parallel-switched equipment resources for increasing the power	2
Efficiency	
	88 %
efficiency in percent	00 /0
power loss [W]	47 141
 at rated output voltage for rated value of the output current typical 	17 W
 during no-load operation maximum 	4 W
during no-load operation maximum Closed-loop control	4 W
Closed-loop control	
	4 W 0.1 %
Closed-loop control relative control precision of the output voltage with rapid	
Closed-loop control relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical relative control precision of the output voltage load step of	0.1 %
Closed-loop control relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical relative control precision of the output voltage load step of resistive load 50/100/50 % typical	0.1 %
Closed-loop control relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical relative control precision of the output voltage load step of resistive load 50/100/50 % typical setting time	0.1 %
Closed-loop control relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical relative control precision of the output voltage load step of resistive load 50/100/50 % typical setting time • load step 50 to 100% typical	0.1 % 3 % 2 ms
Closed-loop control relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical relative control precision of the output voltage load step of resistive load 50/100/50 % typical setting time • load step 50 to 100% typical • load step 100 to 50% typical	0.1 % 3 % 2 ms
Closed-loop control relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical relative control precision of the output voltage load step of resistive load 50/100/50 % typical setting time • load step 50 to 100% typical • load step 100 to 50% typical setting time • maximum	0.1 % 3 % 2 ms 2 ms
Closed-loop control relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical relative control precision of the output voltage load step of resistive load 50/100/50 % typical setting time e load step 50 to 100% typical e load step 100 to 50% typical setting time e maximum Protection and monitoring	0.1 % 3 % 2 ms 2 ms 5 ms
Closed-loop control relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical relative control precision of the output voltage load step of resistive load 50/100/50 % typical setting time • load step 50 to 100% typical • load step 100 to 50% typical setting time • maximum Protection and monitoring design of the overvoltage protection	0.1 % 3 % 2 ms 2 ms 5 ms < 35 V
Closed-loop control relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical relative control precision of the output voltage load step of resistive load 50/100/50 % typical setting time • load step 50 to 100% typical setting time • load step 100 to 50% typical setting time • maximum Protection and monitoring design of the overvoltage protection • typical	0.1 % 3 % 2 ms 2 ms 5 ms < 35 V 6 A
Closed-loop control relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical relative control precision of the output voltage load step of resistive load 50/100/50 % typical setting time • load step 50 to 100% typical • load step 100 to 50% typical setting time • maximum Protection and monitoring design of the overvoltage protection • typical property of the output short-circuit proof	0.1 % 3 % 2 ms 2 ms 5 ms < 35 V 6 A Yes
Closed-loop control relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical relative control precision of the output voltage load step of resistive load 50/100/50 % typical setting time • load step 50 to 100% typical • load step 100 to 50% typical setting time • maximum Protection and monitoring design of the overvoltage protection • typical property of the output short-circuit proof design of short-circuit protection	0.1 % 3 % 2 ms 2 ms 5 ms < 35 V 6 A
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Closed-loop control relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical relative control precision of the output voltage load step of resistive load 50/100/50 % typical setting time • load step 50 to 100% typical • load step 100 to 50% typical setting time • maximum Protection and monitoring design of the overvoltage protection • typical property of the output short-circuit proof design of short-circuit protection enduring short circuit current RMS value • typical	0.1 % 3 % 2 ms 2 ms 5 ms < 35 V 6 A Yes Alternatively, constant current characteristic approx. 5.5 A or latching shutdown 6 A
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Closed-loop control relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical relative control precision of the output voltage load step of resistive load 50/100/50 % typical setting time • load step 50 to 100% typical • load step 100 to 50% typical setting time • load step 100 to 50% typical setting time • maximum Protection and monitoring design of the overvoltage protection • typical property of the output short-circuit proof design of short-circuit protection enduring short circuit current RMS value • typical display version for overload and short circuit Safety galvanic isolation between input and output	0.1 % 3 % 2 ms 2 ms 5 ms < 35 V 6 A Yes Alternatively, constant current characteristic approx. 5.5 A or latching shutdown 6 A LED yellow for "overload", LED red for "latching shutdown"
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Closed-loop control relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical relative control precision of the output voltage load step of resistive load 50/100/50 % typical setting time • load step 50 to 100% typical • load step 100 to 50% typical setting time • load step 100 to 50% typical setting time • maximum Protection and monitoring design of the overvoltage protection • typical property of the output short-circuit proof design of short-circuit protection enduring short circuit current RMS value • typical display version for overload and short circuit Safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current	0.1 % 3 % 2 ms 2 ms 5 ms < 35 V 6 A Yes Alternatively, constant current characteristic approx. 5.5 A or latching shutdown 6 A LED yellow for "overload", LED red for "latching shutdown" Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class I
Closed-loop control relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical relative control precision of the output voltage load step of resistive load 50/100/50 % typical setting time • load step 50 to 100% typical • load step 100 to 50% typical setting time • maximum Protection and monitoring design of the overvoltage protection • typical property of the output short-circuit proof design of short-circuit protection e typical display version for overload and short circuit Safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current • maximum	0.1 % 3 % 2 ms 2 ms 5 ms < 35 V 6 A Yes Alternatively, constant current characteristic approx. 5.5 A or latching shutdown 6 A LED yellow for "overload", LED red for "latching shutdown" Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class I 3.5 mA
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Closed-loop control relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical relative control precision of the output voltage load step of resistive load 50/100/50 % typical setting time • load step 50 to 100% typical setting time • load step 100 to 50% typical setting time • maximum Protection and monitoring design of the overvoltage protection • typical property of the output short-circuit proof design of short-circuit protection enduring short circuit current RMS value • typical display version for overload and short circuit Safety galvanic isolation between input and output galvanic isolation operating resource protection class leakage current • maximum • typical	0.1 % 3 % 2 ms 2 ms 5 ms < 35 V 6 A Yes Alternatively, constant current characteristic approx. 5.5 A or latching shutdown 6 A LED yellow for "overload", LED red for "latching shutdown" Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class 1 3.5 mA 0.25 mA

	(CSA C22.2 No. 60950-1, UL 60950-1)
CSA approval	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1)
 cCSAus, Class 1, Division 2 	No
• ATEX	No
certificate of suitability	
• IECEx	No
NEC Class 2	No
ULhazloc approval	No
FM registration	No
type of certification CB-certificate	Yes
certificate of suitability	
EAC approval	Yes
Regulatory Compliance Mark (RCM)	Yes
certificate of suitability shipbuilding approval	Yes
shipbuilding approval	ABS, DNV GL
Marine classification association	
American Bureau of Shipping Europe Ltd. (ABS)	Yes
 French marine classification society (BV) 	No
DNV GL	Yes
	No
Lloyds Register of Shipping (LRS)	
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	-25 +70 °C; With natural convection; startup tested starting from -40 °C nominal voltage
 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	screw-type terminals
• at input	L, N, PE: 1 screw terminal each for 0.2 2.5 mm ² single-core/finely stranded
● at output	+, -: 2 screw terminals each for 0.2 2.5 mm ²
for auxiliary contacts	13, 14 (alarm signal): 1 screw terminal each for 0.14 1.5 mm ²
width of the enclosure	70 mm
height of the enclosure	125 mm
depth of the enclosure	121 mm
required spacing	
• top	50 mm
• bottom	50 mm
• left	0 mm
• right	0 mm
net weight	0.6 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
MTBF at 40 °C	1 123 973 h
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

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