# **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

input		
type of the power supply network	1-phase and 2-phase AC	
supply voltage at AC	Set by means of selector switch on the device; starting from Vin > 90/180 V	
supply voltage 1 at AC	120 230 V	
supply voltage 2 at AC	230 500 V	
input voltage 1 at AC	85 264 V	
input voltage 2 at AC	176 550 V	
wide range input	Yes	
overvoltage overload capability	1300 Vpeak, 1.3 ms	
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	50/60 Hz	
line frequency	47 63 Hz	
input current		
<ul> <li>at rated input voltage 120 V</li> </ul>	2.2 A	
<ul> <li>at rated input voltage 230 V</li> </ul>	1.2 A	
<ul> <li>at rated input voltage 500 V</li> </ul>	0.61 A	
current limitation of inrush current at 25 °C maximum	35 A	
I2t value maximum	1.7 A <sup>2</sup> ·s	
fuse protection type	T 3.15 A (not accessible)	
fuse protection type 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	
output voltage adjustable	Yes; via potentiometer	
adjustable output voltage	24 28.8 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	

dieplay version for normal appration	Green LED for 24 V OK	
display version for normal operation		
behavior of the output voltage when switching on response delay maximum	Overshoot of Vout approx. 3 %	
· · · · · · · · · · · · · · · · · · ·	15	
voltage increase time of the output voltage  • typical	50 ms	
output current	30 1115	
rated value	5 A	
• rated range	05 A	
supplied active power typical	120 W	
short-term overload current	45.4	
at short-circuit during operation typical	15 A	
duration of overloading capability for excess current	05	
at short-circuit during operation	25 ms	
constant overload current	6 A	
on short-circuiting during the start-up typical     bridging of equipment	Yes; switchable characteristic	
number of parallel-switched equipment resources for increasing	2	
the power	2	
efficiency		
efficiency in percent	88 %	
power loss [W]		
<ul> <li>at rated output voltage for rated value of the output current typical</li> </ul>	17 W	
<ul> <li>during no-load operation maximum</li> </ul>	4 W	
closed-loop control		
relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical	0.1 %	
relative control precision of the output voltage load step of resistive load 50/100/50 % typical	3 %	
setting time		
<ul> <li>load step 50 to 100% typical</li> </ul>	2 ms	
load step 100 to 50% typical	2 ms	
setting time		
• maximum	5 ms	
protection and monitoring		
design of the overvoltage protection	< 35 V	
property of the output short-circuit proof	Yes	
design of short-circuit protection	Alternatively, constant current characteristic approx. 5.5 A or latching shutdown	
• typical	6 A	
enduring short circuit current RMS value		
• typical	6 A	
display version for overload and short circuit	LED yellow for "overload", LED red for "latching shutdown"	
safety	Vee	
galvanic isolation between input and output	Yes  Safaty overa law output valtage Hout ago, to EN 60050 1 and EN 50179	
galvanic isolation	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178	
operating resource protection class	Class I	
leakage current	2.5 mA	
maximum     typical	3.5 mA	
• typical	0.25 mA IP20	
protection class IP EMC	II 20	
standard		
for emitted interference	EN 55022 Class B	
for mains harmonics limitation	EN 61000-3-2	
for interference immunity	EN 61000-3-2 EN 61000-6-2	
standards, specifications, approvals	LIT 01000-0-2	
certificate of suitability		
CE marking	Yes	
UL approval	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus	
- 02 αρρίοται	(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)	

<ul> <li>UKCA marking</li> </ul>	Yes	
<ul> <li>EAC approval</li> </ul>	Yes	
<ul> <li>Regulatory Compliance Mark (RCM)</li> </ul>	Yes	
NEC Class 2	No	
• SEMI F47	Yes	
type of certification		
• BIS	Yes; R-41183539, R-41188271	
CB-certificate	Yes	
MTBF at 40 °C	1 123 973 h	
standards, specifications, approvals hazardous environments		
certificate of suitability		
• IECEx	No	
• ATEX	No	
ULhazloc approval	No	
<ul> <li>cCSAus, Class 1, Division 2</li> </ul>	No	
FM registration	No	
standards, specifications, approvals marine classification		
shipbuilding approval	Yes	
Marine classification association		
<ul> <li>American Bureau of Shipping Europe Ltd. (ABS)</li> </ul>	Yes	
<ul> <li>French marine classification society (BV)</li> </ul>	No	
<ul> <li>Det Norske Veritas (DNV)</li> </ul>	Yes	
<ul> <li>Lloyds Register of Shipping (LRS)</li> </ul>	No	
standards, specifications, approvals Environmental Product De	eclaration	
Environmental Product Declaration	Yes	
Global Warming Potential [CO2 eq]		
● total	541.7 kg	
during manufacturing	9.5 kg	
during operation	531.9 kg	
after end of life	0.14 kg	
ambient conditions		
ambient temperature		
	-25 +70; With natural convection; startup tested starting from -40 °C nominal voltage	
ambient temperature		
ambient temperature  • during operation	voltage	
ambient temperature	voltage -40 +85	
ambient temperature	voltage -40 +85 -40 +85	
ambient temperature	voltage -40 +85 -40 +85	
ambient temperature	voltage -40 +85 -40 +85 Climate class 3K3, 5 95% no condensation	
ambient temperature     • during operation     • during transport     • during storage     environmental category according to IEC 60721     connection method     type of electrical connection	voltage -40 +85 -40 +85 Climate class 3K3, 5 95% no condensation	
ambient temperature     • during operation     • during transport     • during storage     environmental category according to IEC 60721     connection method     type of electrical connection     • at input	voltage -40 +85 -40 +85 Climate class 3K3, 5 95% no condensation  screw terminal L, N, PE: 1 screw terminal each for 0.2 2.5 mm² single-core/finely stranded	
ambient temperature	voltage -40 +85 -40 +85 Climate class 3K3, 5 95% no condensation  screw terminal L, N, PE: 1 screw terminal each for 0.2 2.5 mm² single-core/finely stranded +, -: 2 screw terminals each for 0.2 2.5 mm²	
ambient temperature	voltage -40 +85 -40 +85 Climate class 3K3, 5 95% no condensation  screw terminal L, N, PE: 1 screw terminal each for 0.2 2.5 mm² single-core/finely stranded +, -: 2 screw terminals each for 0.2 2.5 mm²	
ambient temperature     • during operation      • during transport     • during storage     environmental category according to IEC 60721  connection method  type of electrical connection     • at input     • at output     • for auxiliary contacts  mechanical data	voltage -40 +85 -40 +85 Climate class 3K3, 5 95% no condensation  screw terminal L, N, PE: 1 screw terminal each for 0.2 2.5 mm² single-core/finely stranded +, -: 2 screw terminals each for 0.2 2.5 mm² 13, 14 (alarm signal): 1 screw terminal each for 0.14 1.5 mm²	
ambient temperature     • during operation      • during transport     • during storage     environmental category according to IEC 60721      connection method      type of electrical connection     • at input     • at output     • for auxiliary contacts  mechanical data  width × height × depth of the enclosure	voltage -40 +85 -40 +85 Climate class 3K3, 5 95% no condensation  screw terminal L, N, PE: 1 screw terminal each for 0.2 2.5 mm² single-core/finely stranded +, -: 2 screw terminals each for 0.2 2.5 mm² 13, 14 (alarm signal): 1 screw terminal each for 0.14 1.5 mm²	
ambient temperature     • during operation      • during transport     • during storage     environmental category according to IEC 60721  connection method  type of electrical connection     • at input     • at output     • for auxiliary contacts  mechanical data  width × height × depth of the enclosure installation width × mounting height	voltage -40 +85 -40 +85 Climate class 3K3, 5 95% no condensation  screw terminal L, N, PE: 1 screw terminal each for 0.2 2.5 mm² single-core/finely stranded +, -: 2 screw terminals each for 0.2 2.5 mm² 13, 14 (alarm signal): 1 screw terminal each for 0.14 1.5 mm²	
ambient temperature	voltage -40 +85 -40 +85 Climate class 3K3, 5 95% no condensation  screw terminal L, N, PE: 1 screw terminal each for 0.2 2.5 mm² single-core/finely stranded +, -: 2 screw terminals each for 0.2 2.5 mm² 13, 14 (alarm signal): 1 screw terminal each for 0.14 1.5 mm²  70 × 125 × 121 mm 70 mm × 225 mm	
ambient temperature     • during operation      • during transport     • during storage     environmental category according to IEC 60721  connection method  type of electrical connection     • at input     • at output     • for auxiliary contacts  mechanical data  width × height × depth of the enclosure installation width × mounting height  required spacing     • top	voltage -40 +85 -40 +85 Climate class 3K3, 5 95% no condensation  screw terminal L, N, PE: 1 screw terminal each for 0.2 2.5 mm² single-core/finely stranded +, -: 2 screw terminals each for 0.2 2.5 mm² 13, 14 (alarm signal): 1 screw terminal each for 0.14 1.5 mm²  70 × 125 × 121 mm 70 mm × 225 mm  50 mm	
ambient temperature     • during operation      • during transport     • during storage     environmental category according to IEC 60721  connection method  type of electrical connection     • at input     • at output     • for auxiliary contacts  mechanical data  width × height × depth of the enclosure installation width × mounting height  required spacing     • top     • bottom	voltage -40 +85 -40 +85 Climate class 3K3, 5 95% no condensation  screw terminal L, N, PE: 1 screw terminal each for 0.2 2.5 mm² single-core/finely stranded +, -: 2 screw terminals each for 0.2 2.5 mm² 13, 14 (alarm signal): 1 screw terminal each for 0.14 1.5 mm²  70 × 125 × 121 mm 70 mm × 225 mm  50 mm 50 mm	
ambient temperature     • during operation      • during transport     • during storage     environmental category according to IEC 60721  connection method  type of electrical connection     • at input     • at output     • for auxiliary contacts  mechanical data  width × height × depth of the enclosure installation width × mounting height  required spacing     • top     • bottom     • left	voltage -40 +85 -40 +85 Climate class 3K3, 5 95% no condensation  screw terminal L, N, PE: 1 screw terminal each for 0.2 2.5 mm² single-core/finely stranded +, -: 2 screw terminals each for 0.2 2.5 mm² 13, 14 (alarm signal): 1 screw terminal each for 0.14 1.5 mm²  70 × 125 × 121 mm 70 mm × 225 mm  50 mm 50 mm 0 mm	
ambient temperature     • during operation      • during transport     • during storage     environmental category according to IEC 60721  connection method  type of electrical connection     • at input     • at output     • for auxiliary contacts  mechanical data  width × height × depth of the enclosure installation width × mounting height  required spacing     • top     • bottom     • left     • right	voltage -40 +85 -40 +85 Climate class 3K3, 5 95% no condensation  screw terminal L, N, PE: 1 screw terminal each for 0.2 2.5 mm² single-core/finely stranded +, -: 2 screw terminals each for 0.2 2.5 mm² 13, 14 (alarm signal): 1 screw terminal each for 0.14 1.5 mm²  70 × 125 × 121 mm 70 mm × 225 mm  50 mm 50 mm 0 mm 0 mm	
ambient temperature     • during operation      • during transport     • during storage     environmental category according to IEC 60721  connection method  type of electrical connection     • at input     • at output     • for auxiliary contacts  mechanical data  width × height × depth of the enclosure installation width × mounting height  required spacing     • top     • bottom     • left     • right fastening method	voltage -40 +85 -40 +85 Climate class 3K3, 5 95% no condensation  screw terminal L, N, PE: 1 screw terminal each for 0.2 2.5 mm² single-core/finely stranded +, -: 2 screw terminals each for 0.2 2.5 mm² 13, 14 (alarm signal): 1 screw terminal each for 0.14 1.5 mm²  70 × 125 × 121 mm 70 mm × 225 mm  50 mm 50 mm 0 mm 0 mm Snaps onto DIN rail EN 60715 35x7.5/15	
ambient temperature     • during operation      • during transport     • during storage     environmental category according to IEC 60721  connection method  type of electrical connection     • at input     • at output     • for auxiliary contacts  mechanical data  width × height × depth of the enclosure installation width × mounting height  required spacing     • top     • bottom     • left     • right  fastening method     • standard rail mounting	voltage -40 +85 -40 +85 Climate class 3K3, 5 95% no condensation  screw terminal L, N, PE: 1 screw terminal each for 0.2 2.5 mm² single-core/finely stranded +, -: 2 screw terminals each for 0.2 2.5 mm² 13, 14 (alarm signal): 1 screw terminal each for 0.14 1.5 mm²  70 × 125 × 121 mm 70 mm × 225 mm  50 mm 50 mm 0 mm 0 mm Snaps onto DIN rail EN 60715 35x7.5/15 Yes	
ambient temperature     • during operation      • during storage     environmental category according to IEC 60721  connection method  type of electrical connection     • at input     • at output     • for auxiliary contacts  mechanical data  width × height × depth of the enclosure installation width × mounting height  required spacing     • top     • bottom     • left     • right  fastening method     • standard rail mounting     • S7 rail mounting	voltage -40 +85 -40 +85 Climate class 3K3, 5 95% no condensation  screw terminal L, N, PE: 1 screw terminal each for 0.2 2.5 mm² single-core/finely stranded +, -: 2 screw terminals each for 0.2 2.5 mm² 13, 14 (alarm signal): 1 screw terminal each for 0.14 1.5 mm²  70 × 125 × 121 mm 70 mm × 225 mm  50 mm 50 mm 0 mm 0 mm Snaps onto DIN rail EN 60715 35x7.5/15 Yes No	
ambient temperature     • during operation      • during transport     • during storage     environmental category according to IEC 60721  connection method  type of electrical connection     • at input     • at output     • for auxiliary contacts  mechanical data  width × height × depth of the enclosure installation width × mounting height  required spacing     • top     • bottom     • left     • right  fastening method     • standard rail mounting     • s7 rail mounting     • wall mounting housing can be lined up	voltage -40 +85 -40 +85 Climate class 3K3, 5 95% no condensation  screw terminal L, N, PE: 1 screw terminal each for 0.2 2.5 mm² single-core/finely stranded +, -: 2 screw terminals each for 0.2 2.5 mm² 13, 14 (alarm signal): 1 screw terminal each for 0.14 1.5 mm²  70 × 125 × 121 mm 70 mm × 225 mm  50 mm 50 mm 0 mm Snaps onto DIN rail EN 60715 35x7.5/15 Yes No No No	
ambient temperature     • during operation      • during transport     • during storage     environmental category according to IEC 60721  connection method  type of electrical connection     • at input     • at output     • for auxiliary contacts  mechanical data  width × height × depth of the enclosure installation width × mounting height  required spacing     • top     • bottom     • left     • right  fastening method     • standard rail mounting     • S7 rail mounting     • wall mounting housing can be lined up net weight	voltage -40 +85 -40 +85 Climate class 3K3, 5 95% no condensation  screw terminal L, N, PE: 1 screw terminal each for 0.2 2.5 mm² single-core/finely stranded +, -: 2 screw terminals each for 0.2 2.5 mm² 13, 14 (alarm signal): 1 screw terminal each for 0.14 1.5 mm²  70 × 125 × 121 mm 70 mm × 225 mm  50 mm 50 mm 0 mm Snaps onto DIN rail EN 60715 35x7.5/15 Yes No No	
ambient temperature     • during operation      • during transport     • during storage     environmental category according to IEC 60721  connection method  type of electrical connection     • at input     • at output     • for auxiliary contacts  mechanical data  width × height × depth of the enclosure installation width × mounting height  required spacing     • top     • bottom     • left     • right  fastening method     • standard rail mounting     • S7 rail mounting     • wall mounting housing can be lined up net weight  accessories	voltage -40 +85 -40 +85 Climate class 3K3, 5 95% no condensation  screw terminal L, N, PE: 1 screw terminal each for 0.2 2.5 mm² single-core/finely stranded +, -: 2 screw terminals each for 0.2 2.5 mm² 13, 14 (alarm signal): 1 screw terminal each for 0.14 1.5 mm²  70 × 125 × 121 mm 70 mm × 225 mm  50 mm 50 mm 0 mm Snaps onto DIN rail EN 60715 35x7.5/15 Yes No No Yes 0.6 kg	
ambient temperature     • during operation      • during transport     • during storage     environmental category according to IEC 60721  connection method  type of electrical connection     • at input     • at output     • for auxiliary contacts  mechanical data  width × height × depth of the enclosure installation width × mounting height  required spacing     • top     • bottom     • left     • right  fastening method     • standard rail mounting     • S7 rail mounting     • wall mounting     housing can be lined up net weight  accessories electrical accessories	voltage -40 +85 -40 +85 Climate class 3K3, 5 95% no condensation  screw terminal L, N, PE: 1 screw terminal each for 0.2 2.5 mm² single-core/finely stranded +, -: 2 screw terminals each for 0.2 2.5 mm² 13, 14 (alarm signal): 1 screw terminal each for 0.14 1.5 mm²  70 × 125 × 121 mm 70 mm × 225 mm  50 mm 50 mm 0 mm Snaps onto DIN rail EN 60715 35x7.5/15 Yes No No No	
ambient temperature     • during operation      • during transport     • during storage     environmental category according to IEC 60721  connection method  type of electrical connection     • at input     • at output     • for auxiliary contacts  mechanical data  width × height × depth of the enclosure installation width × mounting height  required spacing     • top     • bottom     • left     • right  fastening method     • standard rail mounting     • S7 rail mounting     • wall mounting housing can be lined up net weight  accessories	voltage -40 +85 -40 +85 Climate class 3K3, 5 95% no condensation  screw terminal L, N, PE: 1 screw terminal each for 0.2 2.5 mm² single-core/finely stranded +, -: 2 screw terminals each for 0.2 2.5 mm² 13, 14 (alarm signal): 1 screw terminal each for 0.14 1.5 mm²  70 × 125 × 121 mm 70 mm × 225 mm  50 mm 50 mm 0 mm Snaps onto DIN rail EN 60715 35x7.5/15 Yes No No Yes 0.6 kg	

• to website: Industry Mall

• to web page: selection aid TIA Selection Tool

• to web page: power supplies

• to website: CAx-Download-Manager

• to website: Industry Online Support

https://mall.industry.siemens.com

https://www.siemens.com/tstcloud

https://siemens.com/sitop

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 Declaration of Conformity







**General Product Approval** 

Marine / Shipping

**Environment** 



**BIS CRS** 







last modified:

11/25/2024