



SITOP PSU6200/3AC/48VDC/20A

SITOP PSU6200 48 V/20 A Stabilized power supply Input: 400 - 500 V AC Output: 48 V DC/20 A with diagnostic interface

Technical Product Detail Page

<https://i.siemens.com/1P6EP3447-7SB00-3AX0>

### 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   |
| supply voltage at DC   | 500 ... 550 V   |
| input voltage at DC  | 450 ... 600 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 $V_{in} = 400$ V   |
| line frequency   | 50/60 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                 | 48 V  |
| output voltage                                   |   |
| • at output 1 at DC rated value                  | 48 V  |
| output voltage adjustable                        | Yes; via potentiometer                      |
| adjustable output voltage                        | 48 ... 56 V; max. 960 W (1152 W up to 45°C) |
| 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  | 100 mV                                      |
| • typical  | 80 mV                                       |
| voltage peak                                     |   |
| • maximum  | 80 mV                                       |
| • typical  | 30 mV                                       |

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| display version for normal operation  | Green LED for 48 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 $V_{out} < 1 \%$  |
| response delay maximum  | 0.5 s  |
| voltage increase time of the output voltage <ul style="list-style-type: none"> <li>• typical</li> </ul>   | 200 ms   |
| output current <ul style="list-style-type: none"> <li>• rated value</li> <li>• rated range</li> </ul>   | 20 A<br>0 ... 20 A; 24 A up to +45°C; +60 ... +70 °C: Derating 3%/K                                    |
| supplied active power typical   | 960 W  |
| short-term overload current <ul style="list-style-type: none"> <li>• on short-circuiting during the start-up typical</li> <li>• at short-circuit during operation typical</li> </ul>  | 30 A<br>30 A   |
| parallel switching of outputs   | can be set with DIP switch   |
| bridging of equipment   | Yes; switchable characteristic   |
| number of parallel-switched equipment resources for increasing the power  | 2  |
| <b>efficiency</b>   |  |
| efficiency in percent   | 96.6 %   |
| power loss [W] <ul style="list-style-type: none"> <li>• at rated output voltage for rated value of the output current typical</li> <li>• during no-load operation maximum</li> </ul>  | 32 W<br>4.5 W  |
| <b>closed-loop control</b>  |  |
| relative control precision of the output voltage at load step of resistive load 10/90/10 % typical  | 4 %  |
| setting time <ul style="list-style-type: none"> <li>• load step 10 to 90% typical</li> <li>• load step 90 to 10% typical</li> <li>• maximum</li> </ul>  | 4 ms<br>10 ms<br>10 ms   |
| <b>protection and monitoring</b>  |  |
| design of the overvoltage protection  | < 60 V   |
| property of the output short-circuit proof  | Yes  |
| design of short-circuit protection <ul style="list-style-type: none"> <li>• typical</li> </ul>  | Shutdown and periodic restart attempts<br>24 A   |
| overcurrent overload capability <ul style="list-style-type: none"> <li>• in normal operation</li> </ul>   | overload capability 150 % $I_{out}$ rated up to 5 s/min  |
| <b>safety</b>   |  |
| galvanic isolation between input and output   | Yes  |
| galvanic isolation  | ES1 output voltage $V_{out}$ according to EN 62368-1   |
| operating resource protection class   | Class I  |
| leakage current <ul style="list-style-type: none"> <li>• maximum</li> </ul>   | 3.5 mA   |
| protection class IP   | IP20   |
| <b>EMC</b>  |  |
| standard <ul style="list-style-type: none"> <li>• for emitted interference</li> <li>• for mains harmonics limitation</li> <li>• for interference immunity</li> </ul>  | EN 55022 Class B<br>EN 61000-3-2<br>EN 61000-6-2   |
| <b>standards, specifications, approvals</b>   |  |
| certificate of suitability <ul style="list-style-type: none"> <li>• CE marking</li> <li>• UL approval</li> <li>• UKCA marking</li> <li>• EAC approval</li> <li>• Regulatory Compliance Mark (RCM)</li> <li>• NEC Class 2</li> <li>• SEMI F47</li> </ul> | Yes<br>Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259<br>Yes<br>Yes<br>Yes<br>No<br>Yes |

|   |  |
|---|--|
| type of certification   |  |
| • BIS   | Yes; R-41183539  |
| • CB-certificate  | Yes  |
| <b>standards, specifications, approvals hazardous environments</b>            |  |
| certificate of suitability  |  |
| • IECEx   | No   |
| • ATEX  | No   |
| • ULhazloc approval   | No   |
| • FM registration   | No   |
| <b>standards, specifications, approvals marine classification</b>             |  |
| shipbuilding approval   | Yes  |
| Marine classification association   |  |
| • American Bureau of Shipping Europe Ltd. (ABS)                               | Yes  |
| • French marine classification society (BV)                                   | No   |
| • Det Norske Veritas (DNV)  | Yes  |
| • Lloyds Register of Shipping (LRS)   | No   |
| <b>standards, specifications, approvals Environmental Product Declaration</b> |  |
| Environmental Product Declaration   | Yes  |
| global warming potential [CO2 eq]   |  |
| • total   | 1 042.1 kg   |
| • during manufacturing  | 39.2 kg  |
| • during operation  | 1 001.5 kg   |
| • after end of life   | 0.97 kg  |
| <b>ambient conditions</b>   |  |
| 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   |
| <b>connection method</b>  |  |
| type of electrical connection   | push-in terminals  |
| • at input  | L1, L2, L3, PE: push-in for 0.5 ... 10 mm²   |
| • at output   | +1, +2, -1, -2, -3: push-in for 0.75 ... 16 mm²  |
| • for auxiliary contacts  | 13, 14 (alarm signal): 1 push-in terminal each for 0.2 ... 1.5 mm²   |
| <b>mechanical data</b>  |  |
| width × height × depth of the enclosure                                       | 95 × 135 × 155 mm  |
| installation width × mounting height  | 95 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   |
| • DIN-rail mounting   | Yes  |
| • S7 rail mounting  | No   |
| • wall mounting   | No   |
| housing can be lined up   | Yes  |
| net weight  | 2.1 kg   |
| <b>accessories</b>  |  |
| electrical accessories  | Buffer module, redundancy module   |
| mechanical accessories  | Identification labels SIMATIC ET 200SP 6ES7193-6LF30-0AW0  |
| <b>further information internet links</b>                                     |  |
| internet link   |  |
| • to website: Industry Mall   | <a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a>                                  |
| • to web page: selection aid TIA Selection Tool                               | <a href="https://www.siemens.com/tstcloud">https://www.siemens.com/tstcloud</a>                                    |
| • to web page: power supplies   | <a href="https://siemens.com/sitop">https://siemens.com/sitop</a>  |
| • to website: CAx-Download-Manager  | <a href="https://siemens.com/cax">https://siemens.com/cax</a>  |
| • to website: Industry Online Support   | <a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>                            |

|                               |   |
|-------------------------------|---|
| identification link           | Yes; acc. to IEC 61406-1:2022   |
| <b>additional information</b> |   |
| other information             | Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)   |
| <b>security information</b>   |   |
| 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 <a href="https://www.siemens.com/cybersecurity-industry">www.siemens.com/cybersecurity-industry</a> . 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 <a href="https://www.siemens.com/cert">https://www.siemens.com/cert</a> . (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   | 10      | EC002540       |
|                 | 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](#)

[China RoHS](#)



|                          |  |                               |                         |  |  |
|--------------------------|--|-------------------------------|-------------------------|--|--|
| General Product Approval |  |                               | Maritime application    |  |  |
|                          |  | <a href="#">Miscellaneous</a> | <a href="#">BIS CRS</a> |  |  |

| Environment |  |
|-------------|--|
|             |  |

