



SITOP PSU100C/1ACDC/12VDC/6.5A

SITOP PSU100C 12 V/6.5 A stabilized power supply input: 120-230 V AC (110-300 V DC) output: 12 V DC/6.5 A

| input | |
|--|---|
| type of the power supply network | 1-phase AC or DC |
| supply voltage at AC | |
| • minimum rated value | 100 V |
| • maximum rated value | 230 V |
| • initial value | 85 V |
| • full-scale value | 264 V |
| input voltage at DC | 110 ... 300 V |
| wide range input | Yes |
| overvoltage overload capability | 2.3 × Vin rated, 1.3 ms |
| buffering time for rated value of the output current in the event of power failure minimum | 20 ms |
| operating condition of the mains buffering | at Vin = 230 V |
| line frequency | 50/60 Hz |
| line frequency | 47 ... 63 Hz |
| input current | |
| • at rated input voltage 100 V | 1.6 A |
| • at rated input voltage 230 V | 0.8 A |
| current limitation of inrush current at 25 °C maximum | 31 A |
| I2t value maximum | 3 A²·s |
| fuse protection type | internal |
| fuse protection type in the feeder | Recommended miniature circuit breaker: from 16 A characteristic B or from 10 A characteristic C |
| output | |
| voltage curve at output | Controlled, isolated DC voltage |
| output voltage at DC rated value | 12 V |
| output voltage | |
| • at output 1 at DC rated value | 12 V |
| output voltage adjustable | Yes; via potentiometer |
| adjustable output voltage | 10.5 ... 12.9 V |
| relative control precision of the output voltage | |
| • on slow fluctuation of input voltage | 0.5 % |
| • on slow fluctuation of ohm loading | 1 % |
| residual ripple | |
| • maximum | 200 mV |
| • typical | 80 mV |
| voltage peak | |
| • maximum | 300 mV |
| • typical | 80 mV |
| display version for normal operation | Green LED for output voltage OK |

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| behavior of the output voltage when switching on | Overshoot of Vout approx. 1 % |
| response delay maximum | 1 s |
| voltage increase time of the output voltage <ul style="list-style-type: none"> • typical | 500 ms |
| output current <ul style="list-style-type: none"> • rated value • rated range | 6.5 A 0 ... 6.5 A; +55 ... +70 °C: Derating 1.6%/K; at +70 °C Iout rated 4.9 A |
| supplied active power typical | 78 W |
| bridging of equipment | Yes; Start-up with single nominal load only |
| number of parallel-switched equipment resources for increasing the power | 2 |
| efficiency | |
| efficiency in percent | 86 % |
| power loss [W] <ul style="list-style-type: none"> • at rated output voltage for rated value of the output current typical • during no-load operation maximum | 12.5 W 0.75 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 at load step of resistive load 10/90/10 % typical | 3 % |
| setting time <ul style="list-style-type: none"> • load step 10 to 90% typical • load step 90 to 10% typical | 3 ms 3 ms |
| protection and monitoring | |
| design of the overvoltage protection | Yes, according to EN 60950-1 |
| property of the output short-circuit proof | Yes |
| design of short-circuit protection <ul style="list-style-type: none"> • typical | Electronic shutdown, automatic restart 7.2 A |
| safety | |
| galvanic isolation between input and output | Yes |
| galvanic isolation | Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 |
| operating resource protection class | Class I |
| leakage current <ul style="list-style-type: none"> • maximum • typical | 3.5 mA 0.4 mA |
| protection class IP | IP20 |
| standard <ul style="list-style-type: none"> • for emitted interference • for mains harmonics limitation • for interference immunity | EN 55022 Class B EN 61000-3-2 EN 61000-6-2 |
| standards, specifications, approvals | |
| certificate of suitability <ul style="list-style-type: none"> • CE marking • UL approval • CSA approval • EAC approval • NEC Class 2 | 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) Yes No |
| type of certification <ul style="list-style-type: none"> • CB-certificate | Yes |
| MTBF at 40 °C | 2 853 800 h |
| standards, specifications, approvals hazardous environments | |
| certificate of suitability <ul style="list-style-type: none"> • IECEx • ATEX • ULhazloc approval • cCSAus, Class 1, Division 2 • FM registration | No No No No No |
| standards, specifications, approvals marine classification | |

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| 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 |
| standards, specifications, approvals Environmental Product Declaration | |
| Environmental Product Declaration | Yes |
| Global Warming Potential [CO ₂ eq] | |
| • total | 397.6 kg |
| • during manufacturing | 6.3 kg |
| • during operation | 391 kg |
| • after end of life | 0.2 kg |
| ambient conditions | |
| ambient temperature | |
| • during operation | -20 ... +70 °C; with natural convection |
| • during transport | -40 ... +85 °C |
| • during storage | -40 ... +85 °C |
| environmental category according to IEC 60721 | Climate class 3K3, 5 ... 95% no condensation |
| connection method | |
| type of electrical connection | screw terminal |
| • at input | L, N, PE: Removable screw terminal, each for 1 x 0.5 ... 2.5 mm ² |
| • at output | +: 1 screw terminal for 0.5 ... 2.5 mm ² ; -: 2 screw terminals for 0.5 ... 2.5 mm ² |
| • for auxiliary contacts | - |
| mechanical data | |
| width × height × depth of the enclosure | 52.5 × 100 |
| installation width × mounting height | 52.5 mm |
| required spacing | |
| • top | 50 mm |
| • bottom | 50 mm |
| • left | 0 mm |
| • right | 0 mm |
| fastening method | Snaps onto DIN rail EN 60715 35x7.5/15 |
| • standard rail mounting | Yes |
| • S7 rail mounting | No |
| • wall mounting | No |
| housing can be lined up | Yes |
| net weight | 0.32 kg |
| accessories | |
| electrical accessories | Removable spring-type terminal 6EP1971-5BA00 |
| further information internet links | |
| internet link | |
| • to website: Industry Mall | https://mall.industry.siemens.com |
| • to web page: selection aid TIA Selection Tool | https://siemens.com/tst |
| • to website: Industrial communication | http://www.siemens.com/simatic-net |
| • to website: CAX-Download-Manager | http://www.siemens.com/cax |
| • to website: Industry Online Support | 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 |

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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



CB



CB



CSA

[Manufacturer Declaration](#)

[Declaration of Conformity](#)



General Product Approval

For use in hazardous locations

Marine / Shipping



UL



ATEX



IECEX



CSA

[CCC-Ex](#)



ABS

Marine / Shipping

Environment



DNV



EPD

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