



SITOP PSU8200/3AC/24VDC/40A

SITOP PSU8200 24 V/40 A stabilized power supply input: 400-500 V 3 AC output: 24 V DC/40 A

| input  |  |
|--|--|
| type of the power supply network   | 3-phase AC   |
| supply voltage at AC   |  |
| • minimum rated value  | 400 V  |
| • maximum rated value  | 500 V  |
| • initial value  | 320 V  |
| • full-scale value   | 575 V  |
| wide range input   | Yes  |
| buffering time for rated value of the output current in the event of power failure minimum | 10 ms  |
| operating condition of the mains buffering   | at $V_{in} = 400\text{ V}$   |
| line frequency   | 50/60 Hz   |
| line frequency   | 45 ... 65 Hz   |
| input current  |  |
| • at rated input voltage 400 V   | 2.1 A  |
| • at rated input voltage 500 V   | 1.7 A  |
| current limitation of inrush current at 25 °C maximum                                      | 13 A   |
| I <sup>2</sup> t value maximum   | 2.24 A <sup>2</sup> ·s   |
| fuse protection type   | none   |
| fuse protection type in the feeder   | Required: 3-pole connected miniature circuit breaker 10 ... 16 A characteristic C or circuit breaker 3RV2011-1DA10 (setting 3 A) or 3RV2711-1DD10 (UL 489) |
| 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 V; max. 960 W  |
| 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   | 0.2 %  |
| residual ripple  |  |
| • maximum  | 100 mV   |
| voltage peak   |  |
| • maximum  | 240 mV   |
| 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   | minimal overshooting (< 2 %)   |
| response delay maximum   | 0.1 s  |

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| voltage increase time of the output voltage   |   |
| • maximum   | 100 ms  |
| output current  |   |
| • rated value   | 40 A  |
| • rated range   | 0 ... 40 A; +60 ... +70 °C: Derating 4%/K   |
| supplied active power typical   | 960 W   |
| short-term overload current   |   |
| • at short-circuit during operation typical   | 120 A   |
| duration of overloading capability for excess current   |   |
| • at short-circuit during operation   | 25 ms   |
| constant overload current   |   |
| • on short-circuiting during the start-up typical   | 44 A  |
| bridging of equipment   | Yes; switchable characteristic  |
| number of parallel-switched equipment resources for increasing the power  | 2   |
| <b>efficiency</b>   |   |
| efficiency in percent   | 94 %  |
| power loss [W]  |   |
| • at rated output voltage for rated value of the output current typical   | 66 W  |
| • during no-load operation maximum  | 4 W   |
| <b>closed-loop control</b>  |   |
| relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical | 1 %   |
| relative control precision of the output voltage load step of resistive load 50/100/50 % typical                | 3 %   |
| setting time  |   |
| • maximum   | 10 ms   |
| <b>protection and monitoring</b>  |   |
| design of the overvoltage protection  | < 31.8 V  |
| property of the output short-circuit proof  | Yes   |
| design of short-circuit protection  | Alternatively, constant current characteristic approx. 44 A or latching shutdown                          |
| • typical   | 44 A  |
| overcurrent overload capability   |   |
| • in normal operation   | overload capability 150 % I <sub>out</sub> rated up to 5 s/min  |
| enduring short circuit current RMS value  |   |
| • typical   | 50 A  |
| display version for overload and short circuit  | LED yellow for "overload", LED red for "latching shutdown"  |
| <b>safety</b>   |   |
| galvanic isolation between input and output   | Yes   |
| galvanic isolation  | Safety extra-low output voltage U <sub>out</sub> acc. to EN 60950-1 and EN 50178                          |
| operating resource protection class   | Class I   |
| leakage current   |   |
| • maximum   | 1 mA  |
| • typical   | 0.6 mA  |
| protection class IP   | IP20  |
| <b>EMC</b>  |   |
| standard  |   |
| • for emitted interference  | EN 55022 Class B  |
| • for mains harmonics limitation  | EN 61000-3-2  |
| • for interference immunity   | EN 61000-6-2  |
| <b>standards, specifications, approvals</b>   |   |
| certificate of suitability  |   |
| • CE marking  | Yes   |
| • UL approval   | Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (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) |
| • EAC approval  | Yes   |
| • Regulatory Compliance Mark (RCM)  | Yes   |
| • NEC Class 2   | No  |
| • SEMI F47  | Yes   |

|   |  |
|---|--|
| type of certification   |  |
| <ul style="list-style-type: none"> <li>• BIS</li> <li>• CB-certificate</li> </ul>   | Yes; R-41183539<br>Yes   |
| MTBF at 40 °C   | 517 015 h  |
| <b>standards, specifications, approvals hazardous environments</b>  |  |
| certificate of suitability  |  |
| <ul style="list-style-type: none"> <li>• IECEx</li> <li>• ATEX</li> <li>• ULhazloc approval</li> <li>• cCSAus, Class 1, Division 2</li> <li>• FM registration</li> </ul>  | No<br>No<br>No<br>No<br>No   |
| <b>standards, specifications, approvals marine classification</b>   |  |
| shipbuilding approval   | Yes  |
| Marine classification association   |  |
| <ul style="list-style-type: none"> <li>• American Bureau of Shipping Europe Ltd. (ABS)</li> <li>• French marine classification society (BV)</li> <li>• Det Norske Veritas (DNV)</li> <li>• Lloyds Register of Shipping (LRS)</li> </ul> | Yes<br>No<br>Yes<br>No   |
| <b>standards, specifications, approvals Environmental Product Declaration</b>   |  |
| Environmental Product Declaration   | Yes  |
| global warming potential [CO2 eq]   |  |
| <ul style="list-style-type: none"> <li>• total</li> <li>• during manufacturing</li> <li>• during operation</li> <li>• after end of life</li> </ul>  | 2 118.7 kg<br>52 kg<br>2 065.2 kg<br>0.74 kg   |
| <b>ambient conditions</b>   |  |
| ambient temperature   |  |
| <ul style="list-style-type: none"> <li>• during operation</li> <li>• during transport</li> <li>• during storage</li> </ul>  | -25 ... +70; With natural convection<br>-40 ... +85<br>-40 ... +85   |
| environmental category according to IEC 60721   | Climate class 3K3, 5 ... 95% no condensation   |
| <b>connection method</b>  |  |
| type of electrical connection   | screw terminal   |
| <ul style="list-style-type: none"> <li>• at input</li> <li>• at output</li> <li>• for auxiliary contacts</li> </ul>   | L1, L2, L3, PE: 1 screw terminal each for 0.5 ... 4 mm <sup>2</sup> single-core/finely stranded<br>+: 2 screw terminals each for 0.5 ... 16 mm <sup>2</sup> ; -: 3 screw terminals each for 0.5 ... 16 mm <sup>2</sup><br>13, 14 (alarm signal), 15, 16 (Remote): 1 screw terminal each for 0.05 ... 2.5 mm <sup>2</sup> |
| <b>mechanical data</b>  |  |
| width × height × depth of the enclosure   | 135 × 145 × 150 mm   |
| installation width × mounting height  | 135 mm × 225 mm  |
| required spacing  |  |
| <ul style="list-style-type: none"> <li>• top</li> <li>• bottom</li> <li>• left</li> <li>• right</li> </ul>  | 40 mm<br>40 mm<br>0 mm<br>0 mm   |
| fastening method  | Snaps onto DIN rail EN 60715 35x15   |
| <ul style="list-style-type: none"> <li>• DIN-rail mounting</li> <li>• S7 rail mounting</li> <li>• wall mounting</li> </ul>  | Yes<br>No<br>No  |
| housing can be lined up   | Yes  |
| net weight  | 3.3 kg   |
| <b>accessories</b>  |  |
| electrical accessories  | Buffer module  |
| mechanical accessories  | Device identification label 20 mm × 7 mm, TI-grey 3RT2900-1SB20  |
| <b>further information internet links</b>   |  |
| internet link   |  |
| <ul style="list-style-type: none"> <li>• to website: Industry Mall</li> <li>• to web page: selection aid TIA Selection Tool</li> <li>• to web page: power supplies</li> </ul>   | <a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a><br><a href="https://www.siemens.com/tstcloud">https://www.siemens.com/tstcloud</a><br><a href="https://siemens.com/sitop">https://siemens.com/sitop</a>  |

- to website: CAx-Download-Manager
- to website: Industry Online Support

<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

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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



[Manufacturer Declaration](#)

[Declaration of Conformity](#)



General Product Approval

Marine / Shipping

Environment



[BIS CRS](#)



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