

SITOP PSU100D/1AC/12VDC/8.3A

\*\*\*\*\* spare part \*\*\*\*\* PSU100D 12 V/8.3 A stabilized power supply input:  
100-240 V AC output: 12 V DC/8.3 A



### input

|                                                                                            |                                                                                                 |
|--------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| type of the power supply network                                                           | 1-phase AC                                                                                      |
| supply voltage at AC                                                                       |                                                                                                 |
| • minimum rated value                                                                      | 100 V                                                                                           |
| • maximum rated value                                                                      | 240 V                                                                                           |
| • initial value                                                                            | 85 V                                                                                            |
| • full-scale value                                                                         | 264 V                                                                                           |
| wide range input                                                                           | Yes                                                                                             |
| buffering time for rated value of the output current in the event of power failure minimum | 15 ms                                                                                           |
| operating condition of the mains buffering                                                 | at $V_{in} = 115/230\text{ V}$                                                                  |
| line frequency                                                                             | 50/60 Hz                                                                                        |
| line frequency                                                                             | 47 ... 63 Hz                                                                                    |
| input current                                                                              |                                                                                                 |
| • at rated input voltage 100 V                                                             | 2 A                                                                                             |
| • at rated input voltage 240 V                                                             | 1.1 A                                                                                           |
| current limitation of inrush current at 25 °C maximum                                      | 75 A                                                                                            |
| I2t value maximum                                                                          | 5.5 A <sup>2</sup> s                                                                            |
| fuse protection type                                                                       | internal                                                                                        |
| fuse protection type in the feeder                                                         | Recommended miniature circuit breaker: from 10 A characteristic C or from 16 A characteristic B |

### 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                        | 11 ... 14 V                     |
| relative overall tolerance of the voltage        | 2 %                             |
| 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                                        | 100 mV                          |
| voltage peak                                     |                                 |
| • maximum                                        | 100 mV                          |
| display version for normal operation             | Green LED for 12 V OK           |
| behavior of the output voltage when switching on | Overshoot of $V_{out} < 2\%$    |
| response delay maximum                           | 1 s                             |
| voltage increase time of the output voltage      |                                 |

|                                                                                                                           |                                                                                                                        |
|---------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• maximum</li> </ul>                                                               | 30 ms                                                                                                                  |
| output current                                                                                                            |                                                                                                                        |
| <ul style="list-style-type: none"> <li>• rated value</li> </ul>                                                           | 8.3 A                                                                                                                  |
| <ul style="list-style-type: none"> <li>• rated range</li> </ul>                                                           | 0 ... 8.3 A; +50 ... +70 °C: Derating 2.5%/K                                                                           |
| supplied active power typical                                                                                             | 100 W                                                                                                                  |
| bridging of equipment                                                                                                     | Yes                                                                                                                    |
| number of parallel-switched equipment resources for increasing the power                                                  | 2                                                                                                                      |
| <b>efficiency</b>                                                                                                         |                                                                                                                        |
| efficiency in percent                                                                                                     | 84 %                                                                                                                   |
| power loss [W]                                                                                                            |                                                                                                                        |
| <ul style="list-style-type: none"> <li>• at rated output voltage for rated value of the output current typical</li> </ul> | 19 W                                                                                                                   |
| <b>closed-loop control</b>                                                                                                |                                                                                                                        |
| relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical           | 0.5 %                                                                                                                  |
| relative control precision of the output voltage load step of resistive load 50/100/50 % typical                          | 5 %                                                                                                                    |
| <b>protection and monitoring</b>                                                                                          |                                                                                                                        |
| design of the overvoltage protection                                                                                      | < 17.6 V                                                                                                               |
| property of the output short-circuit proof                                                                                | Yes                                                                                                                    |
| design of short-circuit protection                                                                                        | Electronic shutdown, automatic restart                                                                                 |
| <ul style="list-style-type: none"> <li>• typical</li> </ul>                                                               | 9.9 A                                                                                                                  |
| enduring short circuit current RMS value                                                                                  |                                                                                                                        |
| <ul style="list-style-type: none"> <li>• typical</li> </ul>                                                               | 10 A                                                                                                                   |
| <b>safety</b>                                                                                                             |                                                                                                                        |
| galvanic isolation between input and output                                                                               | Yes                                                                                                                    |
| galvanic isolation                                                                                                        | Safety extra low output voltage Vout according to EN 60950-1                                                           |
| operating resource protection class                                                                                       | Class I                                                                                                                |
| leakage current                                                                                                           |                                                                                                                        |
| <ul style="list-style-type: none"> <li>• maximum</li> </ul>                                                               | 3.5 mA                                                                                                                 |
| <ul style="list-style-type: none"> <li>• typical</li> </ul>                                                               | 1 mA                                                                                                                   |
| protection class IP                                                                                                       | IP20                                                                                                                   |
| <b>EMC</b>                                                                                                                |                                                                                                                        |
| standard                                                                                                                  |                                                                                                                        |
| <ul style="list-style-type: none"> <li>• for emitted interference</li> </ul>                                              | EN 55022 Class B                                                                                                       |
| <ul style="list-style-type: none"> <li>• for mains harmonics limitation</li> </ul>                                        | EN 61000-3-2                                                                                                           |
| <ul style="list-style-type: none"> <li>• for interference immunity</li> </ul>                                             | EN 61000-6-2                                                                                                           |
| <b>standards, specifications, approvals</b>                                                                               |                                                                                                                        |
| certificate of suitability                                                                                                |                                                                                                                        |
| <ul style="list-style-type: none"> <li>• CE marking</li> </ul>                                                            | Yes                                                                                                                    |
| <ul style="list-style-type: none"> <li>• UL approval</li> </ul>                                                           | Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cURus (UL 60950-1, CSA C22.2 No. 60950-1), File E151273 |
| <ul style="list-style-type: none"> <li>• EAC approval</li> </ul>                                                          | Yes                                                                                                                    |
| <ul style="list-style-type: none"> <li>• NEC Class 2</li> </ul>                                                           | No                                                                                                                     |
| type of certification                                                                                                     |                                                                                                                        |
| <ul style="list-style-type: none"> <li>• CB-certificate</li> </ul>                                                        | Yes                                                                                                                    |
| <b>standards, specifications, approvals hazardous environments</b>                                                        |                                                                                                                        |
| certificate of suitability                                                                                                |                                                                                                                        |
| <ul style="list-style-type: none"> <li>• IECEx</li> </ul>                                                                 | No                                                                                                                     |
| <ul style="list-style-type: none"> <li>• ATEX</li> </ul>                                                                  | No                                                                                                                     |
| <ul style="list-style-type: none"> <li>• ULhazloc approval</li> </ul>                                                     | No                                                                                                                     |
| <ul style="list-style-type: none"> <li>• FM registration</li> </ul>                                                       | No                                                                                                                     |
| <b>standards, specifications, approvals marine classification</b>                                                         |                                                                                                                        |
| shipbuilding approval                                                                                                     | No                                                                                                                     |
| Marine classification association                                                                                         |                                                                                                                        |
| <ul style="list-style-type: none"> <li>• American Bureau of Shipping Europe Ltd. (ABS)</li> </ul>                         | No                                                                                                                     |
| <ul style="list-style-type: none"> <li>• French marine classification society (BV)</li> </ul>                             | No                                                                                                                     |
| <ul style="list-style-type: none"> <li>• Det Norske Veritas (DNV)</li> </ul>                                              | No                                                                                                                     |
| <ul style="list-style-type: none"> <li>• Lloyds Register of Shipping (LRS)</li> </ul>                                     | No                                                                                                                     |

| standards, specifications, approvals Environmental Product Declaration |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |
|------------------------------------------------------------------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| Environmental Product Declaration                                      |        | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                |
| global warming potential [CO2 eq]                                      |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |
| • total                                                                |        | 605.8 kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                |
| • during manufacturing                                                 |        | 11.3 kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                |
| • during operation                                                     |        | 594.2 kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                |
| • after end of life                                                    |        | 0.17 kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                |
| ambient conditions                                                     |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |
| ambient temperature                                                    |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |
| • during operation                                                     |        | -10 ... +70 °C; with natural convection                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                |
| • during transport                                                     |        | -40 ... +85 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                |
| • during storage                                                       |        | -40 ... +85 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                |
| connection method                                                      |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |
| type of electrical connection                                          |        | screw terminal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                |
| • at input                                                             |        | L, N, PE: 1 screw terminal each for 0.3 ... 1.3 mm² single-core/finely stranded                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |
| • at output                                                            |        | +, -: 2 screw terminals each for 0.3 ... 1.3 mm²                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                |
| • for auxiliary contacts                                               |        | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                |
| mechanical data                                                        |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |
| width × height × depth of the enclosure                                |        | 97 × 158 × 38 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                |
| required spacing                                                       |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |
| • top                                                                  |        | 20 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                |
| • bottom                                                               |        | 0 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                |
| • left                                                                 |        | 20 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                |
| • right                                                                |        | 20 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                |
| fastening method                                                       |        | Wall mounting                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                |
| • DIN-rail mounting                                                    |        | No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                |
| • S7 rail mounting                                                     |        | No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                |
| • wall mounting                                                        |        | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                |
| net weight                                                             |        | 0.57 kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                |
| further information internet links                                     |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                |
| 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 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>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                |
| 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 <a href="http://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

| Environmental Product Declaration                          |          |
|------------------------------------------------------------|----------|
| • global warming potential [CO2 eq] / during manufacturing | 11.3 kg  |
| • global warming potential [CO2 eq] / during operation     | 594.2 kg |
| • global warming potential [CO2 eq] / after end of life    | 0.17 kg  |
| • global warming potential [CO2 eq] / total                | 605.8 kg |

| Environment | General Product Approval |
|-------------|--------------------------|
|-------------|--------------------------|



[Manufacturer Declaration](#)

[Declaration of Conformity](#)



[China RoHS](#)



General Product Approval



last modified:

5/5/2026