

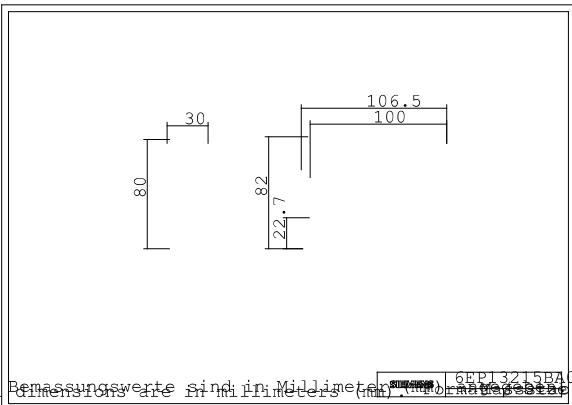


SITOP PSU100C 12 V/2 A STABILIZED POWER SUPPLY  
 INPUT: AC 100-230 V (DC 110-300 V) OUTPUT: DC 12 V/2 A

| Technical specifications  |                                   |
|---|-----------------------------------|
| Product   | SITOP PSU100C                     |
| Power supply, type  | 12 V/2 A                          |
| Input   |                                   |
| Input   | 1-phase AC or DC                  |
| Rated voltage value $V_{in}$ rated  | 100 ... 230 V                     |
| Voltage range   | 85 ... 264 V                      |
| Input voltage / at DC   | 110 ... 300 V                     |
| Wide-range input  | Yes                               |
| Oversvoltage resistance   | $2.3 \times V_{in}$ rated, 1.3 ms |
| Mains buffering at $I_{out}$ rated, min.                                    | 20 ms                             |
| Mains buffering   | at $V_{in} = 230$ V               |
| Rated line frequency  | 50 / 60 Hz                        |
| Rated line range  | 47 ... 63 Hz                      |
| Input current / at nominal level of the input voltage 100 V / nominal value | 0.63 A                            |
| Input current / at nominal level of the input voltage 230 V                 | 0.31 A                            |
| Switch-on current limiting (+25 °C), max.                                   | 33 A                              |
| Inrush current $A^2s$   | 1.2 $A^2s$                        |
| Built-in incoming fuse  | internal                          |

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| Protection in the mains power input (IEC 898)                        | Recommended miniature circuit breaker: from 16 A, characteristic B or from 10 A, characteristic C |
| <b>Output</b>  |   |
| Output   | controlled, isolated DC voltage   |
| Rated voltage  | 12 V  |
| Total tolerance, static $\pm$  | 3 %   |
| Residual ripple peak-peak, max.                                      | 200 mV  |
| Residual ripple peak-peak, typ.                                      | 40 mV   |
| Spikes peak-peak, max. (bandwidth: 20 MHz)                           | 300 mV  |
| Spikes peak-peak, typ. (bandwidth: 20 MHz)                           | 50 mV   |
| Adjustment range   | 10.5 ... 12.9 V   |
| Product feature / output voltage adjustable                          | Yes   |
| Output voltage setting   | via potentiometer   |
| Status display   | Green LED for output voltage OK   |
| On/off behavior  | Overshoot of $V_{out}$ approx. 5 %  |
| Startup delay, max.  | 0.6 s   |
| Voltage rise, typ.   | 10 ms   |
| Rated current value $I_{out}$ rated                                  | 2 A   |
| Current range  | 0 ... 2 A   |
| • Note   | 2 A up to +55 °C, 1.1 A up to +70 °C  |
| delivered active power / typ.  | 24 W  |
| Parallel switching for enhanced performance                          | Yes   |
| • Note   | Start-up with single nominal load only  |
| Numbers of parallel switchable units for enhanced performance        | 2   |
| <b>Efficiency</b>  |   |
| Efficiency at $V_{out}$ rated, $I_{out}$ rated, approx.              | 82 %  |
| Power loss at $V_{out}$ rated, $I_{out}$ rated, approx.              | 5.8 W   |
| <b>Closed-loop control</b>   |   |
| Dynamic mains compensation ( $V_{in}$ rated $\pm 15$ %), max.        | 0.1 %   |
| Dynamic load smoothing ( $I_{out}$ : 10/90/10 %), $U_{out} \pm$ typ. | 3 %   |
| Load step setting time 10 to 90%, typ.                               | 4 ms  |
| Load step setting time 90 to 10%, typ.                               | 3 ms  |
| <b>Protection and monitoring</b>                                     |   |
| Output overvoltage protection  | Yes, according to EN 60950  |
| Current limitation, typ.   | 2.4 A   |
| Characteristic feature of the output / short-circuit protected       | Yes   |
| Short-circuit protection   | Electronic shutdown, automatic restart  |
| Overload/short-circuit indicator                                     | -   |
| <b>Safety</b>  |   |

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| Primary/secondary isolation  | Yes   |
| Potential separation   | Safety extra low output voltage $V_{out}$ according to EN 60950-1 and EN 50178  |
| Protection class   | Class I   |
| stray current / maximum  | 3.5 mA  |
| stray current / typical  | 0.4 mA  |
| CE mark  | Yes   |
| UL/CSA approval  | Yes   |
| UL/cUL (CSA) approval  | cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259;<br>cCSAus (CSA C22.2 No. 60950-1, UL 60950-1)                   |
| Explosion protection   | ATEX (EX) II 3G Ex nA IIC T4; cCSAus (CSA C22.2 No. 213-M1987,<br>ANSI/ISA-12.12.01-2007) Class I, Div. 2, Group ABCD, T4 |
| FM approval  | -   |
| CB approval  | Yes   |
| Marine approval  | GL and ABS in process   |
| Degree of protection (EN 60529)                                      | IP20  |
| <b>EMC</b>   |   |
| Emitted interference   | EN 55022 Class B  |
| Supply harmonics limitation  | not applicable  |
| Noise immunity   | EN 61000-6-2  |
| <b>Operating data</b>  |   |
| Ambient temperature / in operation                                   | -20 ... +70 °C  |
| • Note   | with natural convection   |
| Ambient temperature / on transport                                   | -40 ... +85 °C  |
| Ambient temperature / in storage                                     | -40 ... +85 °C  |
| Humidity class according to EN 60721                                 | Climate class 3K3, no condensation  |
| <b>Mechanics</b>   |   |
| Connection technology  | screw-type terminals  |
| Connections / Supply input   | L, N, PE: Removable screw terminal, each for 1 x 0.5 ... 2.5 mm <sup>2</sup>  |
| Connections / Output   | +: 1 screw terminal for 0.5 ... 2.5 mm <sup>2</sup> ; -: 2 screw terminals for 0.5 ... 2.5 mm <sup>2</sup>                |
| Connections / Auxiliary  | -   |
| Width / of the housing   | 30 mm   |
| Height / of the housing  | 80 mm   |
| Depth / of the housing   | 100 mm  |
| Installation width   | 30 mm   |
| Mounting height  | 180 mm  |
| Weight, approx.  | 0.12 kg   |
| Product feature / of the housing / housing for side-by-side mounting | Yes   |
| Type of mounting / wall mounting                                     | No  |

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|---|---|
| Type of fixing / cap rail mounting  | Yes   |
| Type of mounting / S7-300 rail mounting   | No  |
| Installation  | Snaps onto DIN rail EN 60715 35x7.5/15  |
| Electrical accessories  | Removable spring-type terminal 6EP1971-5BA00  |
| Other information   | Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified) |
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letzte Änderung:

Mar 12, 2012