



SITOP PSU100C/1ACDC/24VDC/0.6A

SITOP PSU100C 24 V/0.6 A Stabilized power supply input: 100-230 V AC (DC 110-300 V) output: DC 24 V/0,6 A

| Input                                                                                                                                  |                                                                                                 |
|----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| Input                                                                                                                                  | 1-phase AC or DC                                                                                |
| Rated voltage value $V_{in}$ rated                                                                                                     | 100 ... 230 V                                                                                   |
| Voltage range AC                                                                                                                       | 85 ... 264 V                                                                                    |
| input voltage <ul style="list-style-type: none"> <li>• at DC</li> </ul>                                                                | 110 ... 300 V                                                                                   |
| Wide-range input                                                                                                                       | Yes                                                                                             |
| Overvoltage resistance                                                                                                                 | $2.3 \times V_{in}$ rated, 1.3 ms                                                               |
| Mains buffering                                                                                                                        | at $V_{in} = 230$ V                                                                             |
| Mains buffering at $I_{out}$ rated, min.                                                                                               | 20 ms; at $V_{in} = 230$ V                                                                      |
| Rated line frequency 1                                                                                                                 | 50 Hz                                                                                           |
| Rated line frequency 2                                                                                                                 | 60 Hz                                                                                           |
| Rated line range                                                                                                                       | 47 ... 63 Hz                                                                                    |
| input current <ul style="list-style-type: none"> <li>• at rated input voltage 100 V</li> <li>• at rated input voltage 230 V</li> </ul> | 0.28 A<br>0.18 A                                                                                |
| Switch-on current limiting (+25 °C), max.                                                                                              | 28 A                                                                                            |
| $I^2t$ , max.                                                                                                                          | 0.7 A <sup>2</sup> ·s                                                                           |
| Built-in incoming fuse                                                                                                                 | internal                                                                                        |
| Protection in the mains power input (IEC 898)                                                                                          | Recommended miniature circuit breaker: from 16 A characteristic B or from 10 A characteristic C |
| Output                                                                                                                                 |                                                                                                 |
| Output                                                                                                                                 | Controlled, isolated DC voltage                                                                 |
| Rated voltage $V_{out}$ DC                                                                                                             | 24 V                                                                                            |
| <ul style="list-style-type: none"> <li>• output voltage at output 1 at DC rated value</li> </ul>                                       | 24 V                                                                                            |
| Total tolerance, static $\pm$                                                                                                          | 3 %                                                                                             |
| Static mains compensation, approx.                                                                                                     | 0.1 %                                                                                           |
| Static load balancing, approx.                                                                                                         | 0.2 %                                                                                           |
| 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)                                                                                             | 20 mV                                                                                           |
| product function output voltage adjustable                                                                                             | No                                                                                              |
| Output voltage setting                                                                                                                 | -                                                                                               |
| Status display                                                                                                                         | Green LED for output voltage OK                                                                 |
| On/off behavior                                                                                                                        | Overshoot of $V_{out}$ approx. 5 %                                                              |
| Startup delay, max.                                                                                                                    | 1 s                                                                                             |
| Voltage rise, typ.                                                                                                                     | 25 ms                                                                                           |

|                                                                                 |                                                                                                                                                         |
|---------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rated current value I <sub>out</sub> rated                                      | 0.6 A                                                                                                                                                   |
| Current range                                                                   | 0 ... 0.6 A                                                                                                                                             |
| supplied active power typical                                                   | 14 W                                                                                                                                                    |
| short-term overload current                                                     |                                                                                                                                                         |
| • at short-circuit during operation typical                                     | 1 A                                                                                                                                                     |
| Parallel switching for enhanced performance                                     | No                                                                                                                                                      |
| <b>Efficiency</b>                                                               |                                                                                                                                                         |
| Efficiency at V <sub>out</sub> rated, I <sub>out</sub> rated, approx.           | 82 %                                                                                                                                                    |
| Power loss at V <sub>out</sub> rated, I <sub>out</sub> rated, approx.           | 2.6 W                                                                                                                                                   |
| power loss [W] during no-load operation maximum                                 | 0.75 W                                                                                                                                                  |
| <b>Closed-loop control</b>                                                      |                                                                                                                                                         |
| Dynamic mains compensation (V <sub>in</sub> rated ±15 %), max.                  | 0.1 %                                                                                                                                                   |
| Dynamic load smoothing (I <sub>out</sub> : 10/90/10 %), U <sub>out</sub> ± typ. | 3 %                                                                                                                                                     |
| Load step setting time 10 to 90%, typ.                                          | 3 ms                                                                                                                                                    |
| Load step setting time 90 to 10%, typ.                                          | 3 ms                                                                                                                                                    |
| <b>Protection and monitoring</b>                                                |                                                                                                                                                         |
| Output overvoltage protection                                                   | Yes, according to EN 60950-1                                                                                                                            |
| Current limitation, typ.                                                        | 0.7 A                                                                                                                                                   |
| property of the output short-circuit proof                                      | Yes                                                                                                                                                     |
| Short-circuit protection                                                        | Electronic shutdown, automatic restart                                                                                                                  |
| Overload/short-circuit indicator                                                | -                                                                                                                                                       |
| <b>Safety</b>                                                                   |                                                                                                                                                         |
| Primary/secondary isolation                                                     | Yes                                                                                                                                                     |
| galvanic isolation                                                              | Safety extra-low output voltage U <sub>out</sub> acc. to EN 60950-1 and EN 50178                                                                        |
| Protection class                                                                | Class I                                                                                                                                                 |
| leakage current                                                                 |                                                                                                                                                         |
| • maximum                                                                       | 3.5 mA                                                                                                                                                  |
| • typical                                                                       | 0.4 mA                                                                                                                                                  |
| Degree of protection (EN 60529)                                                 | IP20                                                                                                                                                    |
| <b>Approvals</b>                                                                |                                                                                                                                                         |
| CE mark                                                                         | Yes                                                                                                                                                     |
| UL/cUL (CSA) approval                                                           | cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cURus-Recognized (UL 60950, CSA C22.2 No. 60950), File E151273, NEC class 2 (acc. to UL 1310) |
| Explosion protection                                                            | IECEx Ex nA IIC T4 Gc; ATEX (EX) II 3G Ex nA IIC T4; cCSAus (CSA C22.2 No. 213, ANSI/ISA-12.12.01) Class I, Div. 2, Group ABCD, T4                      |
| certificate of suitability NEC Class 2                                          | Yes                                                                                                                                                     |
| FM approval                                                                     | -                                                                                                                                                       |
| CB approval                                                                     | Yes                                                                                                                                                     |
| certificate of suitability EAC approval                                         | Yes                                                                                                                                                     |
| Marine approval                                                                 | ABS, DNV GL                                                                                                                                             |
| <b>EMC</b>                                                                      |                                                                                                                                                         |
| Emitted interference                                                            | EN 55022 Class B                                                                                                                                        |
| Supply harmonics limitation                                                     | not applicable                                                                                                                                          |
| Noise immunity                                                                  | EN 61000-6-2                                                                                                                                            |
| <b>environmental conditions</b>                                                 |                                                                                                                                                         |
| ambient temperature                                                             |                                                                                                                                                         |
| • during operation                                                              | -20 ... +70 °C                                                                                                                                          |
| — Note                                                                          | with natural convection                                                                                                                                 |
| • during transport                                                              | -40 ... +85 °C                                                                                                                                          |
| • during storage                                                                | -40 ... +85 °C                                                                                                                                          |
| Humidity class according to EN 60721                                            | Climate class 3K3, 5 ... 95% 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>                                                                            |
| • 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>                                              |

|                                                          |                                                                                                   |
|----------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| • Auxiliary                                              | -                                                                                                 |
| width of the enclosure                                   | 22.5 mm                                                                                           |
| height of the enclosure                                  | 80 mm                                                                                             |
| depth of the enclosure                                   | 100 mm                                                                                            |
| required spacing                                         |                                                                                                   |
| • top                                                    | 50 mm                                                                                             |
| • bottom                                                 | 50 mm                                                                                             |
| • left                                                   | 0 mm                                                                                              |
| • right                                                  | 0 mm                                                                                              |
| Weight, approx.                                          | 0.12 kg                                                                                           |
| product feature of the enclosure housing can be lined up | Yes                                                                                               |
| Installation                                             | Snaps onto DIN rail EN 60715 35x7.5/15                                                            |
| electrical accessories                                   | Removable spring-type terminal 6EP1971-5BA00                                                      |
| MTBF at 40 °C                                            | 3 910 833 h                                                                                       |
| other information                                        | Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified) |

