



SITOP SMART 60 W STABILIZED POWER SUPPLY  
INPUT: 120/230 V AC OUTPUT: 24 V DC/2.5 A

## Technical specifications

|   |   |
|---|---|
| Product   | SITOP smart                                   |
| Power supply, type  | 24 V/2.5 A                                    |
| <b>Input</b>  |   |
| Input   | 1-phase AC                                    |
| Supply voltage / 1 / at AC / nominal value                  | 120 V   |
| Supply voltage / 2 / at AC / nominal value                  | 230 V   |
| Voltage range   |   |
| • Note  | Set by means of selector switch on the device |
| Input voltage / 1 / at AC                                   | 85 ... 132 V                                  |
| Input voltage / 2 / at AC                                   | 170 ... 264 V                                 |
| Wide-range input  | No  |
| Overvoltage resistance                                      | 2.3 × Vin rated, 1.3 ms                       |
| Mains buffering at lout rated, min.                         | 20 ms   |
| Mains buffering   | at Vin = 93/187 V                             |
| Rated line frequency  | 50 / 60 Hz                                    |
| Rated line range  | 47 ... 63 Hz                                  |
| Input current / at nominal level of the input voltage 120 V | 1.1 A   |
| Input current / at nominal level of the input voltage 230 V | 0.65 A  |
| Switch-on current limiting (+25 °C), max.                   | 27 A  |
| Duration of current limiting / at 25 °C / typical           | 3 ms  |

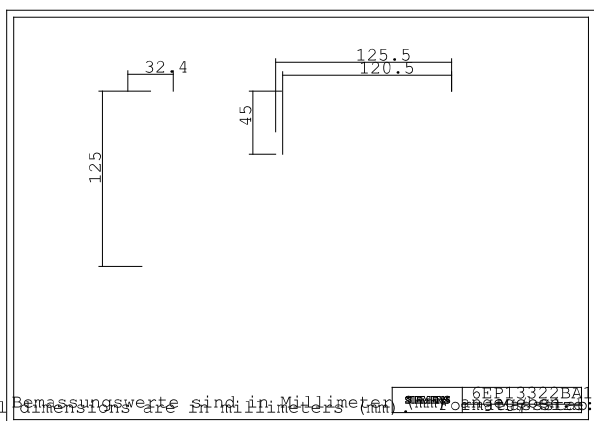
|   |   |
|---|---|
| I <sup>2</sup> t, max.  | 0.3 A <sup>2</sup> ·s   |
| Built-in incoming fuse  | T 2 A/250 V (not accessible)                                      |
| Protection in the mains power input (IEC 898)   | Recommended miniature circuit breaker: from 3 A, characteristic C |
| <b>Output</b>   |   |
| Output  | Controlled, isolated DC voltage                                   |
| Rated voltage V <sub>out</sub> DC   | 24 V  |
| Total tolerance, static ±   | 3 %   |
| Static mains compensation, approx.  | 0.1 %   |
| Static load balancing, approx.  | 0.5 %   |
| Residual ripple peak-peak, max.   | 150 mV  |
| Residual ripple peak-peak, typ.   | 10 mV   |
| Spikes peak-peak, max. (bandwidth: 20 MHz)  | 240 mV  |
| Spikes peak-peak, typ. (bandwidth: 20 MHz)  | 50 mV   |
| Adjustment range  | 22.8 ... 28 V   |
| Product feature / output voltage adjustable   | Yes   |
| Output voltage setting  | via potentiometer   |
| Status display  | Green LED for 24 V OK   |
| On/off behavior   | Overshoot of V <sub>out</sub> approx. 4 %                         |
| Startup delay, max.   | 0.1 s   |
| Voltage rise, typ.  | 50 ms   |
| Rated current value I <sub>out</sub> rated  | 2.5 A   |
| Current range   | 0 ... 3 A   |
| • Note  | 3 A up to +45 °C  |
| delivered active power / typ.   | 60 W  |
| short-term overload current / at short-circuit during run-up / typical                                | 7 A   |
| Duration of overloading ability for excess current / on short-circuiting during the start-up          | 100 ms  |
| short-term overload current / at short-circuit during operation / typical                             | 7 A   |
| Duration of overloading ability for excess current / on short-circuiting during the operational phase | 200 ms  |
| Parallel switching for enhanced performance   | Yes   |
| Numbers of parallel switchable units for enhanced performance   | 2   |
| <b>Efficiency</b>   |   |
| Efficiency at V <sub>out</sub> rated, I <sub>out</sub> rated, approx.                                 | 85 %  |
| Power loss at V <sub>out</sub> rated, I <sub>out</sub> rated, approx.                                 | 9 W   |
| <b>Closed-loop control</b>  |   |
| Dynamic mains compensation (V <sub>in</sub> rated ±15 %), max.  | 0.3 %   |
| Dynamic load smoothing (I <sub>out</sub> : 50/100/50 %), U <sub>out</sub> ± typ.                      | 1 %   |
| Load step setting time 50 to 100%, typ.   | 0.2 ms  |
| Load step setting time 100 to 50%, typ.   | 0.2 ms  |

| <b>Protection and monitoring</b>                               |   |
|--|---|
| Output overvoltage protection                                  | < 33 V  |
| Current limitation   | 3.2 ... 3.4 A   |
| Characteristic feature of the output / short-circuit protected | Yes   |
| Short-circuit protection                                       | Constant current characteristic   |
| Enduring short circuit current / Effective level / typical     | 5 A   |
| Overload/short-circuit indicator                               | -   |
| <b>Safety</b>  |   |
| Primary/secondary isolation                                    | Yes   |
| Potential separation   | Safety extra-low output voltage U <sub>out</sub> acc. 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, cCSAus (CSA C22.2 No. 60950-1, UL 60950-1, UL 1604) |
| Explosion protection   | ATEX (EX) II 3G Ex nA II T4; UL 1604 Class I, Div. 2, Group ABCD  |
| FM approval  | -   |
| CB approval  | Yes   |
| Marine approval  | GL  |
| 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                             | 0 ... 60 °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: 1 screw terminal each for 0.5 ... 2.5 mm <sup>2</sup> single-core/finely stranded                   |
| Connections / Output   | L+, M: 2 screw terminals each for 0.5 ... 2.5 mm <sup>2</sup>   |
| Connections / Auxiliary  | -   |
| Width / of the housing   | 32.5 mm   |

|  |  |
|--|--|
| Height / of the housing  | 125 mm                                 |
| Depth / of the housing   | 125 mm                                 |
| Installation width   | 32.5 mm                                |
| Mounting height  | 225 mm                                 |
| Weight, approx.  | 0.32 kg                                |
| Product feature / of the housing / housing for side-by-side mounting | Yes                                    |
| Type of mounting / wall mounting                                     | No                                     |
| 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 |

Other information

Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)



letzte Änderung:

Oct 19, 2012