



SITOP PSU100L 24 V/10 A STABILIZED POWER SUPPLY
INPUT: 120/230 V AC OUTPUT: 24 V/10 A DC

Technical specifications

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| Product | SITOP PSU100L |
| Power supply, type | 24 V/10 A |
| Input | |
| 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 | 93 ... 132 V |
| Input voltage / 2 / at AC | 187 ... 264 V |
| Wide-range input | No |
| Overvoltage resistance | 2.3 × Vin rated, 1.3 ms |
| Mains buffering at Iout 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 | 4.1 A |
| Input current / at nominal level of the input voltage 230 V | 2.4 A |
| Switch-on current limiting (+25 °C), max. | 65 A |
| Duration of current limiting / at 25 °C / typical | 3 ms |

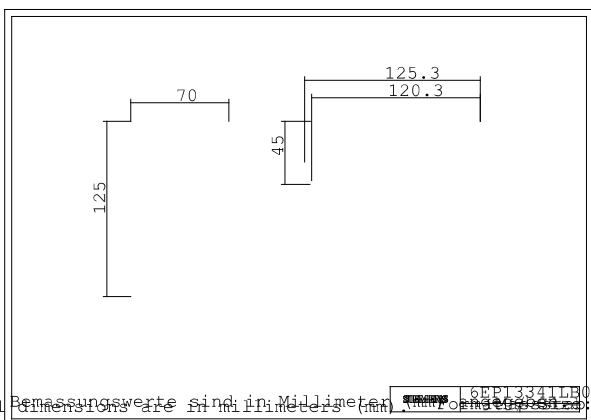
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| I ² t, max. | 3.3 A ² ·s |
| Built-in incoming fuse | T 6.3 A/250 V (not accessible) |
| Protection in the mains power input (IEC 898) | Recommended miniature circuit breaker: from 10 A, characteristic C |
| Output | |
| Output | Controlled, isolated DC voltage |
| Rated voltage V _{out} 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. | 50 mV |
| Spikes peak-peak, max. (bandwidth: 20 MHz) | 240 mV |
| Spikes peak-peak, typ. (bandwidth: 20 MHz) | 150 mV |
| Adjustment range | 22.8 ... 26.4 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 _{out} approx. 4 % |
| Startup delay, max. | 1.5 s |
| Voltage rise, typ. | 170 ms |
| Rated current value I _{out} rated | 10 A |
| Current range | 0 ... 10 A |
| • Note | 10 A up to +45 °C, 7 A up to +60 °C |
| delivered active power / typ. | 240 W |
| Parallel switching for enhanced performance | Yes |
| Numbers of parallel switchable units for enhanced performance | 2 |
| Efficiency | |
| Efficiency at V _{out} rated, I _{out} rated, approx. | 89 % |
| Power loss at V _{out} rated, I _{out} rated, approx. | 34 W |
| Closed-loop control | |
| Dynamic mains compensation (V _{in} rated ±15 %), max. | 0.3 % |
| Dynamic load smoothing (I _{out} : 10/90/10 %), U _{out} ± typ. | 2 % |
| Load step setting time 10 to 90%, typ. | 0.5 ms |
| Load step setting time 90 to 10%, typ. | 0.7 ms |
| Protection and monitoring | |
| Output overvoltage protection | < 33 V |
| Current limitation, typ. | 10.5 A |
| Characteristic feature of the output / short-circuit protected | Yes |
| Short-circuit protection | Constant current characteristic |

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| Enduring short circuit current / Effective level / typical | 16 A |
| Overload/short-circuit indicator | - |
| Safety | |
| Primary/secondary isolation | Yes |
| Potential separation | Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 |
| Protection class | Class I |
| stray current / maximum | 3.5 mA |
| stray current / typical | 0.8 mA |
| CE mark | Yes |
| UL/CSA approval | Yes |
| UL/cUL (CSA) approval | cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259 |
| Explosion protection | - |
| FM approval | - |
| Marine approval | - |
| Degree of protection (EN 60529) | IP20 |
| EMC | |
| Emitted interference | EN 55022 Class A |
| Supply harmonics limitation | - |
| Noise immunity | EN 61000-6-2 |
| Operating data | |
| 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 |
| Mechanics | |
| Connection technology | screw-type terminals |
| Connections / Supply input | L, N, PE: 1 screw terminal each for 0.5 ... 2.5 mm ² single-core/finely stranded |
| Connections / Output | +, -: 2 screw terminals each for 0.5 ... 2.5 mm ² |
| Connections / Auxiliary | - |
| Width / of the housing | 70 mm |
| Height / of the housing | 125 mm |
| Depth / of the housing | 125 mm |
| Installation width | 70 mm |
| Mounting height | 225 mm |
| Weight, approx. | 0.75 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 |

Other information

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



letzte Änderung:

Jul 25, 2012