SIEMENS

## Data sheet 6EP1336-1LB00

SITOP PSU100L 24 V/20 A
SITOP PSU100L 24 V/20 A stabilized power supply input: 100-240 V AC output: 24 V DC/20 A


| Input | |
|---|---|
| Input | 1-phase AC |
| Supply voltage | |
| • 1 at AC Rated value | 100 V |
| • 2 at AC Rated value | 240 V |
| Input voltage | |
| • 1 at AC | 85 ... 264 V |
| • at DC | 88 ... 370 V |
| Wide-range input | Yes |
| Mains buffering at Iout rated, min. | 20 ms; at Vin = 93/187 V |
| Rated line frequency 1 | 50 Hz |
| Rated line frequency 2 | 60 Hz |
| Rated line range | 47 ... 63 Hz |
| Input current | |
| • at rated input voltage 120 V | 5.55 A |
| • at rated input voltage 230 V | 2.35 A |
| Switch-on current limiting (+25 °C), max. | 45 A |
| Duration of inrush current limiting at 25 °C | |
| • typical | 15 ms |

| | |
|---|---|
| $I^2t$, max. | 3.3 $A^2 \cdot s$ |
| Built-in incoming fuse | T 10 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 Vout DC | 24 V |
| Total tolerance, static ± | 3 % |
| Static mains compensation, approx. | 0.1 % |
| Static load balancing, approx. | 1 % |
| 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) | 100 mV |
| Adjustment range | 22.8 ... 28 V |
| Product function Output voltage adjustable | Yes |
| Output voltage setting | via potentiometer |
| Status display | Green LED for 24 V OK |
| On/off behavior | No overshoot of Vout (soft start) |
| Startup delay, max. | 1.5 s |
| Voltage rise, typ. | 20 ms |
| Rated current value Iout rated | 20 A |
| Current range | 0 ... 20 A |
| • Note | +45 ... +70 °C: Derating 2.5%/K |
| Supplied active power typical | 480 W |
| Parallel switching for enhanced performance | Yes |
| Numbers of parallel switchable units for enhanced performance | 2 |

| Efficiency | |
|---|---|
| Efficiency at Vout rated, Iout rated, approx. | 92 % |
| Power loss at Vout rated, Iout rated, approx. | 45 W |

| Closed-loop control | |
|---|---|
| Dynamic mains compensation (Vin rated ±15 %), max. | 0.5 % |
| Dynamic load smoothing (Iout: 10/90/10 %), Uout ± typ. | 3 % |
| Load step setting time 10 to 90%, typ. | 0.7 ms |
| Load step setting time 90 to 10%, typ. | 6 ms |

| Protection and monitoring | |
|---|---|
| Output overvoltage protection | < 33 V |
| Current limitation, typ. | 24 A |
| Property of the output Short-circuit proof | Yes |

| | |
|---|---|
| Short-circuit protection | Constant current characteristic |
| Enduring short circuit current RMS value | |
| • typical | 24 A |
| Overload/short-circuit indicator | - |

| Safety | |
|---|---|
| Primary/secondary isolation | Yes |
| Galvanic isolation | Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 |
| Protection class | Class I |
| Leakage current | |
| • maximum | 3.5 mA |
| • typical | 0.8 mA |
| CE mark | Yes |
| UL/cUL (CSA) approval | cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259 |
| Explosion protection | - |
| FM approval | - |
| CB approval | Yes |
| Marine approval | - |
| Degree of protection (EN 60529) | IP20 |

| EMC | |
|---|---|
| Emitted interference | EN 55022 Class B |
| Supply harmonics limitation | EN 61000-3-2 |
| Noise immunity | EN 61000-6-2 |

| Operating data | |
|---|---|
| Ambient temperature | |
| • during operation | -25 ... +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, no condensation |

| Mechanics | |
|---|---|
| Connection technology | screw-type terminals |
| Connections | |
| • Supply input | L, N, PE: 1 screw terminal each for 0.5 ... 2.5 mm² single-core/finely stranded |
| • Output | +, -: 2 screw terminals each for 0.5 ... 2.5 mm² |
| • Auxiliary | - |
| Width of the enclosure | 110 mm |
| Height of the enclosure | 125 mm |
| Depth of the enclosure | 125 mm |
| Required spacing | |

| | |
|---|---|
| • top | 50 mm |
| • bottom | 50 mm |
| • left | 0 mm |
| • right | 0 mm |
| Weight, approx. | 1.8 kg |
| Product feature of the enclosure housing for side-by-side mounting | Yes |
| 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) |