



SITOP MODULAR 5 STABILIZED POWER SUPPLY INPUT:
120/230-500 V AC OUTPUT: 24 V DC/5 A

Technical specifications

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| Product | SITOP modular |
| Power supply, type | 24 V/5 A |
| Input | |
| Input | 1-phase and 2-phase AC |
| Supply voltage / 1 / at AC | 120 ... 230 V |
| Supply voltage / 2 / at AC | 230 ... 500 V |
| Voltage range | |
| • Note | Set by means of selector switch on the device; starting from $V_{in} > 90/180$ V |
| Input voltage / 1 / at AC | 85 ... 264 V |
| Input voltage / 2 / at AC | 176 ... 550 V |
| Wide-range input | Yes |
| Overvoltage resistance | 1300 V _{peak} , 1.3 ms |
| Mains buffering at lout rated, min. | 25 ms |
| Mains buffering | at $V_{in} = 120/230$ V, typ. 150 ms at $V_{in} = 400$ V |
| Rated line frequency | 50 / 60 Hz |
| Rated line range | 47 ... 63 Hz |
| Input current / at nominal level of the input voltage 120 V | 2.2 A |
| Input current / at nominal level of the input voltage 230 V | 1.2 A |
| Input current / at nominal level of the input voltage 500 V | 0.61 A |

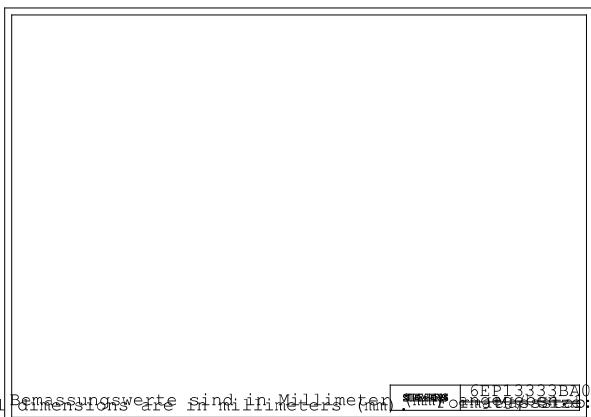
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| Switch-on current limiting (+25 °C), max. | 35 A |
| I^2t , max. | 1.7 A ² s |
| Built-in incoming fuse | T 3.15 A (not accessible) |
| Protection in the mains power input (IEC 898) | Recommended miniature circuit breaker at 1-phase operation: from 6 A (10 A), characteristic C (B); required at 2-phase operation: circuit breaker 2-pole connected or circuit breaker 3RV2011-1EA10 (setting 3.8 A) or 3RV2711-1ED10 (UL 489) at 230 V; 3RV2011-1DA10 (setting 3 A) or 3RV2711-1DD10 (UL 489) at 400/500 V |
| Output | |
| Output | Controlled, isolated DC voltage |
| Rated voltage V_{out} DC | 24 V |
| Total tolerance, static \pm | 3 % |
| Static mains compensation, approx. | 0.1 % |
| Static load balancing, approx. | 0.1 % |
| Residual ripple peak-peak, max. | 50 mV |
| Spikes peak-peak, max. (bandwidth: 20 MHz) | 200 mV |
| Adjustment range | 24 ... 28.8 V |
| Product feature / output voltage adjustable | Yes |
| Output voltage setting | via potentiometer |
| Status display | Green LED for 24 V OK |
| Signaling | via signaling module (6EP1961-3BA10) |
| On/off behavior | Overshoot of V_{out} approx. 3 % |
| Startup delay, max. | 1 s |
| Voltage rise, typ. | 50 ms |
| Rated current value I_{out} rated | 5 A |
| Current range | 0 ... 5 A |
| • Note | > 60 °C Derating |
| delivered active power / typ. | 120 W |
| constant overload current / at short-circuit during run-up / typical | 5.5 A |
| short-term overload current / at short-circuit during operation / typical | 15 A |
| Duration of overloading ability for excess current / on short-circuiting during the operational phase | 25 ms |
| Parallel switching for enhanced performance | Yes |
| • Note | switchable characteristic |
| Numbers of parallel switchable units for enhanced performance | 2 |
| Efficiency | |
| Efficiency at V_{out} rated, I_{out} rated, approx. | 87 % |
| Power loss at V_{out} rated, I_{out} rated, approx. | 18 W |
| Closed-loop control | |
| Dynamic mains compensation (V_{in} rated ± 15 %), max. | 0.1 % |
| Dynamic load smoothing (I_{out} : 50/100/50 %), $U_{out} \pm$ typ. | 3 % |

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| Load step setting time 50 to 100%, typ. | 2 ms |
| Load step setting time 100 to 50%, typ. | 2 ms |
| Setting time / maximum | 5 ms |
| Protection and monitoring | |
| Output overvoltage protection | < 35 V |
| Current limitation, typ. | 5.5 A |
| Characteristic feature of the output / short-circuit protected | Yes |
| Short-circuit protection | Alternatively, constant current characteristic approx. 5.5 A or latching shutdown |
| Enduring short circuit current / Effective level / typical | 5.5 A |
| Overload/short-circuit indicator | LED yellow for "overload", LED red for "latching shutdown" |
| Safety | |
| Primary/secondary isolation | Yes |
| Potential separation | Safety extra-low output voltage U _{out} acc. to EN 60950-1 and EN 50178 |
| Protection class | Class I |
| stray current / maximum | 3.5 mA |
| stray current / typical | 0.25 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 | in preparation |
| FM approval | - |
| CB approval | No |
| Marine approval | GL, ABS |
| 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 / in operation | -25 ... +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 |
| Mechanics | |
| Connection technology | screw-type terminals |
| Connections / Supply input | L, N, PE: 1 screw terminal each for 0.2 ... 2.5 mm ² single-core/finely stranded |

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| Connections / Output | L+, M: 2 screw terminals each for 0.2 ... 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. | 1.2 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 |
| Electrical accessories | Buffer module, signaling module |

Other information

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



Abmessungen sind in Millimeter (mm) angegeben.
Dimensions are in millimeter (mm) indicated.

letzte Änderung:

Sep 10, 2012