

SIPLUS LOGO! POWER 24V 4A
 SIPLUS LOGO! Power 24V 4A for medial stress -40...+70°C start up
 at -25°C based on 6EP3333-6SB00-0AY0 . stabilized power supply
 input: 100-240 V AC output: 24 V / 1.3 A DC



| Input | |
|---|----------------------------|
| Input | 1-phase AC or DC |
| Rated voltage value V_{in} rated | 100 ... 240 V |
| Voltage range AC | 85 ... 264 V |
| input voltage | |
| • at DC | 110 ... 300 V |
| Wide-range input | Yes |
| Mains buffering | at $V_{in} = 187$ V |
| Mains buffering at I_{out} rated, min. | 40 ms; at $V_{in} = 187$ 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 | 1.95 A |
| • at rated input voltage 230 V | 0.97 A |
| Switch-on current limiting (+25 °C), max. | 31 A |
| I^2t , max. | 2.5 A ² ·s |
| Built-in incoming fuse | internal |

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| Protection in the mains power input (IEC 898) | Recommended miniature circuit breaker: from 10 A characteristic B or from 6 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. | 0.1 % |
| Residual ripple peak-peak, max. | 200 mV |
| Residual ripple peak-peak, typ. | 30 mV |
| Spikes peak-peak, max. (bandwidth: 20 MHz) | 300 mV |
| Spikes peak-peak, typ. (bandwidth: 20 MHz) | 50 mV |
| Adjustment range | 22.2 ... 26.4 V |
| product function output voltage adjustable | Yes |
| Output voltage setting | via potentiometer |
| Status display | Green LED for output voltage OK |
| On/off behavior | No overshoot of Vout (soft start) |
| Startup delay, max. | 0.5 s |
| Voltage rise, typ. | 100 ms |
| Rated current value Iout rated | 4 A |
| Current range | 0 ... 4 A |
| • Note | +55 ... +70 °C: Derating 2%/K |
| supplied active power typical | 96 W |
| Parallel switching for enhanced performance | Yes |
| Numbers of parallel switchable units for enhanced performance | 2 |
| Efficiency | |
| Efficiency at Vout rated, Iout rated, approx. | 89 % |
| Power loss at Vout rated, Iout rated, approx. | 12 W |
| power loss [W] during no-load operation maximum | 0.3 W |
| Closed-loop control | |
| Dynamic mains compensation (Vin rated ±15 %), max. | 0.2 % |
| Dynamic load smoothing (Iout: 10/90/10 %), Uout ± typ. | 2 % |
| Load step setting time 10 to 90%, typ. | 1 ms |
| Load step setting time 90 to 10%, typ. | 1 ms |
| Protection and monitoring | |
| Output overvoltage protection | Yes, according to EN 60950-1 |
| Current limitation, typ. | 5 A |
| property of the output short-circuit proof | Yes |
| Short-circuit protection | Constant current characteristic |

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| enduring short circuit current RMS value | |
| • maximum | 5 A |
| overcurrent overload capability in normal operation | overload capability 150% I _{out} rated typ. 200 ms |
| Overload/short-circuit indicator | - |
| measuring point for output current | 50 mV = [^] 4 A |
| overcurrent overload capability when switching on | 150% I _{out} rated typ. 200 ms |

Safety

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| Primary/secondary isolation | Yes |
| galvanic isolation | Safety extra-low output voltage U _{out} acc. to EN 60950-1 and EN 50178 |
| Protection class | Class II (without protective conductor) |
| Degree of protection (EN 60529) | IP20 |

Approvals

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| CE mark | Yes |
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EMC

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

environmental conditions

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| ambient temperature in horizontal mounting position during operation | -40; Startup @ -25 °C ... +70; with natural convection |
| ambient temperature during storage and transport | -40 ... +85 |
| installation altitude at height above sea level maximum | 6 000 m |
| ambient condition relating to ambient temperature - air pressure - installation altitude | In case of operation at altitudes of 2000 - 6000 m above sea level: Output power derating of -7.5 %/1000 m or reduction of the ambient temperature by 5 K/1000 m |
| relative humidity with condensation acc. to IEC 60068-2-38 maximum | 100 %; RH incl. condensation/frost (no commissioning if condensation is present), horizontal installation |
| chemical resistance to commercially available cooling lubricants | Yes; incl. diesel and oil droplets in the air |
| resistance to biologically active substances conformity acc. to EN 60721-3-3 | Yes; Class 3B2 mold, fungal, sponge spores (except fauna); class 3B3 upon request |
| resistance to chemically active substances conformity acc. to EN 60721-3-3 | Yes; Class 3C4 (RH < 75%) incl. salt spray acc. to EN 60068-2-52 (severity level 3) |
| resistance to mechanically active substances conformity acc. to EN 60721-3-3 | Yes; Class 3S4 incl. sand, dust |
| resistance to biologically active substances conformity acc. to EN 60721-3-6 | Yes; Class 6B2 mold, fungal, sponge spores (except fauna) |
| resistance to chemically active substances conformity acc. to EN 60721-3-6 | Yes; Class 6C3 (RH < 75%) incl. salt spray acc. to EN 60068-2-52 (severity level 3) |
| resistance to mechanically active substances conformity acc. to EN 60721-3-6 | Yes; Class 6S3 incl. sand, dust |

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| coating for equipped printed circuit board acc. to EN 61086 | Yes; Class 2 for high availability |
| type of coating protection against pollution according to EN 60664-3 | Yes; Type 1 protection |
| type of test of the coating acc. to MIL-I-46058C | Yes; Discoloration of the coating during service life possible |
| product conformity of the coating Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies acc. to IPC-CC-830A | Yes; Conformal Coating, Class A |

Mechanics

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| Connection technology | screw-type terminals |
| Connections | |
| • Supply input | L, N: 1 screw terminal each for 0.5 ... 2.5 mm ² single-core/finely stranded |
| • Output | +, -: 2 screw terminals each for 0.5 ... 2.5 mm ² |
| • Auxiliary | - |
| width of the enclosure | 72 mm |
| height of the enclosure | 90 mm |
| depth of the enclosure | 53 mm |
| required spacing | |
| • top | 20 mm |
| • bottom | 20 mm |
| • left | 0 mm |
| • right | 0 mm |
| Weight, approx. | 0.29 kg |
| product feature of the enclosure housing for side-by-side mounting | Yes |
| Installation | Snaps onto DIN rail EN 60715 35x7.5/15, direct mounting in different mounting positions |
| MTBF at 40 °C | 2 391 480 h |
| other information | Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified) |