



LOGO!Power/1AC/12VDC/4.5A

LOGO!Power 12 V / 4.5 A stabilized power supply input: 100-240 V AC output: 12 V DC / 4.5 A *Ex approval no longer available*

| input | |
|--|--|
| type of the power supply network | 1-phase AC or DC |
| supply voltage at AC minimum rated value | 100 ... 240 V |
| supply voltage at AC maximum rated value | |
| supply voltage at AC initial value | 85 ... 264 V |
| supply voltage at AC full-scale value | |
| input voltage at DC | 110 ... 300 V |
| wide range input | Yes |
| overvoltage overload capability | 300 V AC for 1 s |
| buffering time for rated value of the output current in the event of power failure minimum | 40 ms |
| operating condition of the mains buffering | at $V_{in} = 187 \text{ V}$ |
| line frequency | 50/60 Hz |
| line frequency initial value | 47 ... 63 Hz |
| line frequency full-scale value | |
| input current | |
| • at rated input voltage 120 V | 1.13 A |
| • at rated input voltage 230 V | 0.61 A |
| current limitation of inrush current at 25 °C maximum | 50 A |
| I ² t value maximum | 3 A ² ·s |
| fuse protection type | internal |
| fuse protection type in the feeder | Recommended miniature circuit breaker: from 10 A characteristic B or from 6 A characteristic C |
| output | |
| voltage curve at output | Controlled, isolated DC voltage |
| output voltage at DC rated value | 12 V |
| output voltage | |
| • at output 1 at DC rated value | 12 V |
| output voltage adjustable | Yes; via potentiometer |
| adjustable output voltage initial value | 10.5 V |
| adjustable output voltage full-scale value | 16.1 V |
| relative overall tolerance of the voltage | 3 % |
| relative control precision of the output voltage | |
| • on slow fluctuation of input voltage | 0.1 % |
| • on slow fluctuation of ohm loading | 0.1 % |
| residual ripple | |
| • maximum | 200 mV |
| • typical | 30 mV |
| voltage peak | |
| • maximum | 300 mV |

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| • typical | 50 mV |
| display version for normal operation | Green LED for output voltage OK |
| behavior of the output voltage when switching on | No overshoot of Vout (soft start) |
| response delay maximum | 0.5 s |
| voltage increase time of the output voltage | |
| • typical | 100 ms |
| output current | |
| • rated value | 4.5 A |
| • rated range | 0 ... 4.5 A; +55 ... +70 °C: Derating 2%/K |
| supplied active power typical | 54 W |
| bridging of equipment | Yes |
| number of parallel-switched equipment resources for increasing the power | 2 |
| efficiency in percent | 87.1 % |
| power loss [W] | |
| • at rated output voltage for rated value of the output current typical | 8 W |
| • during no-load operation maximum | 0.3 W |
| closed-loop control | |
| relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical | 0.2 % |
| relative control precision of the output voltage at load step of resistive load 10/90/10 % typical | 4 % |
| setting time | |
| • load step 10 to 90% typical | 1 ms |
| • load step 90 to 10% typical | 1 ms |
| protection and monitoring | |
| design of the overvoltage protection | Yes, according to EN 60950-1 |
| property of the output short-circuit proof | Yes |
| design of short-circuit protection | Constant current characteristic |
| • response value current limitation typical | 5 A |
| overcurrent overload capability | |
| • when switching on | 150% Iout rated typ. 200 ms |
| • in normal operation | overload capability 150% Iout rated typ. 200 ms |
| enduring short circuit current RMS value | |
| • maximum | 5 A |
| measuring point for output current | Yes; 50 mV =^ 4.5 A |
| safety | |
| galvanic isolation between input and output | Yes |
| galvanic isolation | Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 |
| operating resource protection class | Class II (without protective conductor) |
| protection class IP | IP20 |
| standard | |
| • for emitted interference | EN 55022 Class B |
| • for mains harmonics limitation | not applicable |
| • for interference immunity | EN 61000-6-2 |
| standards, specifications, approvals | |
| certificate of suitability | |
| • CE marking | Yes |
| • UL approval | Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cURus-Recognized (UL 60950, CSA C22.2 No. 60950), File E151273, NEC class 2 (acc. to UL 1310) |
| • CSA approval | Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cURus-Recognized (UL 60950, CSA C22.2 No. 60950), File E151273, NEC class 2 (acc. to UL 1310) |
| • EAC approval | Yes |
| • NEC Class 2 | Yes; according to UL1310, File E151273 |
| • SEMI F47 | Yes |
| type of certification | |
| • CB-certificate | Yes |
| MTBF at 40 °C | 2 566 680 h |
| standards, specifications, approvals hazardous environments | |

| | |
|---|--|
| certificate of suitability | |
| <ul style="list-style-type: none"> • IECEx • ATEX • ULhazloc approval • cCSAus, Class 1, Division 2 • FM registration | <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> |
| standards, specifications, approvals marine classification | |
| shipbuilding approval | Yes |
| Marine classification association | |
| <ul style="list-style-type: none"> • American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (BV) • Det Norske Veritas (DNV) • Lloyds Register of Shipping (LRS) | <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> |
| standards, specifications, approvals Environmental Product Declaration | |
| Environmental Product Declaration | Yes |
| Global Warming Potential [CO2 eq] | |
| <ul style="list-style-type: none"> • total • during manufacturing • during operation • after end of life | <p>254.5 kg</p> <p>3.9 kg</p> <p>250.3 kg</p> <p>0.13 kg</p> |
| ambient conditions | |
| ambient temperature | |
| <ul style="list-style-type: none"> • during operation • during transport • during storage | <p>-25 ... +70 °C; with natural convection</p> <p>-40 ... +85 °C</p> <p>-40 ... +85 °C</p> |
| environmental category according to IEC 60721 | Climate class 3K3, 5 ... 95% no condensation |
| connection method | |
| type of electrical connection | screw-type terminals |
| <ul style="list-style-type: none"> • at input • at output • for auxiliary contacts | <p>L, N: 1 screw terminal each for 0.5 ... 2.5 mm² single-core/finely stranded</p> <p>+, -: 1 screw terminal each for 0.5 ... 2.5 mm²</p> <p>-</p> |
| mechanical data | |
| width × height × depth of the enclosure | 54 × 90 × 53 mm |
| installation width × mounting height | 54 × 130 mm |
| required spacing | |
| <ul style="list-style-type: none"> • top • bottom • left • right | <p>20 mm</p> <p>20 mm</p> <p>0 mm</p> <p>0 mm</p> |
| fastening method | Snaps onto DIN rail EN 60715 35x7.5/15, direct mounting in different mounting positions |
| <ul style="list-style-type: none"> • standard rail mounting • S7 rail mounting • wall mounting | <p>Yes</p> <p>No</p> <p>Yes</p> |
| housing can be lined up | Yes |
| net weight | 0.2 kg |
| additional information | |
| other information | Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified) |
| security information | |
| security information | Siemens provides products and solutions with industrial security functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial security concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial security measures that may be implemented, please visit https://www.siemens.com/industrialsecurity . Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available |

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Classifications

| | Version | Classification |
|--------|---------|----------------|
| eClass | 12 | 27-04-07-01 |
| eClass | 9.1 | 27-04-07-01 |
| eClass | 9 | 27-04-07-01 |
| eClass | 8 | 27-04-90-02 |
| eClass | 7.1 | 27-04-90-02 |
| eClass | 6 | 27-04-90-02 |
| ETIM | 9 | EC002540 |
| ETIM | 8 | EC002540 |
| ETIM | 7 | EC002540 |
| IDEA | 4 | 4130 |
| UNSPSC | 15 | 39-12-10-04 |

Approvals Certificates

General Product Approval



[Manufacturer Declaration](#)

[Declaration of Conformity](#)



General Product Approval

For use in hazardous locations



[EM](#)

[CCC-Ex](#)

Marine / Shipping

Environment



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