

SITOP PSU8200 48 V/10 A
 SITOP PSU8200 48 V/10 A Stabilized power supply input: 3 AC 400-500 V output: 48 V DC/10 A



| Input | |
|----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Input | 3-phase AC |
| Rated voltage value V_{in} rated | 400 ... 500 V |
| Voltage range AC | 320 ... 575 V |
| Wide-range input | Yes |
| Mains buffering | at $V_{in} = 400$ V |
| Mains buffering at I_{out} rated, min. | 15 ms; at $V_{in} = 400$ V |
| Rated line frequency 1 | 50 Hz |
| Rated line frequency 2 | 60 Hz |
| Rated line range | 47 ... 63 Hz |
| Input current | |
| <ul style="list-style-type: none"> at rated input voltage 400 V at rated input voltage 500 V | 1.2 A 1 A |
| Switch-on current limiting (+25 °C), max. | 16 A |
| I^2t , max. | 0.8 A ² ·s |
| Built-in incoming fuse | none |
| Protection in the mains power input (IEC 898) | Required: 3-pole connected miniature circuit breaker 6 ... 16 A characteristic C or circuit breaker 3RV2011-1DA10 (setting 3 A) or 3RV2711-1DD10 (UL 489) |

| Output | |
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| Output | Controlled, isolated DC voltage |
| Rated voltage Vout DC | 48 V |
| Total tolerance, static ± | 3 % |
| Static mains compensation, approx. | 0.1 % |
| Static load balancing, approx. | 0.2 % |
| Residual ripple peak-peak, max. | 100 mV |
| Spikes peak-peak, max. (bandwidth: 20 MHz) | 200 mV |
| Adjustment range | 42 ... 56 V |
| Product function Output voltage adjustable | Yes |
| Output voltage setting | via potentiometer; max. 480 W |
| Status display | Green LED for 48 V OK |
| Signaling | Relay contact (NO contact, rating 60 V DC/ 0.3 A) for 48 V OK |
| On/off behavior | No overshoot of Vout (soft start) |
| Startup delay, max. | 2.5 s |
| Voltage increase time of the output voltage maximum | 500 ms |
| Rated current value Iout rated | 10 A |
| Current range | 0 ... 10 A |
| • Note | +60 ... +70 °C: Derating 2%/K |
| Supplied active power typical | 480 W |
| Short-term overload current | |
| • at short-circuit during operation typical | 30 A |
| Duration of overloading capability for excess current | |
| • at short-circuit during operation | 25 ms |
| Constant overload current | |
| • on short-circuiting during the start-up typical | 11 A |
| Parallel switching for enhanced performance | Yes; switchable characteristic |
| Numbers of parallel switchable units for enhanced performance | 2 |

| Efficiency | |
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| Efficiency at Vout rated, Iout rated, approx. | 94 % |
| Power loss at Vout rated, Iout rated, approx. | 31 W |

| Closed-loop control | |
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| Dynamic mains compensation (Vin rated ±15 %), max. | 0.1 % |
| Dynamic load smoothing (Iout: 50/100/50 %), Uout ± typ. | 1 % |
| Load step setting time 50 to 100%, typ. | 0.2 ms |
| Load step setting time 100 to 50%, typ. | 0.2 ms |
| Dynamic load smoothing (Iout: 10/90/10 %), Uout ± typ. | 2 % |
| Load step setting time 10 to 90%, typ. | 0.2 ms |
| Load step setting time 90 to 10%, typ. | 0.2 ms |

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| Setting time maximum | 10 ms |
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Protection and monitoring

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| Output overvoltage protection | < 60 V |
| Current limitation, typ. | 11 A |
| Property of the output Short-circuit proof | Yes |
| Short-circuit protection | Alternatively, constant current characteristic approx. 11 A or latching shutdown |
| Enduring short circuit current RMS value <ul style="list-style-type: none"> • typical | 11 A |
| Overcurrent overload capability in normal operation | overload capability 150 % I _{out} rated up to 5 s/min |
| Overload/short-circuit indicator | LED yellow for "overload", LED red for "latching shutdown" |

Safety

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| Primary/secondary isolation | Yes |
| Galvanic isolation | Safety extra low output voltage V _{out} according to EN 60950-1 |
| Protection class | Class I |
| Leakage current <ul style="list-style-type: none"> • maximum • typical | 3.5 mA 0.9 mA |
| Degree of protection (EN 60529) | IP20 |

Approvals

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| CE mark | Yes |
| UL/cUL (CSA) approval | cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) |
| Explosion protection | IECEx Ex nA nC IIC T4 Gc; ATEX (EX) II 3G Ex nA nC IIC T4; cCSAus (CSA C22.2 No. 213, ANSI/ISA-12.12.01) Class I, Div. 2, Group ABCD, T4 |
| FM approval | - |
| CB approval | Yes |
| Marine approval | ABS, DNV GL |

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 <ul style="list-style-type: none"> • during operation — Note • during transport • during storage | -25 ... +70 °C with natural convection -40 ... +85 °C -40 ... +85 °C |
| Humidity class according to EN 60721 | Climate class 3K3, no condensation |

Mechanics

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| Connection technology | screw-type terminals |
| Connections | <ul style="list-style-type: none"> • Supply input • Output • Auxiliary |
| Width of the enclosure | 70 mm |
| Height of the enclosure | 125 mm |
| Depth of the enclosure | 125 mm |
| Required spacing | <ul style="list-style-type: none"> • top • bottom • left • right |
| Weight, approx. | 1.2 kg |
| Product feature of the enclosure housing for side-by-side mounting | Yes |
| Installation | Snaps onto DIN rail EN 60715 35x7.5/15 |
| Electrical accessories | Buffer module |
| Mechanical accessories | Device identification label 20 mm × 7 mm, TI-grey 3RT2900-1SB20 |
| Other information | Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified) |