



Figure similar

SITOP PSU6200/1AC/DC24V/10A/EX

SITOP PSU6200 Ex 24 V/10 A stabilized power supply input: 120/230 V AC output: 24 V / 10 A DC with diagnostic interface with painted printed circuit boards

| Input  |  |
|--|--|
| type of the power supply network   | 1-phase AC or DC   |
| supply voltage at AC   |  |
| • minimum rated value  | 120 V  |
| • maximum rated value  | 240 V  |
| • initial value  | 85 V   |
| • full-scale value   | 264 V  |
| supply voltage   |  |
| • at DC  | 110 ... 240 V  |
| input voltage  |  |
| • at DC  | 85 ... 275 V   |
| design of input wide range input   | Yes  |
| overvoltage overload capability  | 300 V AC for 30 s  |
| operating condition of the mains buffering   | at Vin = 240 V   |
| buffering time for rated value of the output current in the event of power failure minimum | 45 ms  |
| operating condition of the mains buffering   | at Vin = 240 V   |
| line frequency   |  |
| • 1 rated value  | 50 Hz  |
| • 2 rated value  | 60 Hz  |
| line frequency   | 47 ... 63 Hz   |
| input current  |  |
| • at rated input voltage 120 V   | 2.2 A  |
| • at rated input voltage 240 V   | 1.2 A  |
| current limitation of inrush current at 25 °C maximum                                      | 6 A  |
| fuse protection type   | 5 A  |
| • in the feeder  | Circuit breaker from 4 A characteristic C/6 A characteristic B to 10 A characteristic C or circuit breaker 3RV2011-1EA10 (setting 4 A) or 3RV2711-1ED10 (UL 489) |
| Output   |  |
| voltage curve at output  | Controlled, isolated DC voltage  |
| number of outputs  | 1  |
| output voltage at DC rated value   | 24 V   |
| output voltage   |  |
| • at output 1 at DC rated value  | 24 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  |  |

|   |  |
|---|--|
| <ul style="list-style-type: none"> <li>• maximum</li> <li>• typical</li> </ul>  | 30 mV<br>20 mV   |
| voltage peak  |  |
| <ul style="list-style-type: none"> <li>• maximum</li> <li>• typical</li> </ul>  | 30 mV<br>20 mV   |
| adjustable output voltage   | 24 ... 28 V  |
| product function output voltage adjustable  | Yes  |
| type of output voltage setting  | via potentiometer; max. 240 W (288 W up to 45°C)   |
| display version for normal operation  | Green LED for 24 V OK  |
| type of signal at output  | Electronic contact (NO contact, contact rating 30 V DC/0.1 A) for DC O.K. or diagnostic interface  |
| behavior of the output voltage when switching on  | Overshoot of $V_{out} < 2\%$   |
| response delay maximum  | 0.5 s  |
| voltage increase time of the output voltage   |  |
| <ul style="list-style-type: none"> <li>• typical</li> </ul>   | 200 ms   |
| output current  |  |
| <ul style="list-style-type: none"> <li>• rated value</li> <li>• rated range</li> </ul>  | 10 A<br>0 ... 10 A; 12 A up to +45°C; +60 ... +70 °C: Derating 3%/K  |
| supplied active power typical   | 240 W  |
| short-term overload current   |  |
| <ul style="list-style-type: none"> <li>• on short-circuiting during the start-up typical</li> <li>• at short-circuit during operation typical</li> </ul>              | 12 A<br>12 A   |
| product feature   |  |
| <ul style="list-style-type: none"> <li>• parallel switching of outputs</li> <li>• bridging of equipment</li> </ul>  | can be set with DIP switch<br>Yes; switchable characteristic   |
| number of parallel-switched equipment resources for increasing the power  | 2  |
| <b>Efficiency</b>   |  |
| efficiency in percent   | 92.8 %   |
| power loss [W]  |  |
| <ul style="list-style-type: none"> <li>• at rated output voltage for rated value of the output current typical</li> <li>• during no-load operation maximum</li> </ul> | 18 W<br>2.2 W  |
| <b>Closed-loop control</b>  |  |
| relative control precision of the output voltage at load step of resistive load 10/90/10 % typical  | 2 %  |
| setting time  |  |
| <ul style="list-style-type: none"> <li>• load step 10 to 90% typical</li> <li>• load step 90 to 10% typical</li> <li>• maximum</li> </ul>                             | 2 ms<br>2 ms<br>3 ms   |
| <b>Protection and monitoring</b>  |  |
| design of the overvoltage protection  | < 32 V   |
| <ul style="list-style-type: none"> <li>• typical</li> </ul>   | 12 A   |
| property of the output short-circuit proof  | Yes  |
| design of short-circuit protection  | Shutdown and periodic restart attempts   |
| overcurrent overload capability in normal operation   | overload capability 150 % I <sub>out</sub> rated up to 5 s/min   |
| <b>Safety</b>   |  |
| galvanic isolation between input and output   | Yes  |
| galvanic isolation  | Safety extra low output voltage $V_{out}$ according to EN 60950-1  |
| operating resource protection class   | Class I  |
| leakage current   |  |
| <ul style="list-style-type: none"> <li>• maximum</li> </ul>   | 3.5 mA   |
| protection class IP   | IP20   |
| <b>Approvals</b>  |  |
| certificate of suitability  |  |
| <ul style="list-style-type: none"> <li>• CE marking</li> <li>• UL approval</li> <li>• CSA approval</li> <li>• cCSAus, Class 1, Division 2</li> <li>• ATEX</li> </ul>  | Yes<br>Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1)<br>Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1)<br>No<br>Yes; ATEX (EX) II 3G Ex ec nC IIC T3 Gc |

|   |  |
|---|--|
| certificate of suitability  |  |
| <ul style="list-style-type: none"> <li>• relating to ATEX</li> <li>• IECEx</li> <li>• NEC Class 2</li> <li>• ULhazloc approval</li> <li>• FM registration</li> </ul>  | IECEx Ex ec nC IIC T3 Gc; ATEX (EX) II 3G Ex ec nC IIC T3 Gc<br>Yes; IECEx Ex ec nC IIC T3 Gc<br>No<br>No<br>No  |
| certificate of suitability shipbuilding approval  | Yes  |
| shipbuilding approval   | ABS; in process: DNV   |
| Marine classification association   |  |
| <ul style="list-style-type: none"> <li>• American Bureau of Shipping Europe Ltd. (ABS)</li> <li>• French marine classification society (BV)</li> <li>• DNV GL</li> <li>• Lloyds Register of Shipping (LRS)</li> <li>• Nippon Kaiji Kyokai (NK)</li> </ul> | Yes<br>No<br>No<br>No<br>No  |
| <b>EMC</b>  |  |
| standard  |  |
| <ul style="list-style-type: none"> <li>• for emitted interference</li> <li>• for mains harmonics limitation</li> <li>• for interference immunity</li> </ul>   | EN 55022 Class B<br>EN 61000-3-2<br>EN 61000-6-2   |
| <b>environmental conditions</b>   |  |
| ambient temperature   |  |
| <ul style="list-style-type: none"> <li>• during operation</li> <li>• during transport</li> <li>• during storage</li> </ul>  | -30 ... +70 °C; with natural convection a monotonically increasing start-up from -25 °C, safe start-up from -40 °C<br>-40 ... +85 °C<br>-40 ... +85 °C   |
| environmental category according to IEC 60721   | Climate class 3K3, 5 ... 95% no condensation   |
| <b>Mechanics</b>  |  |
| type of electrical connection   | push-in terminals  |
| <ul style="list-style-type: none"> <li>• at input</li> <li>• at output</li> <li>• for auxiliary contacts</li> </ul>   | L1/+, L2/N/-, PE: push-in for 0.5 ... 4 mm² single-core/finely stranded<br>+1, +2, -1, -2, -3: push-in for 0.5 ... 2.5 mm²<br>13, 14 (alarm signal): 1 push-in terminal each for 0.2 ... 1.5 mm² |
| width of the enclosure  | 45 mm  |
| height of the enclosure   | 135 mm   |
| depth of the enclosure  | 125 mm   |
| required spacing  |  |
| <ul style="list-style-type: none"> <li>• top</li> <li>• bottom</li> <li>• left</li> <li>• right</li> </ul>  | 45 mm<br>45 mm<br>0 mm<br>0 mm   |
| net weight  | 0.9 kg   |
| product feature of the enclosure housing can be lined up  | Yes  |
| fastening method  | Snaps onto DIN rail EN 60715 35x7.5/15   |
| electrical accessories  | Buffer module, redundancy module   |
| mechanical accessories  | Identification labels SIMATIC ET 200SP 6ES7193-6LF30-0AW0  |
| other information   | Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)  |

