

SITOP PSU6200 24 V3,7 A NEC CLASS II

SITOP PSU6200 3.7 A NEC class II Stabilized power supply Input:  
120 - 230 V AC, (120 - 240 V DC) Output: 24 V DC/3.7 A



| Input                                     |                            |
|---|----------------------------|
| Input                                     | 1-phase AC or DC           |
| Rated voltage value $V_{in}$ rated        | 120 ... 230 V              |
| Voltage range AC                          | 85 ... 264 V               |
| Supply voltage                            |                            |
| • at DC                                   | 120 ... 240 V              |
| Input voltage                             |                            |
| • at DC                                   | 99 ... 275 V               |
| Wide-range input                          | Yes                        |
| Overvoltage resistance                    | 300 V AC for 30 s          |
| Mains buffering at $I_{out}$ rated, min.  | 90 ms; at $V_{in} = 230$ 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            | 1.5 A                      |
| • at rated input voltage 230 V            | 0.9 A                      |
| Switch-on current limiting (+25 °C), max. | 29 A                       |
| Built-in incoming fuse                    | 3.15 A                     |

| Output   |   |
|--|---|
| Output   | Controlled, isolated DC voltage   |
| Number of outputs  | 1   |
| Rated voltage $V_{out}$ DC   | 24 V  |
| Total tolerance, static $\pm$  | 3 %   |
| Static mains compensation, approx.                                   | 0.2 %   |
| Static load balancing, approx.                                       | 0.3 %   |
| Residual ripple peak-peak, max.                                      | 30 mV   |
| Residual ripple peak-peak, typ.                                      | 20 mV   |
| Spikes peak-peak, max. (bandwidth: 20 MHz)                           | 100 mV  |
| Spikes peak-peak, typ. (bandwidth: 20 MHz)                           | 60 mV   |
| Adjustment range   | 24 ... 28 V   |
| Product function Output voltage adjustable                           | Yes   |
| Output voltage setting   | via potentiometer; max. 89 W (106 W up to 45°C)   |
| Status display   | Green LED for 24 V OK   |
| Signaling  | Electronic contact (NO contact, contact rating 60 V DC/0.1 A) for 24 V O.K. or diagnostic interface |
| On/off behavior  | Overshoot of $V_{out} < 2$ %  |
| Startup delay, max.  | 0.5 s   |
| Voltage rise, typ.   | 100 ms  |
| Rated current value $I_{out}$ rated                                  | 3.7 A   |
| Current range  | 0 ... 3.7 A   |
| Supplied active power typical  | 89 W  |
| Short-term overload current  |   |
| • on short-circuiting during the start-up typical                    | 3.7 A   |
| • at short-circuit during operation typical                          | 3.7 A   |
| Efficiency   |   |
| Efficiency at $V_{out}$ rated, $I_{out}$ rated, approx.              | 89.3 %  |
| Power loss at $V_{out}$ rated, $I_{out}$ rated, approx.              | 11 W  |
| Power loss [W] during no-load operation maximum                      | 2.2 W   |
| Closed-loop control  |   |
| Dynamic load smoothing ( $I_{out}$ : 10/90/10 %), $U_{out} \pm$ typ. | 2 %   |
| Load step setting time 10 to 90%, typ.                               | 2 ms  |
| Load step setting time 90 to 10%, typ.                               | 2 ms  |
| Setting time maximum   | 3 ms  |
| Protection and monitoring  |   |
| Output overvoltage protection  | < 32 V  |
| Current limitation, typ.   | 3.7 A   |
| Property of the output Short-circuit proof                           | Yes   |
| Short-circuit protection   | Shutdown and periodic restart attempts  |
| Safety   |   |

|   |   |
|---|---|
| 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"> <li>• maximum</li> </ul> | 3.5 mA  |
| CE mark   | Yes   |
| UL/cUL (CSA) approval   | cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259;<br>cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) |
| Explosion protection  | -   |
| FM approval   | -   |
| CB approval   | Yes   |
| Regulatory Compliance Mark (RCM)  | No  |
| Marine approval   | in process: DNV 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 <ul style="list-style-type: none"> <li>• during operation</li> <li>— Note</li> <li>• during transport</li> <li>• during storage</li> </ul> | -25 ... +70 °C<br>with natural convection<br>-40 ... +85 °C<br>-40 ... +85 °C |
| Humidity class according to EN 60721   | Climate class 3K3, no condensation  |

### Mechanics

|   |   |
|---|---|
| Connection technology   | Push-in terminals   |
| Connections <ul style="list-style-type: none"> <li>• Supply input</li> <li>• Output</li> <li>• Auxiliary</li> </ul>         | L1/+, L2/N/-; PE PushIn for 0.5 ... 4 mm <sup>2</sup> single-core/finely stranded<br>+1, +2, -1, -2, -3: PushIn for 0.5 ... 2.5 mm <sup>2</sup><br>13, 14 (alarm signal): 1 push-in terminal each for 0.2 ... 1.5 mm <sup>2</sup> |
| Width of the enclosure  | 35 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  |
| 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, redundancy 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) |