



SITOP PSU6200/1AC/24VDC/3.7A/NECCLASS2

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 ... 240 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 $V_{in} = 230$ V                                                                                                                     |
| 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                                                                                                                                  |
| Protection in the mains power input (IEC 898) | Circuit breaker 4 A characteristic C or 6 A characteristic B/C or circuit breaker 3RV2011-1EA10 (setting 4 A) or 3RV2711-1ED10 (UL 489) |
| 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 30 V DC/0.1 A) for DC O.K. or diagnostic interface    |
| On/off behavior                                        | Overshoot of Vout < 2 %                                                                              |
| Startup delay, max.                                    | 0.5 s                                                                                                |
| Voltage rise, typ.                                     | 100 ms                                                                                               |
| Rated current value Iout rated                         | 3.7 A                                                                                                |
| Current range                                          | 0 ... 3.7 A                                                                                          |
| • Note                                                 | +60 ... +70 °C: Derating 1.5%/K                                                                      |
| 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                                                                                                |
| <b>Efficiency</b>                                      |                                                                                                      |
| Efficiency at Vout rated, Iout rated, approx.          | 89.3 %                                                                                               |
| Power loss at Vout rated, Iout rated, approx.          | 11 W                                                                                                 |
| power loss [W] during no-load operation maximum        | 2.2 W                                                                                                |
| <b>Closed-loop control</b>                             |                                                                                                      |
| Dynamic load smoothing (Iout: 10/90/10 %), Uout ± 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                                                                                                 |
| <b>Protection and monitoring</b>                       |                                                                                                      |
| 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                                                               |
| <b>Safety</b>                                          |                                                                                                      |
| Primary/secondary isolation                            | Yes                                                                                                  |
| galvanic isolation                                     | Safety extra low output voltage Vout according to EN 60950-1                                         |
| Protection class                                       | Class I                                                                                              |
| leakage current                                        |                                                                                                      |
| • maximum                                              | 3.5 mA                                                                                               |
| Degree of protection (EN 60529)                        | IP20                                                                                                 |
| <b>Approvals</b>                                       |                                                                                                      |
| 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                                   | -                                                                                                    |
| certificate of suitability NEC Class 2                 | Yes                                                                                                  |
| FM approval                                            | -                                                                                                    |
| CB approval                                            | Yes                                                                                                  |
| Regulatory Compliance Mark (RCM)                       | No                                                                                                   |
| Marine approval                                        | in process: DNV GL, ABS                                                                              |
| <b>EMC</b>                                             |                                                                                                      |
| Emitted interference                                   | EN 55022 Class B                                                                                     |
| Supply harmonics limitation                            | EN 61000-3-2                                                                                         |
| Noise immunity                                         | EN 61000-6-2                                                                                         |
| <b>environmental conditions</b>                        |                                                                                                      |
| ambient temperature                                    |                                                                                                      |
| • during operation                                     | -25 ... +70 °C                                                                                       |
| — Note                                                 | with natural convection                                                                              |
| • during transport                                     | -40 ... +85 °C                                                                                       |
| • during storage                                       | -40 ... +85 °C                                                                                       |
| Humidity class according to EN 60721                   | Climate class 3K3, 5 ... 95% no condensation                                                         |
| <b>Mechanics</b>                                       |                                                                                                      |
| Connection technology                                  | Push-in terminals                                                                                    |

|                                                          |                                                                                                   |
|----------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| Connections                                              |                                                                                                   |
| • Supply input                                           | L1/+, L2/N/-; PE PushIn for 0.5 ... 4 mm <sup>2</sup> single-core/finely stranded                 |
| • Output                                                 | +1, +2, -1, -2, -3: PushIn for 0.5 ... 2.5 mm <sup>2</sup>                                        |
| • Auxiliary                                              | 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                                         |                                                                                                   |
| • top                                                    | 45 mm                                                                                             |
| • bottom                                                 | 45 mm                                                                                             |
| • left                                                   | 0 mm                                                                                              |
| • right                                                  | 0 mm                                                                                              |
| Weight, approx.                                          | 0.7 kg                                                                                            |
| product feature of the enclosure housing can be lined up | Yes                                                                                               |
| Installation                                             | 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) |

