

SITOP PSU6200 24 V/20 A  
 SITOP PSU6200 24 V/20 A Stabilized power supply Input: 120 - 230 V AC, (120 - 240 V DC) Output: 24 V DC/20 A with diagnostics interface



| 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                                   | 110 ... 240 V              |
| Input voltage                             |                            |
| • at DC                                   | 85 ... 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.  | 25 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            | 4.3 A                      |
| • at rated input voltage 230 V            | 2.3 A                      |
| Switch-on current limiting (+25 °C), max. | 12 A                       |

|                        |      |
|------------------------|------|
| Built-in incoming fuse | 10 A |
|------------------------|------|

### Output

|   |   |
|---|---|
| Output  | Controlled, isolated DC voltage   |
| Number of outputs   | 1   |
| Rated voltage Vout DC   | 24 V  |
| Total tolerance, static ±                                     | 3 %   |
| Static mains compensation, approx.                            | 0.2 %   |
| Static load balancing, approx.                                | 0.2 %   |
| Residual ripple peak-peak, max.                               | 80 mV   |
| Residual ripple peak-peak, typ.                               | 50 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. 480 W (576 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 Vout approx. 3 %   |
| Startup delay, max.   | 0.5 s   |
| Voltage rise, typ.  | 100 ms  |
| Rated current value Iout rated                                | 20 A  |
| Current range   | 0 ... 20 A  |
| • Note  | 24 A up to +45°C; +60 ... +70 °C: Derating 1%/K   |
| Supplied active power typical                                 | 480 W   |
| Short-term overload current                                   |   |
| • on short-circuiting during the start-up typical             | 30 A  |
| • at short-circuit during operation typical                   | 30 A  |
| Product feature parallel switching of outputs                 | can be set with DIP switch  |
| Parallel switching for enhanced performance                   | Yes; switchable characteristic  |
| Numbers of parallel switchable units for enhanced performance | 2   |

### Efficiency

|   |        |
|---|--------|
| Efficiency at Vout rated, Iout rated, approx.   | 95.1 % |
| Power loss at Vout rated, Iout rated, approx.   | 25 W   |
| Power loss [W] during no-load operation maximum | 2.6 W  |

### Closed-loop control

|  |        |
|--|--------|
| Dynamic load smoothing (Iout: 10/90/10 %), Uout ± typ. | 3 %    |
| Load step setting time 10 to 90%, typ.                 | 0.5 ms |
| Load step setting time 90 to 10%, typ.                 | 0.5 ms |
| Setting time maximum                                   | 1 ms   |

| Protection and monitoring                           |  |
|---|--|
| Output overvoltage protection                       | < 32 V   |
| Current limitation, typ.                            | 30 A   |
| Property of the output Short-circuit proof          | Yes  |
| 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 |

| Safety                          |  |
|---------------------------------|--|
| Primary/secondary isolation     | Yes  |
| Galvanic isolation              | Safety extra low output voltage V <sub>out</sub> according to EN 60950-1 |
| Protection class                | Class I  |
| Leakage current                 |  |
| • maximum                       | 3.5 mA   |
| Degree of protection (EN 60529) | IP20   |

| Approvals                        |   |
|----------------------------------|---|
| 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   |

| EMC                         |                  |
|-----------------------------|------------------|
| Emitted interference        | EN 55022 Class B |
| Supply harmonics limitation | EN 61000-3-2     |
| Noise immunity              | EN 61000-6-2     |

| environmental conditions             |                                    |
|--------------------------------------|------------------------------------|
| 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, no condensation |

| Mechanics              |  |
|------------------------|--|
| 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 ... 6 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 | 70 mm  |

|  |   |
|--|---|
| Height of the enclosure  | 135 mm  |
| Depth of the enclosure   | 155 mm  |
| Required spacing   |   |
| • top  | 45 mm   |
| • bottom   | 45 mm   |
| • left   | 0 mm  |
| • right  | 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   | Identification labels SIMATIC ET 200SP 6ES7193-6LF30-0AW0   |
| Other information  | Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified) |