

SITOP PSU6200 24 V/5 A
 SITOP PSU6200 24 V/5 A Stabilized power supply Input: 120 - 230 V
 AC, (120 - 240 V DC) Output: 24 V DC/5 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 $V_{in} = 230$ V |
| Mains buffering at I_{out} rated, min. | 80 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 | 1.9 A |
| • at rated input voltage 230 V | 1.1 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. | 0.1 % |
| Static load balancing, approx. | 0.2 % |
| 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. 120 W (144 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 $V_{out} < 2$ % |
| Startup delay, max. | 0.5 s |
| Voltage rise, typ. | 100 ms |
| Rated current value I_{out} rated | 5 A |
| Current range | 0 ... 5 A |
| • Note | 6 A up to +45°C; +60 ... +70 °C: Derating 2%/K |
| Supplied active power typical | 120 W |
| Short-term overload current | |
| • on short-circuiting during the start-up typical | 6 A |
| • at short-circuit during operation typical | 6 A |

Efficiency

| | |
|---|--------|
| Efficiency at V_{out} rated, I_{out} rated, approx. | 90.2 % |
| Power loss at V_{out} rated, I_{out} rated, approx. | 13 W |
| Power loss [W] during no-load operation maximum | 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. | 1 ms |
| Load step setting time 90 to 10%, typ. | 1 ms |
| Setting time maximum | 2 ms |

Protection and monitoring

| | |
|---|--|
| Output overvoltage protection | < 32 V |
| Current limitation, typ. | 6 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 _{out} rated up to 5 s/min |

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 | |
| • 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; 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, 5 ... 95% no condensation |

Mechanics

| | |
|-------------------------|---|
| Connection technology | Push-in terminals |
| Connections | |
| • Supply input | L1/+, L2/N/-; PE PushIn for 0.5 ... 4 mm ² single-core/finely stranded |
| • Output | +1, +2, -1, -2, -3: PushIn for 0.5 ... 2.5 mm ² |
| • Auxiliary | 13, 14 (alarm signal): 1 push-in terminal each for 0.2 ... 1.5 mm ² |
| 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 |
| 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) |