

SITOP PSU6200/1AC/24VDC/20A  
 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 supply voltage	85 ... 264 V
<ul style="list-style-type: none"> <li>at DC</li> </ul>	110 ... 240 V
input voltage	
<ul style="list-style-type: none"> <li>at DC</li> </ul>	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	
<ul style="list-style-type: none"> <li>at rated input voltage 120 V</li> </ul>	4.3 A
<ul style="list-style-type: none"> <li>at rated input voltage 230 V</li> </ul>	2.3 A
Switch-on current limiting (+25 °C), max.	12 A

Built-in incoming fuse	10 A
Protection in the mains power input (IEC 898)	Circuit breaker from 6 A characteristic B to 16 A characteristic C or circuit breaker 3RV2011-1HA10 (setting 8A) or 3RV2711-1HD10 (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.	0.2 %
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 30 V DC/0.1 A) for DC O.K. or diagnostic interface
On/off behavior	Overshoot of $V_{out}$ approx. 3 %
Startup delay, max.	0.5 s
Voltage rise, typ.	100 ms
Rated current value $I_{out}$ 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 $V_{out}$ rated, $I_{out}$ rated, approx.	95.5 %
Power loss at $V_{out}$ rated, $I_{out}$ rated, approx.	25 W
power loss [W] during no-load operation maximum	2.6 W

Closed-loop control	
Dynamic load smoothing ( $I_{out}$ : 10/90/10 %), $U_{out} \pm$ 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
<b>Protection and monitoring</b>	
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
<b>Safety</b>	
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
<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	No
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 a monotonically increasing start-up from -25 °C, safe start-up from -40 °C
• 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	

<ul style="list-style-type: none"> <li>• Supply input</li> </ul>	L1/+, L2/N/-; PE PushIn for 0.5 ... 4 mm <sup>2</sup> single-core/finely stranded
<ul style="list-style-type: none"> <li>• Output</li> </ul>	+1, +2, -1, -2, -3: PushIn for 0.5 ... 6 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>• Auxiliary</li> </ul>	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	
<ul style="list-style-type: none"> <li>• top</li> </ul>	45 mm
<ul style="list-style-type: none"> <li>• bottom</li> </ul>	45 mm
<ul style="list-style-type: none"> <li>• left</li> </ul>	0 mm
<ul style="list-style-type: none"> <li>• right</li> </ul>	0 mm
Weight, approx.	1.5 kg
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)