

SITOP PSU6200/3AC/24VDC/20A  
 SITOP PSU6200 24 V/20 A stabilized power supply input: 400 - 500 V AC output: 24 V DC/20 A with diagnostics interface



Input	
Input	3-phase AC or DC
Rated voltage value $V_{in}$ rated	400 ... 500 V
Voltage range AC	323 ... 576 V
input voltage	
• at DC	450 ... 600 V
Mains buffering	at $V_{in} = 400$ V
Mains buffering at $I_{out}$ rated, min.	25 ms; at $V_{in} = 400$ 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 400 V	0.77 A
• at rated input voltage 500 V	0.62 A
Switch-on current limiting (+25 °C), max.	17 A
Protection in the mains power input (IEC 898)	three-poled coupled circuit breaker from 4 A characteristic C to 10 A characteristic 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 Vout DC	24 V
Total tolerance, static ±	3 %
Static mains compensation, approx.	0.2 %
Static load balancing, approx.	0.1 %
Residual ripple peak-peak, max.	30 mV
Residual ripple peak-peak, typ.	20 mV
Spikes peak-peak, max. (bandwidth: 20 MHz)	30 mV
Spikes peak-peak, typ. (bandwidth: 20 MHz)	20 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 Vout < 2 %
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 3%/K
supplied active power typical	480 W
short-term overload current	
• on short-circuiting during the start-up typical	24 A
• at short-circuit during operation typical	24 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.	95.9 %
Power loss at Vout rated, Iout rated, approx.	23 W
power loss [W] during no-load operation maximum	2.9 W

### Closed-loop control

Dynamic load smoothing (Iout: 10/90/10 %), Uout ± typ.	3 %
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.	24 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, 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

### 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 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

### Mechanics

Connection technology	Push-in terminals
Connections	
• Supply input	L1, L2, L3, PE: PushIn for 0.5 ... 10 mm <sup>2</sup>
• 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
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)