

SITOP PSU6200 24 V/10 A
 SITOP PSU6200 24 V/10 A stabilized power supply input: 400 - 500 V AC output: 24 V / 10 A DC 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.	30 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	0.39 A
• at rated input voltage 500 V	0.32 A
Switch-on current limiting (+25 °C), max.	13 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. 240 W (288 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	10 A
Current range	0 ... 10 A
• Note	12 A up to +45°C; +60 ... +70 °C: Derating 3%/K
Supplied active power typical	240 W
Short-term overload current	
• on short-circuiting during the start-up typical	12 A
• at short-circuit during operation typical	12 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.	95.4 %
Power loss at Vout rated, Iout rated, approx.	12 W
Power loss [W] during no-load operation maximum	2.9 W

Closed-loop control

Dynamic load smoothing (Iout: 10/90/10 %), Uout ± 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
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Current limitation, typ.	12 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 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 ... 6 mm ²
• 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	45 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)