

SITOP PSU6200 24 V/10 A
SITOP PSU6200 24 V/10 A Stabilized power supply Input: 120 - 230 V AC, (120 - 240 V DC) Output: 24 V DC/ 10 A with diagnostics interface



Input	
Input	1-phase AC or DC
Rated voltage value Vin 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 Vin = 230 V
Mains buffering at Iout rated, min.	45 ms; at Vin = 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	2.2 A
• at rated input voltage 230 V	1.2 A
Switch-on current limiting (+25 °C), max.	6 A

Built-in incoming fuse	5 A
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Output

Output	Controlled, isolated DC voltage
Number of outputs	1
Rated voltage Vout DC	24 V
Total tolerance, static $\pm$	3 %
Static mains compensation, approx.	0.1 %
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 60 V DC/0.1 A) for 24 V O.K. or diagnostic interface
On/off behavior	Overshoot of Vout < 2 %
Startup delay, max.	0.5 s
Voltage rise, typ.	200 ms
Rated current value Iout rated	10 A
Current range	0 ... 10 A
• Note	12 A up to +45°C; +60 ... +70 °C: Derating 2%/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	switchable characteristic
Numbers of parallel switchable units for enhanced performance	2

Efficiency

Efficiency at Vout rated, Iout rated, approx.	92.8 %
Power loss at Vout rated, Iout rated, approx.	18 W
Power loss [W] during no-load operation maximum	2.2 W

Closed-loop control

Dynamic load smoothing (Iout: 10/90/10 %), Uout $\pm$ typ.	2 %
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.	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
• 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 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	45 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	Device identification label 20 mm × 7 mm, TI-grey 3RT2900-1SB20
Other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)