

SITOP PSU6200 24 V/2,5 A
 SITOP PSU6200 24 V/2.5 A Stabilized power supply Input: 120 - 230 V AC, (120 - 240 V DC) Output: 24 V DC/2.5 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	110 ... 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.	150 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	1.1 A
• at rated input voltage 230 V	0.6 A
Switch-on current limiting (+25 °C), max.	32 A

Built-in incoming fuse	3.15 A
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Output

Output	Controlled, isolated DC voltage
Number of outputs	1
Rated voltage Vout DC	24 V
Total tolerance, static ±	3 %
Static mains compensation, approx.	0.1 %
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	22.2 ... 26.4 V
Product function Output voltage adjustable	Yes
Output voltage setting	via potentiometer; max. 60 W
Status display	Green LED for 24 V OK
On/off behavior	Overshoot of Vout approx. 3 %
Startup delay, max.	1 s
Voltage rise, typ.	100 ms
Rated current value Iout rated	2.5 A
Current range	0 ... 2.5 A
• Note	+60 ... +70 °C: Derating 1.5%/K
Supplied active power typical	60 W
Short-term overload current	
• on short-circuiting during the start-up typical	2.5 A
• at short-circuit during operation typical	2.5 A

Efficiency

Efficiency at Vout rated, Iout rated, approx.	89 %
Power loss at Vout rated, Iout rated, approx.	7 W
Power loss [W] during no-load operation maximum	0.8 W

Closed-loop control

Dynamic load smoothing (Iout: 10/90/10 %), Uout ± typ.	3 %
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.	3.1 A
Property of the output Short-circuit proof	Yes
Short-circuit protection	Shutdown and periodic restart attempts

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 <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • during operation — Note • during transport • during storage 	-25 ... +70 °C with natural convection -40 ... +85 °C -40 ... +85 °C
Humidity class according to EN 60721	Climate class 3K3, no condensation

Mechanics	
Connection technology	Push-in terminals
Connections <ul style="list-style-type: none"> • Supply input • Output • Auxiliary 	L1+, L2/N/-; PE PushIn for 0.5 ... 2.5 mm ² single-core/finely stranded +1, -1, -2: PushIn for 0.5 ... 2.5 mm ² -
Width of the enclosure	40 mm
Height of the enclosure	100 mm
Depth of the enclosure	88 mm
Required spacing <ul style="list-style-type: none"> • top • bottom • left 	50 mm 50 mm 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)