

SITOP PSU6200 24 V/20 A
 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	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 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	
• at rated input voltage 120 V	4.3 A
• at rated input voltage 230 V	2.3 A
Switch-on current limiting (+25 °C), max.	12 A
Built-in incoming fuse	10 A

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.	0.2 %
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 60 V DC/0.1 A) for 24 V O.K. or diagnostic interface
On/off behavior	Overshoot of Vout approx. 3 %
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 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 Vout rated, Iout rated, approx.	95.1 %
Power loss at Vout rated, Iout rated, approx.	25 W
Power loss [W] during no-load operation maximum	2.6 W
Closed-loop control	
Dynamic load smoothing (Iout: 10/90/10 %), Uout $\pm$ 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
Protection and monitoring	

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 _{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
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
Degree of protection (EN 60529)	IP20

EMC

Emitted interference	EN 55022 Class B
Supply harmonics limitation	EN 61000-3-2
Noise immunity	EN 61000-6-2

Operating data

Ambient temperature • 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 • Supply input • Output • Auxiliary	L1/+, L2/N/-; PE PushIn for 0.5 ... 4 mm ² single-core/finely stranded +1, +2, -1, -2, -3: PushIn for 0.5 ... 6 mm ² 13, 14 (alarm signal): 1 push-in terminal each for 0.2 ... 1.5 mm ²
Width of the enclosure	70 mm
Height of the enclosure	135 mm
Depth of the enclosure	155 mm
Required spacing	

• top • bottom • left • right	45 mm 45 mm 0 mm 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)