

SITOP PSU300E 24 V/5 A  
 SITOP PSU2600 24 V/5 A Stabilized power supply input: 230 V AC  
 output: 24 V DC/5 A



Input	
Input	1-phase AC or DC
Supply voltage	
• at DC	110 ... 220 V
Rated voltage value $V_{in}$ rated	120 ... 230 V
Voltage range AC	85 ... 264 V
Input voltage	
• at DC	88 ... 265 V
Wide-range input	Yes
Mains buffering at $I_{out}$ rated, min.	30 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	2.5 A
• at rated input voltage 230 V	1.4 A
Switch-on current limiting (+25 °C), max.	36 A
Built-in incoming fuse	3.15 A
Protection in the mains power input (IEC 898)	None required. Fuse protection starting from 6 A Char. C possible

Output	
Output	Controlled, isolated DC voltage
Rated voltage Vout DC	24 V
Total tolerance, static ±	3 %
Static mains compensation, approx.	0.1 %
Static load balancing, approx.	0.2 %
Residual ripple peak-peak, max.	50 mV
Spikes peak-peak, max. (bandwidth: 20 MHz)	200 mV
Adjustment range	24 ... 28.8 V
Product function Output voltage adjustable	Yes
Output voltage setting	via potentiometer; max. 120 W
Status display	Green LED for 24 V OK
Signaling	Relay contact (NO contact, rating 60 V DC/ 0.3 A) for "24 V OK"
On/off behavior	No overshoot of Vout (soft start)
Startup delay, max.	1 s
Voltage increase time of the output voltage maximum	500 ms
Rated current value Iout rated	5 A
Current range	0 ... 5 A
• Note	+60 °C
Supplied active power typical	120 W
Constant overload current	
• on short-circuiting during the start-up typical	6 A
Parallel switching for enhanced performance	No

Efficiency	
Efficiency at Vout rated, Iout rated, approx.	89 %
Power loss at Vout rated, Iout rated, approx.	15 W
Power loss [W] during no-load operation maximum	1 W

Closed-loop control	
Dynamic mains compensation (Vin rated ±15 %), max.	0.1 %
Dynamic load smoothing (Iout: 50/100/50 %), Uout ± typ.	1 %
Load step setting time 50 to 100%, typ.	0.2 ms
Load step setting time 100 to 50%, typ.	0.2 ms
Dynamic load smoothing (Iout: 10/90/10 %), Uout ± typ.	2 %
Load step setting time 10 to 90%, typ.	0.2 ms
Load step setting time 90 to 10%, typ.	0.2 ms
Setting time maximum	10 ms

Protection and monitoring	
Output overvoltage protection	< 32 V
Current limitation, typ.	6 A

Property of the output Short-circuit proof	Yes
Short-circuit protection	Shutdown and periodic restart attempts
Enduring short circuit current RMS value	6 A
• typical	

### 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	3.5 mA 1.1 mA
• maximum	
• typical	
CE mark	Yes
UL/cUL (CSA) approval	cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259
Explosion protection	No
FM approval	-
CB approval	Yes
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	0 ... 60 °C with natural convection -40 ... +85 °C -40 ... +85 °C
• during operation	
— Note	
• during transport	
• during storage	-40 ... +85 °C
Humidity class according to EN 60721	Climate class 3K3, no condensation

### Mechanics

Connection technology	screw-type terminals
Connections	L1, N, PE: 1 screw terminal each for 0.2 ... 2.5 mm <sup>2</sup> single-core/finely stranded +, -: 2 screw terminals each for 0.2 ... 2.5 mm <sup>2</sup> Signal: 1 screw terminal each for 0.14 ... 1.5 mm <sup>2</sup>
• Supply input	
• Output	
• Auxiliary	
Width of the enclosure	42 mm
Height of the enclosure	125 mm
Depth of the enclosure	125 mm
Required spacing	50 mm 50 mm
• top	
• bottom	

<ul style="list-style-type: none"> <li>• left</li> <li>• right</li> </ul>	0 mm
	0 mm
Weight, approx.	0.6 kg
Product feature of the enclosure housing for side-by-side mounting	Yes
Installation	Snaps onto DIN rail EN 60715 35x7.5/15
Other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)