



SITOP PSU3600 FLEXI/1AC/3-52VDC/10A/120W

SITOP PSU3600 flexi Stabilized  
power supply Input: 120-230 V  
AC Output: 3-52 V DC/10 A, 120  
W

Input	
Input	1-phase AC or DC
Rated voltage value $V_{in}$ rated	120 ... 230 V
Voltage range AC	85 ... 264 V
• Note	Derating at < 110 V AC/DC: output power max. 100 W
supply voltage	
• at DC	110 ... 220 V
input voltage	
• at DC	88 ... 250 V
Wide-range input	Yes
Mains buffering	With $P_a = 120$ W and $U_e = 230$ V AC
Mains buffering at $I_{out}$ rated, min.	80 ms; With $P_a = 120$ W and $U_e = 230$ V AC
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	2.6 A
• at rated input voltage 230 V	1.3 A
• at rated input voltage 110 V	1.3 A
• at rated input voltage 220 V	0.7 A
Switch-on current limiting (+25 °C), max.	35 A
$I^2t$ , max.	1 A <sup>2</sup> ·s
Built-in incoming fuse	T 3.15 A (not accessible)
Protection in the mains power input (IEC 898)	Recommended miniature circuit breaker: 6-10 A characteristic C
Output	
Output	Controlled, isolated DC voltage
Rated voltage $V_{out}$ DC	24 V
• Output voltage	3-52 V DC
Total tolerance, static ±	1 %
Static mains compensation, approx.	0.1 %
Static load balancing, approx.	1 %
Sense line connection max. voltage control per line	0.5 V
Residual ripple peak-peak, max.	50 mV
Spikes peak-peak, max. (bandwidth: 20 MHz)	100 mV

Adjustment range	0 ... 52 V
product function output voltage adjustable	Yes
Output voltage setting	via potentiometer (setting range 3 to 52 V) or analog control voltage signal 0 to 2.5 V (setting range 0 to 52 V)
Status display	Two-color LED: green for 24 V o.k., red for overload
Signaling	DC OK via relay contact, current monitor signal (0 to 2.5 V correspond to 0 to 10 A)
On/off behavior	No overshoot of Vout (soft start)
Startup delay, max.	0.5 s
Voltage rise, typ.	20 ms
Rated current value Iout rated	10 A
Current range	0 ... 10 A
• Note	Output power max. 120 W
supplied active power typical	120 W
constant overload current	
• on short-circuiting during the start-up typical	12 A
• at short-circuit during operation typical	12 A
Parallel switching for enhanced performance	Yes
Numbers of parallel switchable units for enhanced performance	2
<b>Efficiency</b>	
Efficiency at Vout rated, Iout rated, approx.	88 %
Power loss at Vout rated, Iout rated, approx.	16 W
power loss [W] during no-load operation maximum	3 W
<b>Closed-loop control</b>	
Dynamic mains compensation (Vin rated $\pm 15$ %), max.	0.3 %
Dynamic load smoothing (Iout: 50/100/50 %), Uout $\pm$ typ.	5 %
setting time maximum	0.2 ms
<b>Protection and monitoring</b>	
Output overvoltage protection	$\leq 60$ V according to EN 60950-1
Current limitation	2 ... 10 A
Current limitation	Can be set with potentiometer or analog control voltage signal 0.5 ... 2.5 V
property of the output short-circuit proof	Yes
Short-circuit protection	Electronic current limiting (2 ... 10 A) in the range 3 ... 12 V or power limiting (120 W) in the range 12 ... 52 V
enduring short circuit current RMS value	
• maximum	12 A
<b>Safety</b>	
Primary/secondary isolation	Yes
galvanic isolation	Safety extra low output voltage Vout according to EN 60950-1
Protection class	Class I
leakage current	
• maximum	3.5 mA
Degree of protection (EN 60529)	IP20
<b>Approvals</b>	
CE mark	Yes
UL/cUL (CSA) approval	cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259
Explosion protection	-
certificate of suitability NEC Class 2	No
FM approval	-
CB approval	Yes
certificate of suitability EAC approval	Yes
Regulatory Compliance Mark (RCM)	Yes
Marine approval	-
<b>EMC</b>	
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"><li>during operation<ul style="list-style-type: none"><li>— Note</li></ul></li><li>during transport</li><li>during storage</li></ul>	-25 ... +70 °C Derating > 60°C: 2%/°K -40 ... +85 °C -40 ... +85 °C
Humidity class according to EN 60721	Climate class 3K3, 5 ... 95% no condensation
Mechanics	
Connection technology	screw-type terminals
Connections <ul style="list-style-type: none"><li>Supply input</li><li>Output</li><li>Auxiliary</li></ul>	L1, N, PE: 1 screw terminal each for 0.5 ... 2.5 mm² single-core/finely stranded +, -: 2 screw terminals each for 0.5 ... 2.5 mm² single-core/finely stranded Alarm signals, control inputs: screw-type terminals for 0.14 ... 1.5 mm² single-core/finely stranded
width of the enclosure	42 mm
height of the enclosure	125 mm
depth of the enclosure	135 mm
required spacing <ul style="list-style-type: none"><li>top</li><li>bottom</li><li>left</li><li>right</li></ul>	50 mm 50 mm 0 mm 0 mm
Weight, approx.	0.55 kg
product feature of the enclosure housing can be lined up	Yes
Installation	Snaps onto DIN rail EN 60715 35x7.5/15
MTBF at 40 °C	1 200 000 h
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

