



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	
type of the power supply network	1-phase AC or DC
supply voltage at AC	
• minimum rated value	120 V
• maximum rated value	230 V
• initial value	85 V; Derating at < 110 V AC/DC: output power max. 100 W
• full-scale value	264 V
supply voltage	
• at DC	110 ... 220 V
input voltage	
• at DC	88 ... 250 V
design of input wide range input	Yes
operating condition of the mains buffering	With Pa = 120 W and Ue = 230 V AC
buffering time for rated value of the output current in the event of power failure minimum	80 ms
operating condition of the mains buffering	With Pa = 120 W and Ue = 230 V AC
line frequency	
• 1 rated value	50 Hz
• 2 rated value	60 Hz
line frequency	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
current limitation of inrush current at 25 °C maximum	35 A
I2t value maximum	1 A²·s
fuse protection type	T 3.15 A (not accessible)
• in the feeder	Recommended miniature circuit breaker: 6-10 A characteristic C
Output	
voltage curve at output	Controlled, isolated DC voltage
output voltage at DC rated value	24 V
formula for output voltage	3-52 V DC
output voltage	
• at output 1 at DC rated value	24 V
relative overall tolerance of the voltage	1 %
relative control precision of the output voltage	
• on slow fluctuation of input voltage	0.1 %
• on slow fluctuation of ohm loading	1 %
voltage compensation per sense line	0.5 V

residual ripple	
• maximum	50 mV
voltage peak	
• maximum	100 mV
adjustable output voltage	0 ... 52 V
product function output voltage adjustable	Yes
type of 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)
display version for normal operation	Two-color LED: green for 24 V o.k., red for overload
type of signal at output	DC OK via relay contact, current monitor signal (0 to 2.5 V correspond to 0 to 10 A)
behavior of the output voltage when switching on	No overshoot of Vout (soft start)
response delay maximum	0.5 s
voltage increase time of the output voltage	
• typical	20 ms
output current	
• rated value	10 A
• rated range	0 ... 10 A; 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
product feature	
• bridging of equipment	Yes
number of parallel-switched equipment resources for increasing the power	2
Efficiency	
efficiency in percent	88 %
power loss [W]	
• at rated output voltage for rated value of the output current typical	16 W
• during no-load operation maximum	3 W
Closed-loop control	
relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical	0.3 %
relative control precision of the output voltage load step of resistive load 50/100/50 % typical	5 %
setting time	
• maximum	0.2 ms
Protection and monitoring	
design of the overvoltage protection	≤ 60 V according to EN 60950-1
response value current limitation	2 ... 10 A
design of the 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
design of 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
Safety	
galvanic isolation between input and output	Yes
galvanic isolation	Safety extra low output voltage Vout according to EN 60950-1
operating resource protection class	Class I
leakage current	
• maximum	3.5 mA
protection class IP	IP20
Approvals	
certificate of suitability	
• CE marking	Yes
• UL approval	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259
• CSA approval	No; -
• cCSAus, Class 1, Division 2	No
• ATEX	No

certificate of suitability	
<ul style="list-style-type: none"> • IECEx • NEC Class 2 • ULhazloc approval • FM registration 	<p>No</p> <p>No</p> <p>No</p> <p>No</p>
type of certification CB-certificate	Yes
certificate of suitability	
<ul style="list-style-type: none"> • EAC approval • C-Tick • Regulatory Compliance Mark (RCM) 	<p>Yes</p> <p>Yes</p> <p>Yes</p>
certificate of suitability shipbuilding approval	No
shipbuilding approval	-
Marine classification association	
<ul style="list-style-type: none"> • American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (BV) • DNV GL • Lloyds Register of Shipping (LRS) • Nippon Kaiji Kyokai (NK) 	<p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p>
EMC	
standard	
<ul style="list-style-type: none"> • for emitted interference • for mains harmonics limitation • for interference immunity 	<p>EN 55022 Class B</p> <p>EN 61000-3-2</p> <p>EN 61000-6-2</p>
environmental conditions	
ambient temperature	
<ul style="list-style-type: none"> • during operation • during transport • during storage 	<p>-25 ... +70 °C; Derating > 60°C: 2%/°K</p> <p>-40 ... +85 °C</p> <p>-40 ... +85 °C</p>
environmental category according to IEC 60721	Climate class 3K3, 5 ... 95% no condensation
Mechanics	
type of electrical connection	screw-type terminals
<ul style="list-style-type: none"> • at input • at output • for auxiliary contacts 	<p>L1, N, PE: 1 screw terminal each for 0.5 ... 2.5 mm² single-core/finely stranded</p> <p>+, -: 2 screw terminals each for 0.5 ... 2.5 mm² single-core/finely stranded</p> <p>Alarm signals, control inputs: screw-type terminals for 0.14 ... 1.5 mm² single-core/finely stranded</p>
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"> • top • bottom • left • right 	<p>50 mm</p> <p>50 mm</p> <p>0 mm</p> <p>0 mm</p>
net weight	0.55 kg
product feature of the enclosure housing can be lined up	Yes
fastening method	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)

