



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 A <sup>2</sup> ·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	100 mV
• maximum	0 ... 52 V
adjustable output voltage	Yes
product function output voltage adjustable	via potentiometer (setting range 3 to 52 V) or analog control voltage signal 0 to 2.5 V (setting range 0 to 52 V)
type of output voltage setting	Two-color LED: green for 24 V o.k., red for overload
display version for normal operation	DC OK via relay contact, current monitor signal (0 to 2.5 V correspond to 0 to 10 A)
type of signal at output	No overshoot of Vout (soft start)
behavior of the output voltage when switching on	0.5 s
response delay maximum	
voltage increase time of the output voltage	20 ms
• typical	
output current	10 A
• rated value	0 ... 10 A; Output power max. 120 W
• rated range	
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	
• IECEx	No
• NEC Class 2	No

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

