



SITOP PSU3400/1ACDC/DC24V/2.5A

SITOP PSU3400 uni 24 V/2.5 A Stabilized power supply Input: 230 V AC (88...264 V) input: 24 V DC (18...264 V) output: 24 V DC/2.5 A

Input	
type of the power supply network	1-phase AC or DC
supply voltage at AC	
• minimum rated value	120 V
• maximum rated value	240 V
• initial value	88 V; Startup as of 18 V
• full-scale value	264 V
supply voltage	
• at DC	24 ... 24 V
input voltage	
• at DC	18 ... 264 V
design of input wide range input	Yes
overvoltage overload capability	-
operating condition of the mains buffering	at $V_{in}$ rated
buffering time for rated value of the output current in the event of power failure minimum	5 ms
operating condition of the mains buffering	at $V_{in}$ rated
line frequency	
• 1 rated value	50 Hz
• 2 rated value	60 Hz
line frequency	47 ... 63 Hz
input current	
• at rated input voltage 24 V	1.9 A
current limitation of inrush current at 25 °C maximum	15 A
I <sup>2</sup> t value maximum	0.09 A <sup>2</sup> ·s
fuse protection type	15 A (not accessible), breaking capacity 100 A
• in the feeder	Recommended miniature circuit breaker: 16 A characteristic B or C
Output	
voltage curve at output	Controlled, isolated DC voltage
output voltage at DC rated value	24 V
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	0.2 %
residual ripple	
• maximum	150 mV
• typical	30 mV
voltage peak	

<ul style="list-style-type: none"> <li>• maximum</li> </ul>	250 mV
<ul style="list-style-type: none"> <li>• typical</li> </ul>	70 mV
adjustable output voltage	24 ... 28 V
product function output voltage adjustable	Yes
type of output voltage setting	via potentiometer
display version for normal operation	Green LED for 24 V OK
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	
<ul style="list-style-type: none"> <li>• typical</li> </ul>	10 ms
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	20 ms
output current	
<ul style="list-style-type: none"> <li>• rated value</li> </ul>	2.5 A
<ul style="list-style-type: none"> <li>• rated range</li> </ul>	0 ... 3.5 A; +60 to +70 °C: without derating
supplied active power typical	85 W
product feature	
<ul style="list-style-type: none"> <li>• bridging of equipment</li> </ul>	Yes
number of parallel-switched equipment resources for increasing the power	2

### Efficiency

efficiency in percent	85 %
power loss [W]	
<ul style="list-style-type: none"> <li>• at rated output voltage for rated value of the output current typical</li> </ul>	7 W
<ul style="list-style-type: none"> <li>• during no-load operation maximum</li> </ul>	1.5 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	2 %
setting time	
<ul style="list-style-type: none"> <li>• load step 50 to 100% typical</li> </ul>	1 ms
<ul style="list-style-type: none"> <li>• load step 100 to 50% typical</li> </ul>	1 ms

### Protection and monitoring

design of the overvoltage protection	Ua < 35 V
<ul style="list-style-type: none"> <li>• typical</li> </ul>	3.8 A
property of the output short-circuit proof	Yes
design of short-circuit protection	Electronic shutdown, automatic restart
display version for overload and short circuit	LED yellow for "overload"

### 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 III
protection class IP	IP20

### Approvals

certificate of suitability	
<ul style="list-style-type: none"> <li>• CE marking</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• UL approval</li> </ul>	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259
<ul style="list-style-type: none"> <li>• CSA approval</li> </ul>	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259
<ul style="list-style-type: none"> <li>• cCSAus, Class 1, Division 2</li> </ul>	No
<ul style="list-style-type: none"> <li>• ATEX</li> </ul>	No
certificate of suitability	
<ul style="list-style-type: none"> <li>• IECEx</li> </ul>	No
<ul style="list-style-type: none"> <li>• NEC Class 2</li> </ul>	No
<ul style="list-style-type: none"> <li>• ULhazloc approval</li> </ul>	No
<ul style="list-style-type: none"> <li>• FM registration</li> </ul>	No
type of certification CB-certificate	Yes
certificate of suitability	
<ul style="list-style-type: none"> <li>• EAC approval</li> </ul>	No
<ul style="list-style-type: none"> <li>• Regulatory Compliance Mark (RCM)</li> </ul>	Yes
certificate of suitability shipbuilding approval	No
shipbuilding approval	-

Marine classification association	
<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>	<p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p>
<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>	<p>EN 61000-6-3</p> <p>not applicable</p> <p>EN 61000-6-2</p>
<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>	<p>-25 ... +70 °C; with natural convection</p> <p>-40 ... +85 °C</p> <p>-40 ... +85 °C</p>
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> <li>• at output</li> </ul>	<p>L, N, FE: 1 screw terminal each for 0.5 ... 2.5 mm<sup>2</sup> single-core/finely stranded</p> <p>+, -: 2 screw terminals each for 0.5 ... 2.5 mm<sup>2</sup></p>
width of the enclosure	32 mm
height of the enclosure	100 mm
depth of the enclosure	100 mm
required spacing	
<ul style="list-style-type: none"> <li>• top</li> <li>• bottom</li> <li>• left</li> <li>• right</li> </ul>	<p>50 mm</p> <p>50 mm</p> <p>0 mm</p> <p>0 mm</p>
net weight	0.32 kg
product feature of the enclosure housing can be lined up	Yes
fastening method	Snaps onto DIN rail EN 60715 35x7.5/15
electrical accessories	Buffer module
MTBF at 40 °C	1 934 648 h
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

