



SITOP PSU3400/DC/DC/12V/24V/4A

SITOP PSU3400 24 V/4 A Stabilized power supply Input: DC 12 V (9...18 V) Output: DC 24 V/4 A

Input	
type of the power supply network	DC voltage
supply voltage	
• at DC	12 ... 12 V
input voltage	
• at DC	9 ... 18 V
design of input wide range input	No
overvoltage overload capability	-
operating condition of the mains buffering	at $V_{in} = 12\text{ V}$
buffering time for rated value of the output current in the event of power failure minimum	2 ms
operating condition of the mains buffering	at $V_{in} = 12\text{ V}$
input current	
• at rated input voltage 24 V	9 A
current limitation of inrush current at 25 °C maximum	15 A
I ² t value maximum	0.08 A ² ·s
fuse protection type	25 A (not accessible), breaking capacity 300 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	2 %
relative control precision of the output voltage	
• on slow fluctuation of input voltage	0.1 %
• on slow fluctuation of ohm loading	0.6 %
residual ripple	
• maximum	150 mV
• typical	20 mV
voltage peak	
• maximum	250 mV
• typical	40 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 V_{out} (soft start)
response delay maximum	0.5 s
voltage increase time of the output voltage	

<ul style="list-style-type: none"> • typical • maximum 	<p>10 ms</p> <p>20 ms</p>
output current	
<ul style="list-style-type: none"> • rated value • rated range 	<p>4 A</p> <p>0 ... 4 A; +60 ... +70 °C: Derating 2%/K</p>
supplied active power typical	108 W
product feature	
<ul style="list-style-type: none"> • bridging of equipment 	Yes
number of parallel-switched equipment resources for increasing the power	2
Efficiency	
efficiency in percent	89 %
power loss [W]	
<ul style="list-style-type: none"> • at rated output voltage for rated value of the output current typical • during no-load operation maximum 	<p>12 W</p> <p>1.5 W</p>
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"> • load step 50 to 100% typical • load step 100 to 50% typical 	<p>1 ms</p> <p>1 ms</p>
Protection and monitoring	
design of the overvoltage protection	Ua < 35 V
response value current limitation typical	4.5 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	Yellow LED 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"> • CE marking • UL approval • CSA approval • cCSAus, Class 1, Division 2 • ATEX 	<p>Yes</p> <p>Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259</p> <p>Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259</p> <p>No</p> <p>No</p>
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 • Regulatory Compliance Mark (RCM) 	<p>Yes</p> <p>Yes</p>
certificate of suitability shipbuilding approval	Yes
shipbuilding approval	ABS, DNV GL
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>Yes</p> <p>No</p> <p>Yes</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 	EN 61000-6-3 not applicable EN 61000-6-2
environmental conditions		
ambient temperature	<ul style="list-style-type: none"> • during operation • during transport • during storage 	-25 ... +70 °C; with natural convection -40 ... +85 °C -40 ... +85 °C
environmental category according to IEC 60721		Climate class 3K3, 5 ... 95% no condensation
Mechanics		
type of electrical connection	<ul style="list-style-type: none"> • at input • at output 	screw-type terminals L, N, FE: 1 screw terminal each for 0.5 ... 2.5 mm ² single-core/finely stranded +, -: 2 screw terminals each for 0.5 ... 2.5 mm ²
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"> • top • bottom • left • right 	50 mm 50 mm 0 mm 0 mm
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		1 868 914 h
other information		Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

