



SITOP PSU3400/DC/DC/48V/24V/10A

SITOP PSU3400 24 V/10 A Stabilized power supply Input: 48 V DC (28...60 V)  
Output: 24 V DC/10 A

Input	
type of the power supply network	DC voltage
supply voltage at AC	
• initial value	Startup as of 36 V, derating necessary for 28 ... 36 V DC
supply voltage	
• at DC	48 ... 48 V
input voltage	
• at DC	28 ... 60 V
design of input wide range input	No
overvoltage overload capability	-
operating condition of the mains buffering	at $V_{in} = 48 \text{ V}$
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 $V_{in} = 48 \text{ V}$
input current	
• at rated input voltage 48 V	5.4 A
current limitation of inrush current at 25 °C maximum	15 A
$I^2t$ value maximum	0.5 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	0.3 %
residual ripple	
• maximum	150 mV
• typical	50 mV
voltage peak	
• maximum	250 mV
• typical	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
type of signal at output	Relay contact (NO contact, contact rating 30 V AC/0.5 A; 60 V DC/0.3 A; 30 V DC/1 A) for 24 V O.K.

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> <li>• maximum</li> </ul>	10 ms 20 ms
output current <ul style="list-style-type: none"> <li>• rated value</li> <li>• rated range</li> </ul>	10 A 0 ... 12.5 A; 12 A up to +40°C; +60 ... +70 °C: Derating 2%/K
supplied active power typical	256 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
<b>Efficiency</b>	
efficiency in percent	93.5 %
power loss [W] <ul style="list-style-type: none"> <li>• at rated output voltage for rated value of the output current typical</li> <li>• during no-load operation maximum</li> </ul>	17 W 1.5 W
<b>Closed-loop control</b>	
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> <li>• load step 100 to 50% typical</li> </ul>	1 ms 1 ms
<b>Protection and monitoring</b>	
design of the overvoltage protection <ul style="list-style-type: none"> <li>• typical</li> </ul>	Ua < 35 V 13 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"
<b>Safety</b>	
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
<b>Approvals</b>	
certificate of suitability <ul style="list-style-type: none"> <li>• CE marking</li> <li>• UL approval</li> <li>• CSA approval</li> <li>• cCSAus, Class 1, Division 2</li> <li>• ATEX</li> </ul>	Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259 Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259 No No
certificate of suitability <ul style="list-style-type: none"> <li>• IECEx</li> <li>• NEC Class 2</li> <li>• ULhazloc approval</li> <li>• FM registration</li> </ul>	No No No No
type of certification CB-certificate	Yes
certificate of suitability <ul style="list-style-type: none"> <li>• EAC approval</li> <li>• Regulatory Compliance Mark (RCM)</li> </ul>	Yes Yes
certificate of suitability shipbuilding approval	Yes
shipbuilding approval	ABS, DNV GL
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>	Yes No Yes No No

EMC	
standard	
• for emitted interference	EN 61000-6-3
• for mains harmonics limitation	not applicable
• for interference immunity	EN 61000-6-2
environmental conditions	
ambient temperature	
• during operation	-25 ... +70 °C; with natural convection
• during transport	-40 ... +85 °C
• during storage	-40 ... +85 °C
environmental category according to IEC 60721	Climate class 3K3, 5 ... 95% no condensation
Mechanics	
type of electrical connection	screw-type terminals
• at input	L, N, FE: 1 screw terminal each for 0.5 ... 2.5 mm <sup>2</sup> single-core/finely stranded
• at output	+, -: 2 screw terminals each for 0.5 ... 2.5 mm <sup>2</sup>
• for auxiliary contacts	Alarm signals: 2 screw terminals for 0.5 ... 2.5 mm <sup>2</sup>
• for signaling contact	2 screw terminals for 0.5 ... 2.5 mm <sup>2</sup>
width of the enclosure	42 mm
height of the enclosure	125 mm
depth of the enclosure	120 mm
required spacing	
• top	50 mm
• bottom	50 mm
• left	0 mm
• right	0 mm
net weight	0.6 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	1 552 337 h
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

