



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

SITOP PSU3400 24 V/10 A Stabilized power supply Input: 24 V DC (14...32 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 18 V, derating necessary for 14 ... 18 V DC
supply voltage	
• at DC	24 ... 24 V
input voltage	
• at DC	14 ... 32 V
design of input wide range input	No
overvoltage overload capability	-
operating condition of the mains buffering	at $V_{in} = 24\text{ V}$
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 $V_{in} = 24\text{ V}$
input current	
• at rated input voltage 24 V	10.8 A
current limitation of inrush current at 25 °C maximum	15 A
I ² t value maximum	0.6 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	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	30 mV
voltage peak	
• maximum	250 mV
• typical	50 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	
• typical	10 ms
• maximum	20 ms
output current	
• rated value	10 A
• rated range	0 ... 12.5 A; 12 A up to +40°C; +60 ... +70 °C: Derating 2%/K
supplied active power typical	260 W
product feature	
• bridging of equipment	Yes
number of parallel-switched equipment resources for increasing the power	2

Efficiency

efficiency in percent	93 %
power loss [W]	
• at rated output voltage for rated value of the output current typical	20 W
• during no-load operation maximum	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	
• load step 50 to 100% typical	1 ms
• load step 100 to 50% typical	1 ms

Protection and monitoring

design of the overvoltage protection	Ua < 35 V
• typical	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"

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	
• CE marking	Yes
• UL approval	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259
• CSA approval	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259
• cCSAus, Class 1, Division 2	No
• ATEX	No
certificate of suitability	
• IECEx	No
• NEC Class 2	No
• ULhazloc approval	No
• FM registration	No
type of certification CB-certificate	Yes
certificate of suitability	
• EAC approval	Yes
• Regulatory Compliance Mark (RCM)	Yes
certificate of suitability shipbuilding approval	Yes
shipbuilding approval	ABS, DNV GL
Marine classification association	
• American Bureau of Shipping Europe Ltd. (ABS)	Yes
• French marine classification society (BV)	No
• DNV GL	Yes
• Lloyds Register of Shipping (LRS)	No
• Nippon Kaiji Kyokai (NK)	No

EMC	
standard	
<ul style="list-style-type: none"> • for emitted interference 	EN 61000-6-3
<ul style="list-style-type: none"> • for mains harmonics limitation 	not applicable
<ul style="list-style-type: none"> • for interference immunity 	EN 61000-6-2
environmental conditions	
ambient temperature	
<ul style="list-style-type: none"> • during operation 	-25 ... +70 °C; with natural convection
<ul style="list-style-type: none"> • during transport 	-40 ... +85 °C
<ul style="list-style-type: none"> • 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
<ul style="list-style-type: none"> • at input 	L, N, FE: 1 screw terminal each for 0.5 ... 2.5 mm ² single-core/finely stranded
<ul style="list-style-type: none"> • at output 	+, -: 2 screw terminals each for 0.5 ... 2.5 mm ²
<ul style="list-style-type: none"> • for auxiliary contacts 	Alarm signals: 2 screw terminals for 0.5 ... 2.5 mm ²
<ul style="list-style-type: none"> • for signaling contact 	2 screw terminals for 0.5 ... 2.5 mm ²
width of the enclosure	42 mm
height of the enclosure	125 mm
depth of the enclosure	120 mm
required spacing	
<ul style="list-style-type: none"> • top 	50 mm
<ul style="list-style-type: none"> • bottom 	50 mm
<ul style="list-style-type: none"> • left 	0 mm
<ul style="list-style-type: none"> • 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	1 579 080 h
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

