Data sheet

SITOP PSU3400 12 V/15 A SITOP PSU3400 12 V/15 A Stabilized power supplies Input: DC 24 V (18...32 V) Output: DC 12 V/15 A



Input	
Input	DC voltage
Supply voltage	
• at DC	24 24 V
• Note	Startup as of 18 V, derating necessary for 14 18 V DC
Input voltage	
• at DC	14 32 V
Wide-range input	No
Overvoltage resistance	-
Mains buffering at lout rated, min.	5 ms; at Vin = 24 V
Input current	
 at rated input voltage 24 V 	8.4 A
Switch-on current limiting (+25 °C), max.	15 A
I²t, max.	0.6 A²-s
Built-in incoming fuse	25 A (not accessible), breaking capacity 300 A
Protection in the mains power input (IEC 898)	Recommended miniature circuit breaker: 16 A characteristic B or C

Output	
Output	Controlled, isolated DC voltage

Rated voltage Vout DC	12 V
Total tolerance, static ±	2 %
Static mains compensation, approx.	0.2 %
Static load balancing, approx.	1 %
Residual ripple peak-peak, max.	150 mV
Residual ripple peak-peak, typ.	30 mV
Spikes peak-peak, max. (bandwidth: 20 MHz)	250 mV
Spikes peak-peak, typ. (bandwidth: 20 MHz)	50 mV
Adjustment range	12 15.5 V
Product function Output voltage adjustable	Yes
Output voltage setting	via potentiometer
Status display	Green LED for 12 V OK
Signaling	Relay contact (NO contact, contact rating 30 V AC/0.5 A; 60 V DC/0.3 A; 30 V DC/1 A) for 12 V O.K.
On/off behavior	No overshoot of Vout (soft start)
Startup delay, max.	0.5 s
Voltage rise, typ.	5 ms
Voltage increase time of the output voltage maximum	10 ms
Rated current value lout rated	15 A
Current range	0 15 A
• Note	+60 +70 °C: Derating 2%/K
Supplied active power typical	200 W
Parallel switching for enhanced performance	Yes
Numbers of parallel switchable units for enhanced performance	2
Efficiency	
Efficiency at Vout rated, lout rated, approx.	91 %
Power loss at Vout rated, lout rated, approx.	21 W
Power loss [W] during no-load operation maximum	0.5 W
Closed-loop control	
Dynamic mains compensation (Vin rated ±15 %),	0.3 %
max.	
Dynamic load smoothing (lout: 50/100/50 %), Uout ±	4 %
typ.	
Load step setting time 50 to 100%, typ.	2 ms
Load step setting time 100 to 50%, typ.	2 ms
Protection and monitoring	
Output overvoltage protection	Ua < 22 V
Current limitation, typ.	16 A
Property of the output Short-circuit proof	Yes
Short-circuit protection	Electronic shutdown, automatic restart
Overload/short-circuit indicator	Yellow LED overload
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Safety	
Primary/secondary isolation	Yes
Galvanic isolation	Safety extra low output voltage Vout according to EN 60950-1
Protection class	Class III
CE mark	Yes
UL/cUL (CSA) approval	cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259
FM approval	-
CB approval	Yes
Marine approval	in process: DNV GL, ABS
Degree of protection (EN 60529)	IP20
EMC	
Emitted interference	EN 61000-6-3
Supply harmonics limitation	not applicable
Noise immunity	EN 61000-6-2
Operating data	
Ambient temperature	
during operation	-25 +70 °C
— Note	with natural convection
 during transport 	-40 +85 °C
during storage	-40 +85 °C
Humidity class according to EN 60721	Climate class 3K3, no condensation
Mechanics	
Connection technology	screw-type terminals
Connections	
Supply input	L, N, FE: 1 screw terminal each for 0.5 2.5 mm² single-core/finely stranded
Output	+, -: 2 screw terminals each for 0.5 2.5 mm²
Auxiliary	Alarm signals: 2 screw terminals for 0.5 2.5 mm ²
Connections 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	
• top	50 mm
• bottom	50 mm
● left	0 mm
● right	0 mm
Weight, approx.	0.6 kg
Product feature of the enclosure housing for side-by- side mounting	Yes
Installation	Snaps onto DIN rail EN 60715 35x7.5/15

Electrical accessories

Buffer module

Other information	Specifications at rated input voltage and ambient temperature +25
	°C (unless otherwise specified)