



SITOP PSU2600/1ACDC/24VDC/5A

SITOP PSU2600 24 V/5 A Stabilized power supply input: 230 V AC output: 24 V DC/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	230 V
• initial value	85 V
• full-scale value	264 V
supply voltage	
• at DC	110 ... 220 V
input voltage	
• at DC	88 ... 265 V
design of input wide range input	Yes
operating condition of the mains buffering	at $V_{in} = 230 \text{ V}$
buffering time for rated value of the output current in the event of power failure minimum	30 ms
operating condition of the mains buffering	at $V_{in} = 230 \text{ V}$
line frequency	
• 1 rated value	50 Hz
• 2 rated value	60 Hz
line frequency	47 ... 63 Hz
input current	
• at rated input voltage 120 V	2.5 A
• at rated input voltage 230 V	1.4 A
current limitation of inrush current at 25 °C maximum	36 A
fuse protection type	3.15 A
• in the feeder	None required. Fuse protection starting from 6 A Char. C possible
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	3 %
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	50 mV
voltage peak	
• maximum	200 mV
adjustable output voltage	24 ... 28.8 V

product function output voltage adjustable	Yes
type of output voltage setting	via potentiometer; max. 120 W
display version for normal operation	Green LED for 24 V OK
type of signal at output	Relay contact (NO contact, rating 60 V DC/ 0.3 A) for "24 V OK"
behavior of the output voltage when switching on	No overshoot of Vout (soft start)
response delay maximum	1 s
voltage increase time of the output voltage • maximum	500 ms
output current • rated value • rated range	5 A 0 ... 5 A; +60 °C
supplied active power typical	120 W
constant overload current • on short-circuiting during the start-up typical	6 A
product feature • bridging of equipment	No
Efficiency	
efficiency in percent	89 %
power loss [W] • at rated output voltage for rated value of the output current typical • during no-load operation maximum	15 W 1 W
Closed-loop control	
relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical	0.1 %
relative control precision of the output voltage load step of resistive load 50/100/50 % typical	1 %
setting time • load step 50 to 100% typical • load step 100 to 50% typical	0.2 ms 0.2 ms
relative control precision of the output voltage at load step of resistive load 10/90/10 % typical	2 %
setting time • load step 10 to 90% typical • load step 90 to 10% typical • maximum	0.2 ms 0.2 ms 10 ms
Protection and monitoring	
design of the overvoltage protection	< 32 V
response value current limitation typical	6 A
property of the output short-circuit proof	Yes
design of short-circuit protection	Shutdown and periodic restart attempts
enduring short circuit current RMS value • typical	6 A
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 I
leakage current • maximum • typical	3.5 mA 1.1 mA
protection class IP	IP20
Approvals	
certificate of suitability • CE marking • UL approval • CSA approval • cCSAus, Class 1, Division 2 • ATEX	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 • IECEx	No

• NEC Class 2	No
• ULhazloc approval	No
• FM registration	No
type of certification CB-certificate	Yes
certificate of suitability	
• EAC approval	Yes
certificate of suitability shipbuilding approval	No
shipbuilding approval	-
Marine classification association	
• American Bureau of Shipping Europe Ltd. (ABS)	No
• French marine classification society (BV)	No
• DNV GL	No
• Lloyds Register of Shipping (LRS)	No
• Nippon Kaiji Kyokai (NK)	No
EMC	
standard	
• for emitted interference	EN 55022 Class B
• for mains harmonics limitation	EN 61000-3-2
• for interference immunity	EN 61000-6-2
environmental conditions	
ambient temperature	
• during operation	0 ... 60 °C; with natural convection
• during transport	-40 ... +85 °C
• during storage	-40 ... +85 °C
environmental category acc. to IEC 60721	Climate class 3K3, 5 ... 95% no condensation
Mechanics	
type of electrical connection	screw-type terminals
• at input	L1, N, PE: 1 screw terminal each for 0.2 ... 2.5 mm ² single-core/finely stranded
• at output	+, -: 2 screw terminals each for 0.2 ... 2.5 mm ²
• for auxiliary contacts	13, 14 (alarm signal): 1 screw terminal each for 0.05 ... 2.5 mm ²
width of the enclosure	42 mm
height of the enclosure	125 mm
depth of the enclosure	125 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
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

