



SITOP PSU2600/1ACDC/24VDC/20A

SITOP PSU2600 24 V/20 A Stabilized power supply input: 3 AC 400-500 V  
output: 24 V DC/20 A

Input	
type of the power supply network	3-phase AC
supply voltage at AC	
<ul style="list-style-type: none"> <li>• minimum rated value</li> <li>• maximum rated value</li> <li>• initial value</li> <li>• full-scale value</li> </ul>	400 V 500 V 340 V 575 V
design of input wide range input	Yes
operating condition of the mains buffering	at $V_{in} = 400\text{ V}$
buffering time for rated value of the output current in the event of power failure minimum	15 ms
operating condition of the mains buffering	at $V_{in} = 400\text{ V}$
line frequency	
<ul style="list-style-type: none"> <li>• 1 rated value</li> <li>• 2 rated value</li> </ul>	50 Hz 60 Hz
line frequency	47 ... 63 Hz
input current	
<ul style="list-style-type: none"> <li>• at rated input voltage 400 V</li> <li>• at rated input voltage 500 V</li> </ul>	1.2 A 1 A
current limitation of inrush current at 25 °C maximum	16 A
I <sup>2</sup> t value maximum	0.8 A <sup>2</sup> ·s
fuse protection type	none
<ul style="list-style-type: none"> <li>• in the feeder</li> </ul>	Required: 3-pole connected miniature circuit breaker 6 ... 16 A characteristic C or circuit breaker 3RV2011-1DA10 (setting 3 A), 3RV2021-1HA (setting 8 A) or 3RV2711-1DD10 (UL 489)
Output	
voltage curve at output	Controlled, isolated DC voltage
output voltage at DC rated value	24 V
output voltage	
<ul style="list-style-type: none"> <li>• at output 1 at DC rated value</li> </ul>	24 V
relative overall tolerance of the voltage	2 %
relative control precision of the output voltage	
<ul style="list-style-type: none"> <li>• on slow fluctuation of input voltage</li> <li>• on slow fluctuation of ohm loading</li> </ul>	1 % 0.2 %
residual ripple	
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	50 mV
voltage peak	
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	200 mV
adjustable output voltage	24 ... 28.8 V
product function output voltage adjustable	Yes

type of output voltage setting	via potentiometer; max. 480 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	2.5 s
voltage increase time of the output voltage	
• maximum	500 ms
output current	
• rated value	20 A
• rated range	0 ... 20 A; +60 °C
supplied active power typical	480 W
short-term overload current	
• at short-circuit during operation typical	60 A
duration of overloading capability for excess current	
• at short-circuit during operation	25 ms
constant overload current	
• on short-circuiting during the start-up typical	23 A
product feature	
• bridging of equipment	Yes
number of parallel-switched equipment resources for increasing the power	2
<b>Efficiency</b>	
efficiency in percent	93 %
power loss [W]	
• at rated output voltage for rated value of the output current typical	36 W
• during no-load operation maximum	4 W
<b>Closed-loop control</b>	
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	2 %
setting time	
• load step 50 to 100% typical	0.2 ms
• load step 100 to 50% typical	0.2 ms
relative control precision of the output voltage at load step of resistive load 10/90/10 % typical	3 %
setting time	
• load step 10 to 90% typical	0.2 ms
• load step 90 to 10% typical	0.2 ms
• maximum	10 ms
<b>Protection and monitoring</b>	
design of the overvoltage protection	< 32 V
response value current limitation typical	23 A
property of the output short-circuit proof	Yes
design of short-circuit protection	Constant current characteristic approx. 23 A
enduring short circuit current RMS value	
• typical	23 A
<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 I
leakage current	
• maximum	3.5 mA
• typical	1.7 mA
protection class IP	IP20
<b>Approvals</b>	
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

