



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	
• minimum rated value	400 V
• maximum rated value	500 V
• initial value	340 V
• full-scale value	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	
• 1 rated value	50 Hz
• 2 rated value	60 Hz
line frequency	47 ... 63 Hz
input current	
• at rated input voltage 400 V	1.2 A
• at rated input voltage 500 V	1 A
current limitation of inrush current at 25 °C maximum	16 A
I ² t value maximum	0.8 A ² ·s
fuse protection type	none
• in the feeder	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	
• at output 1 at DC rated value	24 V
relative overall tolerance of the voltage	2 %
relative control precision of the output voltage	
• on slow fluctuation of input voltage	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. 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 <ul style="list-style-type: none"> • maximum 	500 ms
output current <ul style="list-style-type: none"> • rated value • rated range 	20 A 0 ... 20 A; +60 °C
supplied active power typical	480 W
short-term overload current <ul style="list-style-type: none"> • at short-circuit during operation typical 	60 A
duration of overloading capability for excess current <ul style="list-style-type: none"> • at short-circuit during operation 	25 ms
constant overload current <ul style="list-style-type: none"> • on short-circuiting during the start-up typical 	23 A
product feature <ul style="list-style-type: none"> • bridging of equipment 	Yes
number of parallel-switched equipment resources for increasing the power	2
Efficiency	
efficiency in percent	93 %
power loss [W] <ul style="list-style-type: none"> • at rated output voltage for rated value of the output current typical • during no-load operation maximum 	36 W 4 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	2 %
setting time <ul style="list-style-type: none"> • 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	3 %
setting time <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • typical 	< 32 V 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 <ul style="list-style-type: none"> • typical 	23 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 <ul style="list-style-type: none"> • maximum • typical 	3.5 mA 1.7 mA
protection class IP	IP20
Approvals	
certificate of suitability <ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • IECEx • NEC Class 2 • ULhazloc approval • FM registration 	<p>No</p> <p>No</p> <p>No</p> <p>No</p>
type of certification CB-certificate	Yes
certificate of suitability	
<ul style="list-style-type: none"> • EAC approval 	Yes
certificate of suitability shipbuilding approval	No
shipbuilding approval	-
Marine classification association	
<ul style="list-style-type: none"> • American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (BV) • DNV GL • Lloyds Register of Shipping (LRS) • Nippon Kaiji Kyokai (NK) 	<p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p>
EMC	
standard	
<ul style="list-style-type: none"> • for emitted interference • for mains harmonics limitation • for interference immunity 	<p>EN 55022 Class B</p> <p>EN 61000-3-2</p> <p>EN 61000-6-2</p>
environmental conditions	
ambient temperature	
<ul style="list-style-type: none"> • during operation • during transport • during storage 	<p>0 ... 60 °C; with natural convection</p> <p>-40 ... +85 °C</p> <p>-40 ... +85 °C</p>
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 • at output • for auxiliary contacts 	<p>L1, L2, L3, PE: 1 screw terminal each for 0.2 ... 4 mm² single-core/finely stranded</p> <p>+, -: 2 screw terminals each for 0.2 ... 4 mm²</p> <p>Signal and remote: 1 screw terminal each for 0.14 ... 1.5 mm²</p>
width of the enclosure	90 mm
height of the enclosure	125 mm
depth of the enclosure	125 mm
required spacing	
<ul style="list-style-type: none"> • top • bottom • left • right 	<p>50 mm</p> <p>50 mm</p> <p>0 mm</p> <p>0 mm</p>
net weight	1.3 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)

