



SITOP PSU8200/3AC/24VDC/20A

SITOP PSU8200 24 V/20 A stabilized power supply input: 400-500 V 3 AC output: 24 V DC/20 A *Ex approval no longer available*

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	320 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) 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	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	100 mV
voltage peak	
• maximum	200 mV
adjustable output voltage	24 ... 28 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 ... +70 °C: Derating 2%/K
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 	22 A
product feature <ul style="list-style-type: none"> • bridging of equipment 	Yes; switchable characteristic
number of parallel-switched equipment resources for increasing the power	2
Efficiency	
efficiency in percent	94 %
power loss [W] <ul style="list-style-type: none"> • at rated output voltage for rated value of the output current typical 	31 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 <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	2 %
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 22 A
property of the output short-circuit proof	Yes
design of short-circuit protection	Alternatively, constant current characteristic approx. 22 A or latching shutdown
enduring short circuit current RMS value <ul style="list-style-type: none"> • typical 	22 A
overcurrent overload capability in normal operation	overload capability 150 % Iout rated up to 5 s/min
display version for overload and short circuit	LED yellow for "overload", LED red for "latching shutdown"
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 0.9 mA
protection class IP	IP20
Approvals	
certificate of suitability <ul style="list-style-type: none"> • CE marking • UL approval • CSA approval 	Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1)

<ul style="list-style-type: none"> • NEC Class 2 • EAC approval • Regulatory Compliance Mark (RCM) 	<p>No</p> <p>Yes</p> <p>Yes</p>
<p>type of certification</p> <ul style="list-style-type: none"> • BIS • CB-certificate 	<p>Yes; R-41188271</p> <p>Yes</p>
<p>certificate of suitability</p> <ul style="list-style-type: none"> • IECEx • ATEX • ULhazloc approval • cCSAus, Class 1, Division 2 • FM registration 	<p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p>
<p>certificate of suitability shipbuilding approval</p>	<p>Yes</p>
<p>Marine classification association</p> <ul style="list-style-type: none"> • American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (BV) • Lloyds Register of Shipping (LRS) 	<p>Yes</p> <p>No</p> <p>No</p>
EMC	
<p>standard</p> <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	
<p>ambient temperature</p> <ul style="list-style-type: none"> • during operation • during transport • during storage 	<p>-25 ... +70 °C; With natural convection; startup tested starting from -40 °C nominal voltage</p> <p>-40 ... +85 °C</p> <p>-40 ... +85 °C</p>
<p>environmental category according to IEC 60721</p>	<p>Climate class 3K3, 5 ... 95% no condensation</p>
Mechanics	
<p>type of electrical connection</p> <ul style="list-style-type: none"> • at input • at output • for auxiliary contacts 	<p>screw-type terminals</p> <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>13, 14 (alarm signal): 1 screw terminal each for 0.14 ... 1.5 mm²; 15, 16 (Remote): 1 screw terminal each for 0.14 ... 1.5 mm²</p>
<p>width of the enclosure</p>	<p>70 mm</p>
<p>height of the enclosure</p>	<p>125 mm</p>
<p>depth of the enclosure</p>	<p>125 mm</p>
<p>required spacing</p> <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>
<p>net weight</p>	<p>1.2 kg</p>
<p>product feature of the enclosure housing can be lined up</p>	<p>Yes</p>
<p>fastening method</p>	<p>Snaps onto DIN rail EN 60715 35x7.5/15</p>
<p>electrical accessories</p>	<p>Buffer module</p>
<p>mechanical accessories</p>	<p>Device identification label 20 mm × 7 mm, TI-grey 3RT2900-1SB20</p>
<p>MTBF at 40 °C</p>	<p>590 573 h</p>
<p>other information</p>	<p>Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)</p>

