



SITOP PSU3800/3AC/24VDC/30-40A

SITOP PSU3800 24 V/30-40 A stabilized power supply input: 400-500 V 3 AC
output: 24 V DC/30-40 A suitable for battery charging

Technical Product Detail Page

<https://i.siemens.com/1P6EP3437-8UB00-0AY0>

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
wide range input	Yes
buffering time for rated value of the output current in the event of power failure minimum	10 ms
operating condition of the mains buffering	at $V_{in} = 400\text{ V}$
line frequency	50/60 Hz
line frequency	45 ... 65 Hz
input current	
• at rated input voltage 400 V	2.1 A
• at rated input voltage 500 V	1.7 A
current limitation of inrush current at 25 °C maximum	13 A
I ² t value maximum	2.24 A ² ·s
fuse protection type in the feeder	Required: 3-pole connected miniature circuit breaker 10 ... 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
output voltage adjustable	Yes; via potentiometer
adjustable output voltage	24 ... 28 V; max. 960 W
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	240 mV
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	minimal overshoot (< 3 %)

response delay maximum	0.1 s
voltage increase time of the output voltage	
• maximum	100 ms
output current	
• rated value	40 A
• rated range	0 ... 40 A; +60 ... +70 °C: Derating 4%/K
supplied active power typical	960 W
constant overload current	
• on short-circuiting during the start-up typical	48 A
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]	
• at rated output voltage for rated value of the output current typical	66 W
• during no-load operation maximum	4 W
closed-loop control	
relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical	1 %
relative control precision of the output voltage load step of resistive load 50/100/50 % typical	3 %
setting time	
• maximum	10 ms
protection and monitoring	
design of the overvoltage protection	< 31.8 V
property of the output short-circuit proof	Yes
design of short-circuit protection	Constant current characteristic approx. 44 A
• typical	44 A
enduring short circuit current RMS value	
• typical	50 A
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 U _{out} acc. to EN 60950-1 and EN 50178
operating resource protection class	Class I
leakage current	
• maximum	1 mA
• typical	0.6 mA
protection class IP	IP20
EMC	
standard	
• for emitted interference	EN 55022 Class B
• for mains harmonics limitation	EN 61000-3-2
• for interference immunity	EN 61000-6-2
standards, specifications, approvals	
certificate of suitability	
• CE marking	Yes
• UL approval	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259
• UKCA marking	Yes
• EAC approval	Yes
• Regulatory Compliance Mark (RCM)	Yes
• NEC Class 2	No
• SEMI F47	Yes
type of certification	
• CB-certificate	Yes
MTBF at 40 °C	517 015 h
standards, specifications, approvals hazardous environments	

certificate of suitability	
<ul style="list-style-type: none"> • IECEx • ATEX • ULhazloc approval • FM registration 	<p>No</p> <p>No</p> <p>No</p> <p>No</p>
standards, specifications, approvals marine classification	
shipbuilding approval	Yes
Marine classification association	
<ul style="list-style-type: none"> • American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (BV) • Det Norske Veritas (DNV) • Lloyds Register of Shipping (LRS) 	<p>No</p> <p>No</p> <p>Yes</p> <p>No</p>
standards, specifications, approvals Environmental Product Declaration	
Environmental Product Declaration	Yes
global warming potential [CO2 eq]	
<ul style="list-style-type: none"> • total • during manufacturing • during operation • after end of life 	<p>2 118.7 kg</p> <p>52 kg</p> <p>2 065.2 kg</p> <p>0.74 kg</p>
ambient conditions	
ambient temperature	
<ul style="list-style-type: none"> • during operation • during transport • during storage 	<p>-25 ... +70 °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
connection method	
type of electrical connection	screw terminal
<ul style="list-style-type: none"> • at input • at output • for auxiliary contacts 	<p>L1, L2, L3, PE: 1 screw terminal each for 0.5 ... 4 mm² single-core/finely stranded</p> <p>+: 2 screw terminals each for 0.5 ... 16 mm²; -: 3 screw terminals each for 0.5 ... 16 mm²</p> <p>13, 14 (alarm signal), 15, 16 (Remote): 1 screw terminal each for 0.05 ... 2.5 mm²</p>
mechanical data	
width × height × depth of the enclosure	135 × 145 × 150 mm
installation width × mounting height	135 mm × 225 mm
required spacing	
<ul style="list-style-type: none"> • top • bottom • left • right 	<p>40 mm</p> <p>40 mm</p> <p>0 mm</p> <p>0 mm</p>
fastening method	Snaps onto DIN rail EN 60715 35x15
<ul style="list-style-type: none"> • DIN-rail mounting • S7 rail mounting • wall mounting 	<p>Yes</p> <p>No</p> <p>No</p>
housing can be lined up	Yes
net weight	3.3 kg
accessories	
electrical accessories	Buffer module
mechanical accessories	Device identification label 20 mm × 7 mm, TI-grey 3RT2900-1SB20
further information internet links	
internet link	
<ul style="list-style-type: none"> • to website: Industry Mall • to web page: selection aid TIA Selection Tool • to web page: power supplies • to website: CAX-Download-Manager • to website: Industry Online Support 	<p>https://mall.industry.siemens.com</p> <p>https://www.siemens.com/tstcloud</p> <p>https://siemens.com/sitop</p> <p>https://siemens.com/cax</p> <p>https://support.industry.siemens.com</p>
additional information	
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

security information

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Classifications

	Version	Classification
eClass	14	27-04-07-01
eClass	12	27-04-07-01
eClass	9.1	27-04-07-01
eClass	9	27-04-07-01
eClass	8	27-04-90-02
eClass	7.1	27-04-90-02
eClass	6	27-04-90-02
ETIM	10	EC002540
ETIM	9	EC002540
ETIM	8	EC002540
ETIM	7	EC002540
IDEA	4	4130
UNSPSC	15	39-12-10-04

Approvals Certificates

General Product Approval



[Manufacturer Declaration](#)

[Declaration of Conformity](#)



General Product Approval

Maritime application

Environment



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