



SITOP PSU3800/3AC/24VDC/17A

SITOP PSU3800 24 V/17 A stabilized power supply input: 400-500 V 3 AC output: 24 V DC/17 A optimized for battery charging

Technical Product Detail Page

<https://i.siemens.com/1P6EP3436-8UB00-0AY0>

input	
type of the power supply network	3-phase AC
supply voltage at AC	
<ul style="list-style-type: none"> • minimum rated value • maximum rated value • initial value • full-scale value 	400 V 500 V 320 V 575 V
wide range input	Yes
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	50/60 Hz
line frequency	47 ... 63 Hz
input current	
<ul style="list-style-type: none"> • at rated input voltage 400 V • at rated input voltage 500 V 	1.1 A 0.9 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
fuse protection type 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	
<ul style="list-style-type: none"> • at output 1 at DC rated value 	24 V
output voltage adjustable	Yes; via potentiometer
adjustable output voltage	24 ... 28 V; max. 480 W
relative overall tolerance of the voltage	3 %
relative control precision of the output voltage	
<ul style="list-style-type: none"> • on slow fluctuation of input voltage • on slow fluctuation of ohm loading 	0.1 % 0.2 %
residual ripple	
<ul style="list-style-type: none"> • maximum 	100 mV
voltage peak	
<ul style="list-style-type: none"> • maximum 	200 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	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	17 A
• rated range	0 ... 17 A; +60 ... +70 °C: Derating 2%/K
supplied active power typical	408 W
constant overload current	
• on short-circuiting during the start-up typical	19 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	26 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	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	2 %
setting time	
• load step 10 to 90% typical	0.2 ms
• load step 90 to 10% typical	0.2 ms
• maximum	10 ms
protection and monitoring	
design of the overvoltage protection	< 32 V
property of the output short-circuit proof	Yes
design of short-circuit protection	Alternatively, constant current characteristic approx. 19 A or latching shutdown
• typical	19 A
enduring short circuit current RMS value	
• typical	19 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 Vout according to EN 60950-1
operating resource protection class	Class I
leakage current	
• maximum	3.5 mA
• typical	0.9 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

<ul style="list-style-type: none"> • NEC Class 2 • SEMI F47 	No Yes
type of certification	
<ul style="list-style-type: none"> • CB-certificate 	Yes
standards, specifications, approvals hazardous environments	
certificate of suitability	
<ul style="list-style-type: none"> • IECEx • ATEX • ULhazloc approval • FM registration 	No No No No
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) 	Yes No Yes No
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 	833.3 kg 18.9 kg 813.8 kg 0.27 kg
ambient conditions	
ambient temperature	
<ul style="list-style-type: none"> • during operation • during transport • during storage 	-25 ... +70 °C; with natural convection -40 ... +85 °C -40 ... +85 °C
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 	L1, L2, L3, PE: 1 screw terminal each for 0.2 ... 4 mm ² single-core/finely stranded +, -: 2 screw terminals each for 0.2 ... 4 mm ² 13, 14 (alarm signal): 1 screw terminal each for 0.14 ... 1.5 mm ² ; 15, 16 (Remote): 1 screw terminal each for 0.14 ... 1.5 mm ²
mechanical data	
width × height × depth of the enclosure	70 × 125 × 125 mm
installation width × mounting height	70 mm × 225 mm
required spacing	
<ul style="list-style-type: none"> • top • bottom • left • right 	50 mm 50 mm 0 mm 0 mm
fastening method	Snaps onto DIN rail EN 60715 35x7.5/15
<ul style="list-style-type: none"> • DIN-rail mounting • S7 rail mounting • wall mounting 	Yes No No
housing can be lined up	Yes
net weight	1.2 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 	https://mall.industry.siemens.com https://www.siemens.com/tstcloud https://siemens.com/sitop

- to website: CAx-Download-Manager
- to website: Industry Online Support

<https://siemens.com/cax>

<https://support.industry.siemens.com>

additional information

other information

Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

security information

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



last modified:

11/14/2025