

SITOP PSU100M/1AC/24VDC/40A

SITOP PSU100M 40 A stabilized power supply input: 120/230 V AC output: 24 V DC/40 A !!!!product phase-out!!!! successor: 6EP3337-8SB00-0AY0



input	
type of the power supply network	1-phase AC
supply voltage at AC	Set by means of wire jumper on the device; starting from $V_{in} > 95/190$ V
supply voltage	120 V/230 V
input voltage 1 at AC	85 ... 132 V
input voltage 2 at AC	176 ... 264 V
wide range input	No
overvoltage overload capability	$2.3 \times V_{in}$ rated, 1.3 ms
buffering time for rated value of the output current in the event of power failure minimum	20 ms
operating condition of the mains buffering	at $V_{in} = 230$ V
line frequency	50/60 Hz
line frequency	47 ... 63 Hz
input current	
• at rated input voltage 120 V	15 A
• at rated input voltage 230 V	8 A
current limitation of inrush current at 25 °C maximum	125 A
I ² t value maximum	26 A ² ·s
fuse protection type	Yes
fuse protection type in the feeder	Recommended miniature circuit breaker at 1-phase operation: 20 A characteristic C; required at 2-phase operation: circuit breaker 2-pole connected or circuit breaker 3RV2421-4BA10 (120 V) or 3RV2411-1JA10 (230 V)
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 ... 28.8 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	0.1 %
residual ripple	
• maximum	100 mV
• typical	60 mV
voltage peak	
• maximum	200 mV
• typical	120 mV
display version for normal operation	Green LED for 24 V OK

type of signal at output	via signaling module (6EP1961-3BA10)
behavior of the output voltage when switching on	Overshoot of Vout approx. 3 %
response delay maximum	0.1 s
voltage increase time of the output voltage <ul style="list-style-type: none"> • typical 	50 ms
output current <ul style="list-style-type: none"> • rated value • rated range 	40 A 0 ... 40 A; +60 ... +70 °C: Derating 2.5%/K
supplied active power typical	960 W
short-term overload current <ul style="list-style-type: none"> • at short-circuit during operation typical 	120 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 	46 A
bridging of equipment	Yes; switchable characteristic
number of parallel-switched equipment resources for increasing the power	2
efficiency	
efficiency in percent	88 %
power loss [W] <ul style="list-style-type: none"> • at rated output voltage for rated value of the output current typical 	131 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	2 %
setting time <ul style="list-style-type: none"> • load step 50 to 100% typical • load step 100 to 50% typical 	2 ms 2 ms
setting time <ul style="list-style-type: none"> • maximum 	5 ms
protection and monitoring	
design of the overvoltage protection	< 35 V
property of the output short-circuit proof	Yes
design of short-circuit protection <ul style="list-style-type: none"> • typical 	Alternatively, constant current characteristic approx. 46 A or latching shutdown 46 A
enduring short circuit current RMS value <ul style="list-style-type: none"> • typical 	46 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 Uout acc. to EN 60950-1 and EN 50178
operating resource protection class	Class I
leakage current <ul style="list-style-type: none"> • maximum • typical 	3.5 mA 0.4 mA
protection class IP	IP20
EMC	
standard <ul style="list-style-type: none"> • for emitted interference • for mains harmonics limitation • for interference immunity 	EN 55022 Class B - EN 61000-6-2
standards, specifications, approvals	
certificate of suitability <ul style="list-style-type: none"> • CE marking • UL approval • CSA approval • UKCA marking • EAC approval 	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 Yes Yes

<ul style="list-style-type: none"> • Regulatory Compliance Mark (RCM) 	Yes
<ul style="list-style-type: none"> • NEC Class 2 	No
<ul style="list-style-type: none"> • SEMI F47 	Yes
type of certification	
<ul style="list-style-type: none"> • CB-certificate 	No
MTBF at 40 °C	540 249 h
standards, specifications, approvals hazardous environments	
certificate of suitability	
<ul style="list-style-type: none"> • IECEx 	No
<ul style="list-style-type: none"> • ATEX 	No
<ul style="list-style-type: none"> • ULhazloc approval 	No
<ul style="list-style-type: none"> • cCSAus, Class 1, Division 2 	No
<ul style="list-style-type: none"> • FM registration 	No
standards, specifications, approvals marine classification	
shipbuilding approval	No
Marine classification association	
<ul style="list-style-type: none"> • American Bureau of Shipping Europe Ltd. (ABS) 	No
<ul style="list-style-type: none"> • French marine classification society (BV) 	No
<ul style="list-style-type: none"> • Det Norske Veritas (DNV) 	No
<ul style="list-style-type: none"> • Lloyds Register of Shipping (LRS) 	No
standards, specifications, approvals Environmental Product Declaration	
Environmental Product Declaration	Yes
Global Warming Potential [CO2 eq]	
<ul style="list-style-type: none"> • total 	4 146.1 kg
<ul style="list-style-type: none"> • during manufacturing 	45.7 kg
<ul style="list-style-type: none"> • during operation 	4 099 kg
<ul style="list-style-type: none"> • after end of life 	0.65 kg
ambient conditions	
ambient temperature	
<ul style="list-style-type: none"> • during operation 	0 ... 70; with natural convection
<ul style="list-style-type: none"> • during transport 	-40 ... +85
<ul style="list-style-type: none"> • during storage 	-40 ... +85
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 	L, N, PE: 1 screw terminal each for 0.2 ... 4 mm ² single-core/finely stranded
<ul style="list-style-type: none"> • at output 	+, -: 2 screw terminals each for 0.5 ... 10 mm ²
<ul style="list-style-type: none"> • for auxiliary contacts 	-
mechanical data	
width × height × depth of the enclosure	240 × 125 × 125 mm
installation width × mounting height	240 mm × 225 mm
required spacing	
<ul style="list-style-type: none"> • top 	50 mm
<ul style="list-style-type: none"> • bottom 	50 mm
<ul style="list-style-type: none"> • left 	0 mm
<ul style="list-style-type: none"> • right 	0 mm
fastening method	Snaps onto DIN rail EN 60715 35x15
<ul style="list-style-type: none"> • standard rail mounting 	Yes
<ul style="list-style-type: none"> • S7 rail mounting 	No
<ul style="list-style-type: none"> • wall mounting 	No
housing can be lined up	Yes
net weight	2.9 kg
accessories	
electrical accessories	Buffer module, signaling module
further information internet links	
internet link	
<ul style="list-style-type: none"> • to website: Industry Mall 	https://mall.industry.siemens.com
<ul style="list-style-type: none"> • to web page: selection aid TIA Selection Tool 	https://www.siemens.com/tstcloud
<ul style="list-style-type: none"> • to website: CAx-Download-Manager 	https://siemens.com/cax
<ul style="list-style-type: none"> • to website: Industry Online Support 	https://support.industry.siemens.com

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	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

Environment

[Miscellaneous](#)



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