SIEMENS

Data sheet 6EP3436-8SB00-2AY0



SITOP PSU8600/3AC/24VDC/20A PN

SITOP PSU8600 3AC 20 A PN stabilized power supply input: 400-500 V 3 AC output: 24 V DC/20 A with PN/IE connection web server integrated OPC UA server integrated

General information	
Technical Product Detail Page	https://i.siemens.com/1P6EP3436-8SB00-2AY0
product brand name	SITOP
product type designation	PSU8600
product designation	Power supply SITOP PSU8600
type of current supply	24 V/20 A
input	
type of the power supply network	3-phase AC
phase number	3
voltage curve at input	AC
supply voltage at AC	
● minimum rated value	400 V
● maximum rated value	500 V
● initial value	320 V
● full-scale value	575 V
supply voltage at AC	Derating 320 ... 360 and 530 ... 575 V
supply voltage	
● at 50 Hz	400 V
● at 60 Hz	500 V
line frequency	50/60 Hz
line frequency	47 ... 63 Hz
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 Vin = 400 V; Prioritized supply of the output in case of power failure selectable via DIP switch (only in conjunction with CNX8600 expansion module)
input current	
● at rated input voltage 400 V	1.4 A
● at rated input voltage 500 V	1.1 A
current limitation of inrush current at 25 °C maximum	14 A
I2t value maximum	1.2 $A^2 \cdot s$
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
product function output voltage controlled	Yes
product function output voltage stabilized	Yes
number of outputs	1

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output voltage at DC rated value	24 V
output voltage	
● at output 1 at DC rated value	24 V
output voltage	
● at output 1 at DC	5 ... 24 V
output voltage adjustable	Yes; via potentiometer or IE/PN interface
adjustable output voltage	4 ... 28 V; Derating > 24 V: 4%/V; max. 480 W overall system
relative overall tolerance of the voltage	3 %
relative control precision of the output voltage	
● on slow fluctuation of input voltage	0.2 %
● on slow fluctuation of ohm loading	0.1 %
residual ripple	
● maximum	100 mV
voltage peak	
● maximum	200 mV
display version for normal operation	3-color LED for operating state device; LED for operating mode manual/remote; 4 LEDs for communication PROFINET; 3-color LED for operating state output
type of signal at output	Relay contact (changeover contact, contact current capacity DC 60 V/0.3 A) for "Operating state OK"
behavior of the output voltage when switching on	No overshoot of Vout (soft start)
response delay maximum	1 s
type of outputs connection	simultaneous switch-on of all outputs after device power-up or delay time of 25 ms, 100 ms, or "load-optimized" for sequential switch-on of the outputs via DIP switch configurable (only in connection with expansion module CNX8600)
voltage increase time of the output voltage	
● maximum	500 ms
output current	
● rated value	20 A
● per output	20 A
● at output 1 rated value	20 A
● rated range	0 ... 20 A; +50 ... +60 °C: Derating 2.5%/K; no derating in connection with expansion module CNX8600 and total load of the outputs at the basic device max. 240 W
supplied active power typical	480 W
short-term overload current	
● at short-circuit during operation typical	60 A; only in operation without CNX8600 extension module
duration of overloading capability for excess current	
● at short-circuit during operation	25 ms
bridging of equipment	Yes; suitable output characteristics via DIP switch can be selected
number of parallel-switched equipment resources for increasing the power	2
efficiency	
efficiency in percent	93 %
power loss [W]	
● at rated output voltage for rated value of the output current typical	34 W
● during no-load operation maximum	12 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	0.4 %
setting time	
● maximum	10 ms
protection and monitoring	
design of the overvoltage protection	max. 35 V (max. 500 ms)
property of the output short-circuit proof	Yes
design of short-circuit protection	Electronic overload shutdown; optional constant-current operation can be selected via DIP switch
adjustable current response value current of the current-dependent overload release	2 ... 20 A
type of response value setting	via potentiometer or IE/PN interface

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switching characteristic	
● of the excess current	Ia >1.0...<1.5 x Ia threshold for 5 s permissible; Ia limit (= 1.5 x Ia threshold) for 200 ms permissible
● of the current limitation	Ia limit (= 1.5 x Ia threshold) permissible for 5 s, afterwards Ia threshold continuous
overcurrent overload capability	
● in normal operation	Total system overloadable 150% Ia rated to 5 s/min
display version for overload and short circuit	3-color LED for operating state device; 3-color LED for operating state output
design of the reset device/resetting mechanism	via sensor or IE/PN interface
remote reset function	non-isolated 24 V input (signal level "high" at > 15 V)
interfaces	
product function communication function	Yes
design of the interface	Ethernet/PROFINET
● design of the interface PROFINET protocol	Yes
protocol is supported	
● OPC UA	Yes
safety	
galvanic isolation between input and output	Yes
galvanic isolation	Output voltage: SELV, ES1 (IEC 62368-1), DVC As (IEC 61204-7)
operating resource protection class	Class I
leakage current	
● maximum	3.5 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
● EAC approval	Yes
● NEC Class 2	No
● SEMI F47	Yes
type of certification	
● BIS	Yes; R-41188271
● CB-certificate	Yes
MTBF at 40 °C	298 979 h
standards, specifications, approvals hazardous environments	
certificate of suitability	
● IECEx	No
● ATEX	No
● ULhazloc approval	No
● FM registration	No
standards, specifications, approvals marine classification	
shipbuilding approval	Yes
Marine classification association	
● American Bureau of Shipping Europe Ltd. (ABS)	Yes
● French marine classification society (BV)	No
● Det Norske Veritas (DNV)	Yes
● Lloyds Register of Shipping (LRS)	No
standards, specifications, approvals Environmental Product Declaration	
Environmental Product Declaration	Yes
global warming potential [CO2 eq]	
● total	904.9 kg
● during manufacturing	43.1 kg
● during operation	861 kg
● after end of life	0.36 kg

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ambient conditions	
ambient temperature	
● during operation	-25 ... +60 °C; with natural convection
● during transport	-40 ... +85 °C
● during storage	-40 ... +85 °C
environmental category according to IEC 60721	Climate class 3K3, 5 ... 95% no condensation
connection method	
type of electrical connection	Plug-in terminals with screwed connection
● at input	L1, L2, L3, PE: Plug-in terminal with 1 screwed connection each for 0.2 ... 4 mm² single-wire / fine stranded
● at output	Output: plug-in terminals with 2 screw connectors for 0.2 ... 4 mm²; 0 V: screw terminal with 3 screw connectors for 0.2 ... 4 mm²
● for auxiliary contacts	RST (Reset): Plug-in terminal (together with alarm signal) with 1 screwed connection for 0.2 ... 1.5 mm²
● for signaling contact	11, 12, 14 (alarm signal): Plug-in terminal (together with Reset) with 1 screwed connection each for 0.2 ... 1.5 mm²
removable terminal at input	Yes
removable terminal at output	Yes
design of the interface for communication	PROFINET/Ethernet: two RJ45 sockets (2-port switch)
suitability for interaction modular system	Yes
mechanical data	
width × height × depth of the enclosure	80 × 125 × 150 mm
installation width × mounting height	80 mm × 225 mm
required spacing	
● top	50 mm
● bottom	50 mm
● left	0 mm
● right	0 mm
fastening method	Snaps onto DIN rail EN 60715 35x15
● DIN-rail mounting	Yes
● S7 rail mounting	No
● wall mounting	No
housing can be lined up	Yes
net weight	1.8 kg
accessories	
electrical accessories	Expansion modules CNX8600, buffer modules BUF8600, module UPS8600
mechanical accessories	Device identification label 20 mm × 7 mm, TI-grey 3RT2900-1SB20
further information internet links	
internet link	
● to website: Industry Mall	https://mall.industry.siemens.com
● to web page: selection aid TIA Selection Tool	https://www.siemens.com/tstcloud
● to web page: power supplies	https://siemens.com/sitop
● to website: CAx-Download-Manager	https://siemens.com/cax
● 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	
security information	Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement - and continuously maintain - a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit www.siemens.com/cybersecurity-industry. Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase

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Classifications

	Version	Classification
eClass	16	27-04-07-01
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

Environmental Product Declaration

● global warming potential [CO2 eq] / during manufacturing	43.1 kg
● global warming potential [CO2 eq] / during operation	861 kg
● global warming potential [CO2 eq] / after end of life	0.36 kg
● global warming potential [CO2 eq] / total	904.9 kg

Environment

General Product Approval

Manufacturer Declaration

Declaration of Conformity

General Product Approval

China RoHS

BIS CRS

Maritime application

Industrial Communication

PROFINET

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