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 *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; Derating 320 … 360 and 530 … 575 V
● full-scale value	575 V
design of input wide range input	Yes
operating condition of the mains buffering	at Vin = 400 V; Prioritized supply to the output on power failure via DIP switch can be selected (only with expansion module CNX8600)
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 to the output on power failure via DIP switch can be selected (only with expansion module CNX8600)
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	1.4 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 A²·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
number of outputs	1
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	0.2 %
● on slow fluctuation of ohm loading	0.1 %
residual ripple	
● maximum	100 mV
voltage peak	
● maximum	200 mV

adjustable output voltage	4 ... 28 V
product function output voltage adjustable	Yes
type of output voltage setting	via potentiometer or IE/PN interface; Derating > 24 V: 4%/V; max. 480 W overall system
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 connecting-in of all outputs after device booting or delay time of 25 ms, 100 ms or "load-optimized" for sequential cutting-in of the outputs via DIP switches can be set (only 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
product feature	
● 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
switching characteristic	
● of the excess current	Ia >1.0…<1.5 x Ia threshold permissible for 5 s; Ia limit (= 1.5 x Ia threshold) permissible for 200 ms
● of the current limitation	Ia limit (= 1.5 x Ia threshold) permissible for 5 s, afterwards Ia threshold continuous
design of the reset device/resetting mechanism	via sensor or IE/PN interface
remote reset function	Non-electrically isolated 24 V input (signal level "high" at > 15 V)
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

Interface	
design of the interface	Ethernet/PROFINET
● PROFINET protocol	Yes
protocol is supported OPC UA	Yes
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	
● maximum	3.5 mA
protection class IP	IP20
Approvals	
certificate of suitability	
● CE marking	Yes
● UL approval	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1)
● CSA approval	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1)
● cCSAus, Class 1, Division 2	No
● ATEX	No
certificate of suitability	
● IECEx	No
● NEC Class 2	No
● ULhazloc approval	No
● FM registration	No
type of certification CB-certificate	Yes
certificate of suitability	
● EAC approval	Yes
● C-Tick	No
certificate of suitability shipbuilding approval	Yes
shipbuilding approval	ABS, DNV GL
Marine classification association	
● American Bureau of Shipping Europe Ltd. (ABS)	Yes
● French marine classification society (BV)	No
● DNV GL	Yes
● Lloyds Register of Shipping (LRS)	No
● Nippon Kaiji Kyokai (NK)	No
EMC	
standard	
● for emitted interference	EN 55022 Class B
● for mains harmonics limitation	EN 61000-3-2
● for interference immunity	EN 61000-6-2
environmental 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
Mechanics	
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
product function	
● 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
width of the enclosure	80 mm
height of the enclosure	125 mm
depth of the enclosure	150 mm
required spacing	
● top	50 mm
● bottom	50 mm
● left	0 mm
● right	0 mm
net weight	1.8 kg
product feature of the enclosure housing can be lined up	Yes
fastening method	Snaps onto DIN rail EN 60715 35x15
electrical accessories	Expansion modules CNX8600, buffer modules BUF8600, module UPS8600
mechanical accessories	Device identification label 20 mm × 7 mm, TI-grey 3RT2900-1SB20
MTBF at 40 °C	298 979 h
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)