



SITOP PSU8600/3AC/24VDC/40A/4X10A PN

SITOP PSU8600 3AC 40 A/4x10 A PN stabilized power supply input: 400-500 V 3 AC output: 24 V DC/40 A/4x 10 A with PN/IE connection web server integrated OPC UA server integrated

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
supply voltage at AC	Derating 320 ... 360 and 530 ... 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 $V_{in} = 400$ V; Prioritized supply of Output 1 in case of power failure selectable via DIP switch
line frequency	50/60 Hz
line frequency	47 ... 63 Hz
input current	
• at rated input voltage 400 V	2.75 A
• at rated input voltage 500 V	2.2 A
current limitation of inrush current at 25 °C maximum	14 A
I ² t value maximum	2.24 A ² ·s
fuse protection type	none
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
number of outputs	4
output voltage at DC rated value	24 V
output voltage	
• at output 1 at DC rated value	24 V
• at output 2 at DC rated value	24 V
• at output 3 at DC rated value	24 V
• at output 4 at DC rated value	24 V
output voltage adjustable	Yes; via potentiometer or IE/PN interface
adjustable output voltage	4 ... 28 V; Derating > 24 V: 4%/V; max. 240 W per output, max. 960 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 per output for operating state output; LED green for parallel operation Output 1 and 2 / 3 and 4
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; Without on-delay of the outputs
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
voltage increase time of the output voltage	
• maximum	500 ms
output current	
• rated value	40 A
• per output	10 A
• at output 1 rated value	10 A
• at output 2 rated value	10 A
• at output 3 rated value	10 A
• at output 4 rated value	10 A
• rated range	0 ... 40 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. 480 W
supplied active power typical	960 W
parallel switching of outputs	Yes; Parallel circuit Output 1 with 2 or Output 3 with 4 can be selected via DIP switch
bridging of equipment	No
efficiency	
efficiency in percent	93 %
power loss [W]	
• at rated output voltage for rated value of the output current typical	72 W
• during no-load operation maximum	20 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 cut-off; optionally constant current operation can be selected for Output 4 via DIP switches
adjustable current response value current of the current-dependent overload release	0.5 ... 10 A
type of response value setting	via potentiometer or IE/PN interface
switching characteristic	
• of the excess current	$I_a > 1.0 \dots < 1.5 \times I_a$ threshold permissible for 5 s; I_a limit (= $1.5 \times I_a$ threshold) permissible for 200 ms
• of the current limitation	I_a limit (= $1.5 \times I_a$ threshold) permissible for 5 s, afterwards I_a threshold continuous
overcurrent overload capability	
• in normal operation	Total system overloadable 150% I_a rated to 5 s/min
display version for overload and short circuit	3-color LED for operating state device; 3-color LED per output for operating state output
design of the reset device/resetting mechanism	via sensor per output or IE/PN interface
remote reset function	Non-electrically 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	Safety extra low output voltage V_{out} according to EN 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
• CSA approval	Yes; cCSAus (CSA C22.2 No. 62368-1, UL 62368-1)
• EAC approval	Yes
• NEC Class 2	No
• SEMI F47	Yes
type of certification	
• BIS	Yes; R-41188271
• CB-certificate	Yes
MTBF at 40 °C	207 612 h
standards, specifications, approvals hazardous environments	
certificate of suitability	
• IECEx	No
• ATEX	No
• ULhazloc approval	No
• cCSAus, Class 1, Division 2	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	2 295.1 kg
• during manufacturing	41 kg
• during operation	2 252.9 kg
• after end of life	0.59 kg
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	1, 2, 3, 4: Two plug-in terminals (1, 2 and 3, 4) with 2 screwed connections each for 0.2 ... 2.5 mm²; 0 V: Plug-in terminal with 3 screwed connections for 0.2 ... 10 mm² (max. 6 mm² with ferrule)
• 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

mechanical

width $\times$ height $\times$ depth of the enclosure

installation width x mo

Installation width = 1

required space

ETIM	9	EC002540
ETIM	8	EC002540
ETIM	7	EC002540
IDEA	4	4130
UNSPSC	15	39-12-10-04

Approvals Certificates

General Product Approval



CB



CSA

[Manufacturer Declaration](#)

[Declaration of Conformity](#)



UKCA



CE
EG-Konf.

General Product Approval

Maritime application

Environment



UL

[Miscellaneous](#)

[BIS CRS](#)



ABS



DNV



EPD

Industrial Communication

[PROFINET](#)

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