SIEMENS

Data sheet

6EP4437-8XB00-0CY0



SITOP CNX8600/4X10A

SITOP CNX8600 4x10 A expansion module for PSU8600 output: 24 V DC/4x 10 A *Ex approval no longer available*

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
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. 240 W per output
display version for normal operation	3-color LED for operating state module; 3-color LED per output 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" at power supply unit PSU8600
behavior of the output voltage when switching on	No overshoot of Vout (soft start)
response delay maximum	1.5 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 at power supply unit PSU8600 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; No increase in the maximum output power of the overall system SITOP PSU8600 via the expansion module SITOP CNX8600 possible
supplied active power typical	960 W

product feature	
product feature parallel switching of outputs 	No
bridging of equipment	No
Efficiency	07.0/
efficiency in percent	97 %
power loss [W]	
 at rated output voltage for rated value of the output current typical 	30 W
Closed-loop control	
relative control precision of the output voltage with rapid	0.1 %
fluctuation of the input voltage by +/- 15% typical	0.170
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
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	
	$ a > 1.0 > 1.5 \times a threshold permissible for 5 s; a limit (= 1.5 \times a threshold)$
 of the excess current 	la >1.0<1.5 x la threshold permissible for 5 s; la limit (= 1.5 x la threshold) permissible for 200 ms
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) at power
display version for overload and short circuit	supply unit PSU8600 3-color LED for operating state module; 3-color LED per output for operating
	state output
Interface	
design of the interface	Ethernet/PROFINET via power supply unit PSU8600
Safety	
Safety galvanic isolation between input and output	Yes
	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178
galvanic isolation between input and output	
galvanic isolation between input and output galvanic isolation operating resource protection class protection class IP	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178
galvanic isolation between input and output galvanic isolation operating resource protection class	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class III
galvanic isolation between input and output galvanic isolation operating resource protection class protection class IP	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class III
galvanic isolation between input and output galvanic isolation operating resource protection class protection class IP Approvals	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class III
galvanic isolation between input and output galvanic isolation operating resource protection class protection class IP Approvals certificate of suitability	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class III IP20
galvanic isolation between input and output galvanic isolation operating resource protection class protection class IP Approvals certificate of suitability • CE marking	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class III IP20 Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus
galvanic isolation between input and output galvanic isolation operating resource protection class protection class IP Approvals certificate of suitability • CE marking • UL approval	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class III IP20 Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus
galvanic isolation between input and output galvanic isolation operating resource protection class protection class IP Approvals certificate of suitability • CE marking • UL approval • CSA approval	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class III IP20 Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1)
galvanic isolation between input and output galvanic isolation operating resource protection class protection class IP Approvals certificate of suitability • CE marking • UL approval • CSA approval • NEC Class 2	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class III IP20 Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) No
galvanic isolation between input and output galvanic isolation operating resource protection class protection class IP Approvals certificate of suitability • CE marking • UL approval • CSA approval • NEC Class 2 • EAC approval	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class III IP20 Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) No
galvanic isolation between input and output galvanic isolation operating resource protection class protection class IP Approvals certificate of suitability • CE marking • UL approval • CSA approval • NEC Class 2 • EAC approval type of certification	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class III IP20 Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) Yes Ves
galvanic isolation between input and output galvanic isolation operating resource protection class protection class IP Approvals certificate of suitability • CE marking • UL approval • CSA approval • NEC Class 2 • EAC approval type of certification • CB-certificate	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class III IP20 Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) Yes Ves
galvanic isolation between input and output galvanic isolation operating resource protection class protection class IP Approvals certificate of suitability • CE marking • UL approval • CSA approval • NEC Class 2 • EAC approval type of certificate certificate of suitability	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class III IP20 Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) Yes Yes
galvanic isolation between input and output galvanic isolation operating resource protection class protection class IP Approvals certificate of suitability • CE marking • UL approval • CSA approval • NEC Class 2 • EAC approval type of certificate certificate of suitability • CB-certificate certificate of suitability	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class III IP20 Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) Yes Yes Yes Yes
galvanic isolation between input and output galvanic isolation operating resource protection class protection class IP Approvals certificate of suitability • CE marking • UL approval • CSA approval • NEC Class 2 • EAC approval type of certificate certificate of suitability • CB-certificate certificate of suitability • LAC approval type of certification • CB-certificate certificate of suitability • IECEx • ATEX	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class III IP20 Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) Yes Yes No
galvanic isolation between input and output galvanic isolation operating resource protection class protection class IP Approvals certificate of suitability • CE marking • UL approval • CSA approval • NEC Class 2 • EAC approval type of certification • CB-certificate certificate of suitability IECEx • ATEX • ULhazloc approval • cCSAus, Class 1, Division 2	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class III IP20 Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) Yes Yes Yes Yes No
galvanic isolation between input and output galvanic isolation operating resource protection class protection class IP Approvals certificate of suitability • CE marking • UL approval • CSA approval • NEC Class 2 • EAC approval type of certificate certificate of suitability • CB-certificate certificate of suitability • LEC Class 2 • EAC approval type of certification • CB-certificate certificate of suitability • IECEx • ATEX • ULhazloc approval • cCSAus, Class 1, Division 2 • FM registration	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class III IP20 Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) Yes Yes Yes Yes No
galvanic isolation between input and output galvanic isolation operating resource protection class protection class IP Approvals certificate of suitability • CE marking • UL approval • CSA approval • NEC Class 2 • EAC approval type of certification • CB-certificate certificate of suitability IECEx • ATEX • ULhazloc approval • cCSAus, Class 1, Division 2	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class III IP20 Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) Yes Yes Yes Yes No
galvanic isolation between input and output galvanic isolation operating resource protection class protection class IP Approvals certificate of suitability • CE marking • UL approval • CSA approval • NEC Class 2 • EAC approval type of certificate certificate of suitability • CB-certificate certificate of suitability • LECEx • ATEX • ULhazloc approval • cCSAus, Class 1, Division 2 • FM registration certificate of suitability shipbuilding approval	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class III IP20 Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) Yes No Yes
galvanic isolation between input and output galvanic isolation operating resource protection class protection class IP Approvals certificate of suitability • CE marking • UL approval • CSA approval • NEC Class 2 • EAC approval type of certification • CB-certificate certificate of suitability • IECEx • ATEX • ULhazloc approval • cCSAus, Class 1, Division 2 • FM registration certificate of suitability shipbuilding approval Marine classification association • American Bureau of Shipping Europe Ltd. (ABS)	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class III IP20 Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) No Yes
galvanic isolation between input and output galvanic isolation operating resource protection class protection class IP Approvals certificate of suitability • CE marking • UL approval • CSA approval • NEC Class 2 • EAC approval type of certification • CB-certificate certificate of suitability • IECEx • ATEX • ULhazloc approval • cCSAus, Class 1, Division 2 • FM registration certificate of suitability shipbuilding approval Marine classification association • American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (BV)	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class III IP20 Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) No Yes No No No No No Yes Yes Yes No No No No No Yes Yes Yes Yes Yes No No Yes Yes Yes Yes Yes Yes Yes<
galvanic isolation between input and output galvanic isolation operating resource protection class protection class IP Approvals certificate of suitability • CE marking • UL approval • CSA approval • NEC Class 2 • EAC approval type of certification • CB-certificate certificate of suitability • IECEx • ATEX • ULhazloc approval • cCSAus, Class 1, Division 2 • FM registration certificate of suitability shipbuilding approval Marine classification association • American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (BV) • Lloyds Register of Shipping (LRS)	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class III IP20 Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) No Yes Yes Yes Yes Yes Yes Yes Yes Yes
galvanic isolation between input and output galvanic isolation operating resource protection class protection class IP Approvals certificate of suitability • CE marking • UL approval • CSA approval • NEC Class 2 • EAC approval type of certification • CB-certificate certificate of suitability • IECEx • ATEX • ULhazloc approval • cCSAus, Class 1, Division 2 • FM registration certificate of suitability shipbuilding approval Marine classification association • American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (BV) • Lloyds Register of Shipping (LRS) • Nippon Kaiji Kyokai (NK)	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class III IP20 Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) No Yes No No No No No Yes Yes Yes No No No No No Yes Yes Yes Yes Yes No No Yes Yes Yes Yes Yes Yes Yes<
galvanic isolation between input and output galvanic isolation operating resource protection class protection class IP Approvals certificate of suitability • CE marking • UL approval • CSA approval • NEC Class 2 • EAC approval type of certification • CB-certificate certificate of suitability • IECEx • ATEX • ULhazloc approval • cCSAus, Class 1, Division 2 • FM registration certificate of suitability shipbuilding approval Marine classification association • American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (BV) • Lloyds Register of Shipping (LRS) • Nippon Kaiji Kyokai (NK)	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class III IP20 Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) No Yes Yes Yes Yes Yes Yes Yes Yes Yes
galvanic isolation between input and output galvanic isolation operating resource protection class protection class IP Approvals certificate of suitability • CE marking • UL approval • CSA approval • NEC Class 2 • EAC approval type of certification • CB-certificate certificate of suitability • IECEx • ATEX • ULhazloc approval • cCSAus, Class 1, Division 2 • FM registration certificate of suitability shipbuilding approval Marine classification association • American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (BV) • Lloyds Register of Shipping (LRS) • Nippon Kaiji Kyokai (NK)	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class III IP20 Yes Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) No Yes Yes Yes Yes Yes Yes Yes Yes Yes

• 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 output	1, 2, 3, 4: Two plug-in terminals (1, 2 and 3, 4) with 2 screwed connections each for 0.2 2.5 mm ² ; Ground: Plug-in terminal with 3 screwed connections for 0.2 2.5 mm ²
product function	
 removable terminal at output 	Yes
suitability for interaction modular system	Yes
type of connection to system components	Via integrated connector
width of the enclosure	60 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	1.15 kg
product feature of the enclosure housing can be lined up	Yes
fastening method	Snaps onto DIN rail EN 60715 35x15
mechanical accessories	Device identification label 20 mm × 7 mm, TI-grey 3RT2900-1SB20
MTBF at 40 °C	358 372 h
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

Ø