SIEMENS

Data sheet

6EP4436-8XB00-0DY0



SITOP CNX8600/8X2.5A

SITOP CNX8600 8x2.5 A Extension module for PSU8600 Output: 24 V DC / 8x 2.5 A Outputs according to NEC Class 2

Output	
Output	Controlled, isolated DC voltage
number of outputs	8
Rated voltage Vout DC	24 V
 output voltage at output 1 at DC rated value 	24 V
 output voltage at output 2 at DC rated value 	24 V
 output voltage at output 3 at DC rated value 	24 V
 output voltage at output 4 at DC rated value 	24 V
 output voltage at output 5 at DC rated value 	24 V
 output voltage at output 6 at DC rated value 	24 V
 output voltage at output 7 at DC rated value 	24 V
 output voltage at output 8 at DC rated value 	24 V
Total tolerance, static ±	3 %
Static mains compensation, approx.	0.2 %
Static load balancing, approx.	0.1 %
Residual ripple peak-peak, max.	100 mV
Spikes peak-peak, max. (bandwidth: 20 MHz)	200 mV
Adjustment range	4 28 V
product function output voltage adjustable	Yes
Output voltage setting	via potentiometer or IE/PN interface; Derating > 24 V: 4%/V; max. 60 W per output
Status display	3-color LED for operating state module; 3-color LED per output for operating state output
Signaling	Relay contact (changeover contact, contact current capacity DC 60 V/0.3 A) for "Operating state OK" at power supply unit PSU8600
On/off behavior	No overshoot of Vout (soft start)
Startup delay, max.	1.5 s; Without on-delay of the outputs
connection of outputs operating	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
Rated current value lout rated	20 A
output current	
• per output	2.5 A
 at output 1 rated value 	2.5 A
 at output 2 rated value 	2.5 A
 at output 3 rated value 	2.5 A
 at output 4 rated value 	2.5 A
 at output 5 rated value 	2.5 A

 at output 6 rated value 	2.5 A
 at output 7 rated value 	2.5 A
 at output 8 rated value 	2.5 A
Current range	0 20 A
• Note	Outputs meet requirements to NEC Class 2; an increase of the maximum output power of the SITOP PSU8600 overall system is not possible over the SITOP CNX8600 expansion module
supplied active power typical	480 W
product feature parallel switching of outputs	No
Parallel switching for enhanced performance	No
Efficiency	
Efficiency at Vout rated, lout rated, approx.	97 %
Power loss at Vout rated, lout rated, approx.	15 W
Closed-loop control	
Dynamic mains compensation (Vin rated ±15 %), max.	0.1 %
Dynamic load smoothing (lout: 50/100/50 %), Uout ± typ.	0.4 %
setting time maximum	10 ms
Protection and monitoring	
Output overvoltage protection	max. 35 V (max. 500 ms)
property of the output short-circuit proof	Yes
Short-circuit protection	electronic overload cut-off
adjustable response value current of current-dependent overload trip	0.5 2.5 A
type of threshold value setting	via potentiometer or IE/PN interface
characteristics of electronic overload switch-off	la >1.0<1.5 x la threshold permissible for 5 s; la limit (= 1.5 x la threshold) permissible for 200 ms
Reset	via sensor per output or IE/PN interface
Remote reset	Non-electrically isolated 24 V input (signal level "high" at > 15 V) at power supply unit PSU8600
Overload/short-circuit indicator	3-color LED for operating state module; 3-color LED per output for operating state output
Interface	
Interface Specification interface	Ethernet/PROFINET via power supply unit PSU8600
	Ethernet/PROFINET via power supply unit PSU8600
Specification interface	Ethernet/PROFINET via power supply unit PSU8600 Yes
Specification interface Safety	
Specification interface Safety Primary/secondary isolation galvanic isolation Protection class	Yes
Specification interface Safety Primary/secondary isolation galvanic isolation	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178
Specification interface Safety Primary/secondary isolation galvanic isolation Protection class	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class III
Specification interface Safety Primary/secondary isolation galvanic isolation Protection class Degree of protection (EN 60529)	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class III
Specification interface Safety Primary/secondary isolation galvanic isolation Protection class Degree of protection (EN 60529) Approvals CE mark UL/cUL (CSA) approval	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class III IP20
Specification interface Safety Primary/secondary isolation galvanic isolation Protection class Degree of protection (EN 60529) Approvals CE mark UL/cUL (CSA) approval Explosion protection	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class III IP20 Yes CULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1), NEC class 2
Specification interface Safety Primary/secondary isolation galvanic isolation Protection class Degree of protection (EN 60529) Approvals CE mark UL/cUL (CSA) approval Explosion protection certificate of suitability NEC Class 2	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class III IP20 Yes CULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus
Specification interface Safety Primary/secondary isolation galvanic isolation Protection class Degree of protection (EN 60529) Approvals CE mark UL/cUL (CSA) approval Explosion protection certificate of suitability NEC Class 2 FM approval	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class III IP20 Yes CULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1), NEC class 2 - Yes -
Specification interface Safety Primary/secondary isolation galvanic isolation Protection class Degree of protection (EN 60529) Approvals CE mark UL/cUL (CSA) approval Explosion protection certificate of suitability NEC Class 2 FM approval CB approval	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class III IP20 Yes cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1), NEC class 2 - Yes - Yes
Specification interface Safety Primary/secondary isolation galvanic isolation Protection class Degree of protection (EN 60529) Approvals CE mark UL/cUL (CSA) approval Explosion protection certificate of suitability NEC Class 2 FM approval CB approval certificate of suitability EAC approval	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class III IP20 Yes CULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1), NEC class 2 - Yes - Yes - Yes Yes
Specification interface Safety Primary/secondary isolation galvanic isolation Protection class Degree of protection (EN 60529) Approvals CE mark UL/cUL (CSA) approval Explosion protection certificate of suitability NEC Class 2 FM approval CB approval certificate of suitability EAC approval Regulatory Compliance Mark (RCM)	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class III IP20 Yes CULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1), NEC class 2 - Yes - Yes - Yes Yes Yes
Specification interface Safety Primary/secondary isolation galvanic isolation Protection class Degree of protection (EN 60529) Approvals CE mark UL/cUL (CSA) approval Explosion protection certificate of suitability NEC Class 2 FM approval CB approval certificate of suitability EAC approval Regulatory Compliance Mark (RCM) Marine approval	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class III IP20 Yes CULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1), NEC class 2 - Yes - Yes - Yes Yes
Specification interface Safety Primary/secondary isolation galvanic isolation Protection class Degree of protection (EN 60529) Approvals CE mark UL/cUL (CSA) approval Explosion protection certificate of suitability NEC Class 2 FM approval CB approval certificate of suitability EAC approval Regulatory Compliance Mark (RCM) Marine approval EMC	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class III IP20 Yes cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1), NEC class 2 - Yes - Yes - Yes Yes Yes ABS, DNV GL
Specification interface Safety Primary/secondary isolation galvanic isolation Protection class Degree of protection (EN 60529) Approvals CE mark UL/cUL (CSA) approval Explosion protection certificate of suitability NEC Class 2 FM approval CB approval certificate of suitability EAC approval Regulatory Compliance Mark (RCM) Marine approval EMC Emitted interference	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class III IP20 Yes CULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1), NEC class 2 - Yes - Yes - Yes Yes ABS, DNV GL EN 55022 Class B
Specification interface Safety Primary/secondary isolation galvanic isolation Protection class Degree of protection (EN 60529) Approvals CE mark UL/cUL (CSA) approval Explosion protection certificate of suitability NEC Class 2 FM approval CB approval certificate of suitability EAC approval Regulatory Compliance Mark (RCM) Marine approval EMC Emitted interference Noise immunity	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class III IP20 Yes cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1), NEC class 2 - Yes - Yes - Yes Yes Yes ABS, DNV GL
Specification interface Safety Primary/secondary isolation galvanic isolation Protection class Degree of protection (EN 60529) Approvals CE mark UL/cUL (CSA) approval Explosion protection certificate of suitability NEC Class 2 FM approval CB approval certificate of suitability EAC approval Regulatory Compliance Mark (RCM) Marine approval EMC Emitted interference	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class III IP20 Yes CULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1), NEC class 2 - Yes - Yes - Yes Yes ABS, DNV GL EN 55022 Class B
Specification interface Safety Primary/secondary isolation galvanic isolation Protection class Degree of protection (EN 60529) Approvals CE mark UL/cUL (CSA) approval Explosion protection certificate of suitability NEC Class 2 FM approval CB approval certificate of suitability EAC approval Regulatory Compliance Mark (RCM) Marine approval EMC Emitted interference Noise immunity environmental conditions ambient temperature	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class III IP20 Yes CULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1), NEC class 2 - Yes - Yes - Yes Yes ABS, DNV GL EN 55022 Class B
Specification interface Safety Primary/secondary isolation galvanic isolation Protection class Degree of protection (EN 60529) Approvals CE mark UL/cUL (CSA) approval Explosion protection certificate of suitability NEC Class 2 FM approval CB approval certificate of suitability EAC approval Regulatory Compliance Mark (RCM) Marine approval EMC Emitted interference Noise immunity environmental conditions ambient temperature • during operation	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class III IP20 Yes CULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1), NEC class 2 - Yes - Yes - Yes Yes ABS, DNV GL EN 55022 Class B
Specification interface Safety Primary/secondary isolation galvanic isolation Protection class Degree of protection (EN 60529) Approvals CE mark UL/cUL (CSA) approval Explosion protection certificate of suitability NEC Class 2 FM approval CB approval certificate of suitability EAC approval Regulatory Compliance Mark (RCM) Marine approval EMC Emitted interference Noise immunity environmental conditions ambient temperature • during operation — Note	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class III IP20 Yes CULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1), NEC class 2 - Yes - Yes Yes Yes Yes Yes ABS, DNV GL EN 55022 Class B EN 61000-6-2 -25 +60 °C with natural convection
Specification interface Safety Primary/secondary isolation galvanic isolation Protection class Degree of protection (EN 60529) Approvals CE mark UL/cUL (CSA) approval Explosion protection certificate of suitability NEC Class 2 FM approval CB approval certificate of suitability EAC approval Regulatory Compliance Mark (RCM) Marine approval EMC Emitted interference Noise immunity environmental conditions ambient temperature • during operation — Note • during transport	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class III IP20 Yes CULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1), NEC class 2 Yes Yes Yes ABS, DNV GL EN 55022 Class B EN 61000-6-2 -25 +60 °C with natural convection -40 +85 °C
Specification interface Safety Primary/secondary isolation galvanic isolation Protection class Degree of protection (EN 60529) Approvals CE mark UL/cUL (CSA) approval Explosion protection certificate of suitability NEC Class 2 FM approval CB approval certificate of suitability EAC approval Regulatory Compliance Mark (RCM) Marine approval EMC Emitted interference Noise immunity environmental conditions ambient temperature • during operation — Note	Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class III IP20 Yes CULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1), NEC class 2 - Yes - Yes Yes Yes Yes Yes ABS, DNV GL EN 55022 Class B EN 61000-6-2 -25 +60 °C with natural convection

Mechanics	
Connection technology	Plug-in terminals with screwed connection
Connections	
• Output	1, 2, 3, 4, 5, 6, 7, 8: Two plug-in terminals (14 and 58) with 1 screwed connection each for 0.2 2.5 mm²; Ground: Plug-in terminal with 3 screwed connections for 0.2 2.5 mm²
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	100 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
Weight, approx.	1.29 kg
product feature of the enclosure housing can be lined up	Yes
Installation	Snaps onto DIN rail EN 60715 35x15
mechanical accessories	Device identification label 20 mm × 7 mm, Tl-grey 3RT2900-1SB20
MTBF at 40 °C	327 369 h
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

