SIEMENS

Data sheet   6EP4436-8XB00-0DY0

SITOP CNX8600/8X2.5A

SITOP CNX8600 8x2.5 A expansion module for PSU8600 output: 24 V DC/8x 2.5 A outputs according to NEC class 2

Technical Product Detail Page	https://i.siemens.com/1P6EP4436-8XB00-0DY0
output	
voltage curve at output	Controlled, isolated DC voltage
number of outputs	8
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
● at output 5 at DC rated value	24 V
● at output 6 at DC rated value	24 V
● at output 7 at DC rated value	24 V
● at output 8 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. 60 W per output
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 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	20 A
● 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
● rated range	0 ... 20 A; 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
parallel switching of outputs	No
bridging of equipment	No
efficiency	
efficiency in percent	97 %
power loss [W]	
● at rated output voltage for rated value of the output current typical	15 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
adjustable current response value current of the current-dependent overload release	0.5 ... 2.5 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
display version for overload and short circuit	3-color LED for operating state module; 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) at power supply unit PSU8600
interfaces	
product function communication function	Yes
design of the interface	Ethernet/PROFINET via power supply unit PSU8600
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 III
protection class IP	IP20
EMC	
standard	
● for emitted interference	EN 55022 Class B
● 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
● Regulatory Compliance Mark (RCM)	Yes
● NEC Class 2	Yes; according to UL1310
● SEMI F47	Yes
type of certification	
● CB-certificate	Yes

MTBF at 40 °C	327 369 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	527.6 kg
● during manufacturing	56.8 kg
● during operation	469.5 kg
● after end of life	1.28 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 output	1, 2, 3, 4, 5, 6, 7, 8: Two plug-in terminals (1…4 and 5…8) 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
removable terminal at output	Yes
suitability for interaction modular system	Yes
type of connection to system components	Via integrated connector

mechanical data

width × height × depth of the enclosure	100 × 125 × 150 mm
installation width × mounting height	100 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	1.29 kg

accessories

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 customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under https://www.siemens.com/cert. (V4.7)

Classifications

	Version	Classification
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

General Product Approval

CB	UKCA	Manufacturer Declaration	Declaration of Conformity	CE EG-Konf.	China RoHS

General Product Approval	Maritime application		Environment
UL	ABS	DNV	EPD

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