



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 *Ex approval no longer available*

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
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. 60 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	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

<ul style="list-style-type: none"> • at output 4 rated value • at output 5 rated value • at output 6 rated value • at output 7 rated value • at output 8 rated value • rated range 	<p>2.5 A</p> <p>2.5 A</p> <p>2.5 A</p> <p>2.5 A</p> <p>2.5 A</p> <p>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</p>
supplied active power typical	480 W
product feature	
<ul style="list-style-type: none"> • parallel switching of outputs • bridging of equipment 	<p>No</p> <p>No</p>
Efficiency	
efficiency in percent	97 %
power loss [W]	
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • 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
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
display version for overload and short circuit	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	
galvanic isolation between input and output	Yes
galvanic isolation	Safety extra-low output voltage U_{out} acc. to EN 60950-1 and EN 50178
operating resource protection class	Class III
protection class IP	IP20
Approvals	
certificate of suitability	
<ul style="list-style-type: none"> • CE marking • UL approval 	<p>Yes</p> <p>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</p>
<ul style="list-style-type: none"> • 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), NEC class 2
<ul style="list-style-type: none"> • cCSAus, Class 1, Division 2 • ATEX 	<p>No</p> <p>No</p>
certificate of suitability	
<ul style="list-style-type: none"> • IECEx • NEC Class 2 • ULhazloc approval • FM registration 	<p>No</p> <p>Yes</p> <p>No</p> <p>No</p>
type of certification CB-certificate	Yes
certificate of suitability	
<ul style="list-style-type: none"> • EAC approval • C-Tick 	<p>Yes</p> <p>No</p>

<ul style="list-style-type: none"> • Regulatory Compliance Mark (RCM) 	Yes
certificate of suitability shipbuilding approval	Yes
shipbuilding approval	ABS, DNV GL
Marine classification association	
<ul style="list-style-type: none"> • American Bureau of Shipping Europe Ltd. (ABS) 	Yes
<ul style="list-style-type: none"> • French marine classification society (BV) 	No
<ul style="list-style-type: none"> • DNV GL 	Yes
<ul style="list-style-type: none"> • Lloyds Register of Shipping (LRS) 	No
<ul style="list-style-type: none"> • Nippon Kaiji Kyokai (NK) 	No
EMC	
standard	
<ul style="list-style-type: none"> • for emitted interference 	EN 55022 Class B
<ul style="list-style-type: none"> • for interference immunity 	EN 61000-6-2
environmental conditions	
ambient temperature	
<ul style="list-style-type: none"> • during operation 	-25 ... +60 °C; with natural convection
<ul style="list-style-type: none"> • during transport 	-40 ... +85 °C
<ul style="list-style-type: none"> • 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
<ul style="list-style-type: none"> • 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 mm ² ; Ground: Plug-in terminal with 3 screwed connections for 0.2 ... 2.5 mm ²
product function	
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • top 	50 mm
<ul style="list-style-type: none"> • bottom 	50 mm
<ul style="list-style-type: none"> • left 	0 mm
<ul style="list-style-type: none"> • right 	0 mm
net weight	1.29 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	327 369 h
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

