



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; 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
• at output 4 rated value	2.5 A

<ul style="list-style-type: none"> • 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 2.5 A 2.5 A 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>
<p>supplied active power typical</p> <p>product feature</p> <ul style="list-style-type: none"> • parallel switching of outputs • bridging of equipment 	<p>480 W</p> <p>No</p> <p>No</p>
Efficiency	
<p>efficiency in percent</p> <p>power loss [W]</p> <ul style="list-style-type: none"> • at rated output voltage for rated value of the output current typical 	<p>97 %</p> <p>15 W</p>
Closed-loop control	
<p>relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical</p> <p>relative control precision of the output voltage load step of resistive load 50/100/50 % typical</p> <p>setting time</p> <ul style="list-style-type: none"> • maximum 	<p>0.1 %</p> <p>0.4 %</p> <p>10 ms</p>
Protection and monitoring	
<p>design of the overvoltage protection</p> <p>property of the output short-circuit proof</p> <p>design of short-circuit protection</p> <p>adjustable current response value current of the current-dependent overload release</p> <p>type of response value setting</p> <p>switching characteristic</p> <ul style="list-style-type: none"> • of the excess current <p>design of the reset device/resetting mechanism</p> <p>remote reset function</p> <p>display version for overload and short circuit</p>	<p>max. 35 V (max. 500 ms)</p> <p>Yes</p> <p>electronic overload cut-off</p> <p>0.5 ... 2.5 A</p> <p>via potentiometer or IE/PN interface</p> <p>$I_a > 1.0 \dots < 1.5 \times I_a$ threshold permissible for 5 s; I_a limit (= $1.5 \times I_a$ threshold) permissible for 200 ms</p> <p>via sensor per output or IE/PN interface</p> <p>Non-electrically isolated 24 V input (signal level "high" at > 15 V) at power supply unit PSU8600</p> <p>3-color LED for operating state module; 3-color LED per output for operating state output</p>
Interface	
<p>design of the interface</p>	<p>Ethernet/PROFINET via power supply unit PSU8600</p>
Safety	
<p>galvanic isolation between input and output</p> <p>galvanic isolation</p> <p>operating resource protection class</p> <p>protection class IP</p>	<p>Yes</p> <p>Safety extra-low output voltage U_{out} acc. to EN 60950-1 and EN 50178</p> <p>Class III</p> <p>IP20</p>
Approvals	
<p>certificate of suitability</p> <ul style="list-style-type: none"> • CE marking • UL approval • CSA approval • cCSAus, Class 1, Division 2 • ATEX <p>certificate of suitability</p> <ul style="list-style-type: none"> • IECEx • NEC Class 2 • ULhazloc approval • FM registration <p>type of certification CB-certificate</p> <p>certificate of suitability</p> <ul style="list-style-type: none"> • EAC approval • C-Tick • Regulatory Compliance Mark (RCM) 	<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> <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> <p>No</p> <p>No</p> <p>No</p> <p>Yes</p> <p>Yes</p> <p>No</p> <p>No</p> <p>Yes</p> <p>Yes</p> <p>No</p> <p>Yes</p>

certificate of suitability shipbuilding approval	Yes
shipbuilding approval	ABS, DNV GL
Marine classification association	
• American Bureau of Shipping Europe Ltd. (ABS)	Yes
• French marine classification society (BV)	No
• DNV GL	Yes
• Lloyds Register of Shipping (LRS)	No
• Nippon Kaiji Kyokai (NK)	No
EMC	
standard	
• for emitted interference	EN 55022 Class B
• 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, 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	
• 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
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)

