## **SIEMENS**

## **Data sheet**

## 6EP3336-8MB00-2CY0



## SITOP PSU8600/1AC/24VDC/20A/4X5A PN

SITOP PSU8600 1AC 20 A/4x5 A PN stabilized power supply input: 100-240 V AC output: 24 V DC/20 A/4x 5 A with PN/IE connection web server integrated OPC UA server integrated \*Ex approval no longer available\*

Input	
type of the power supply network	1-phase and 2-phase AC or DC
supply voltage at AC	
minimum rated value	100 V
maximum rated value	240 V
initial value	85 V
• full-scale value	275 V
supply voltage	
• at DC	110 220 V
input voltage	
• at DC	93 275 V
design of input wide range input	Yes
operating condition of the mains buffering	at Vin = 100 V; Prioritized supply Output 1 at power failure can be selected via DIP switch
buffering time for rated value of the output current in the event of power failure minimum	20 ms
operating condition of the mains buffering	at Vin = 100 V; Prioritized supply Output 1 at power failure can be selected via DIP switch
line frequency	
1 rated value	50 Hz
2 rated value	60 Hz
line frequency	47 63 Hz
input current	
<ul> <li>at rated input voltage 100 V</li> </ul>	5.4 A
<ul> <li>at rated input voltage 120 V</li> </ul>	4.5 A
<ul> <li>at rated input voltage 230 V</li> </ul>	2.5 A
<ul> <li>at rated input voltage 240 V</li> </ul>	2.4 A
<ul> <li>at rated input voltage 110 V</li> </ul>	4.8 A
<ul> <li>at rated input voltage 220 V</li> </ul>	2.4 A
current limitation of inrush current at 25 °C maximum	15 A
I2t value maximum	4.33 A <sup>2</sup> ·s
fuse protection type	internal
• in the feeder	required: circuit breaker (for UL: UL489-listed/DIVQ) characteristic C, 10-32 A, alternatively slow-response fuses (for UL: UL248-listed)
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
<ul> <li>at output 2 at DC rated value</li> </ul>	24 V

at output 2 at DC rated valueat output 3 at DC rated value

24 V

* at output * at Dic rated value control precision of the output voltage * en allow fluctuation of input voltage * on allow fluctuation of orbin loading * residue control precision of the output voltage * on allow fluctuation of orbin loading * residual inpide * maximum * 100 m/V * voltage peak * on asimum * 200 m/V * displasive transfer or UEFPN interface, Derating > 24 V- 45/V, max. 12 0 * Village product function output voltage adjustable * yep of output voltage setting * display version for normal operation  * Sype of signal at output * Special voltage version for normal operation  * Sype of signal at output * Special voltage when switching on response delay maximum * Sype of output voltage when switching on response delay maximum * Sype of output voltage when switching on response delay maximum * Sype of output voltage when switching on response delay maximum * Sype of output voltage when switching on response delay maximum * Sype of output voltage when switching on response delay maximum * Sype of output voltage when switching on response delay maximum * Sype of output voltage when switching on response delay and response delay value of 2 rs. No overshoot of Voic (set start) * Sype of output voltage when switching on response delay and response delay of the output voltage * maximum * Sype of output voltage when switching on response delay and response delay of the output voltage * maximum * Sype of output voltage with response voltage in response of the output voltage * en and response voltage voltage in response v	-ttt	04.1/
relative control precision of the output voltage	at output 4 at DC rated value	24 V
on allow fluctuation of input voltage     on slow fluctuation of ohm loading residual rippile     maximum voltage peak     maximum adjustable output voltage type of output voltage eglustable type of output voltage settling display version for normal operation  display version for normal operation of normal operation for normal operation of normal operation on the output operation of normal operation on the output operation operation of normal operation of normal operation of normal operation of normal operation on the output voltage operation operation of normal operation operation of normal operation operation operation of normal operat	G	3 %
on slow fluctuation of ohm loading residual proper waxmum 100 mV voltage peak     maximum 200 mV adjustable output voltage adjustable output voltage setting 4 28 V yes of output voltage setting 4 28 V yes of output voltage setting 5 24 V: 4%V, max. 120 W per output, max. 480 W overall system 3 3-color LED for operating state device, LED for operating state output. LED great for parallel operation output voltage when switching on response deby maximum type of outputs connection 19 with the output voltage when switching on response deby maximum 19 with the output voltage increase time of the output voltage increase time of the output voltage	· · · · · · · · · · · · · · · · · · ·	
residual ripple  maximum  voltage peak  maximum  adjustable output voltage adjustable  type of output voltage setting  display version for normal operation  voltage signal at output  voltage when switching on response delay maximum  type of outputs connection  behavior of the output voltage when switching on response delay maximum  type of outputs connection  behavior of the output voltage when switching on response delay maximum  type of outputs connection  voltage increase time of the output voltage  maximum  output current  "rated value  "per output  "rated value  "per output  "rated value  "rated		0.2 %
• maximum voltage peak • maximum dijustable output voltage product function output voltage adjustable type of output voltage adjustable type of output voltage setting display version for normal operation  type of signal at output  type of output voltage when switching on response delay maximum type of outputs connection  type of outputs connection  type of outputs connection  type of output voltage when switching on response delay maximum type of outputs connection  type of outputs connection  type of outputs connection  type of outputs  to output voltage increase time of the output voltage  • maximum  output current  • rated value  • per output  • at output 1 rated value  • at output 2 rated value  • at output 2 rated value  • at output 3 rated value  • at output 3 rated value  • at output 3 rated value  • at output 4 rated value  • at output 5 A  • at output 3 rated value  • parallel switching of outputs  • parallel switching of outputs  • product feature  • parallel switching of outputs  • product feature  • parallel switching of outputs  • product feature  • parallel switching of outputs  • product peature  • parallel circuit output 1 with 2 or Output 3 with 4 can be selected via DiP switch  No  Closued-Bop control  relative control precision of the output voltage with rapid fluctuation of the input voltage by **- 15% byteal relative control precision of the output voltage by **- 15% byteal relative control precision of the output voltage by **- 15% byteal relative control precision of the output voltage by of restore load of 100505 % byteal selection  • of the current limitation	<ul> <li>on slow fluctuation of ohm loading</li> </ul>	0.1 %
voltage peak	residual ripple	
a maximum adjustable output voltage adjustable type of output voltage setting display version for normal operation  display version for normal operation  type of signal at output  behavior of the output voltage when switching on response delay maximum type of outputs connection  type of output some display maximum type of outputs one time of the output voltage behavior of the output voltage when switching on response delay maximum type of outputs connection  voltage increase time of the output voltage  • maximum  output current  • rated value  • per output 1 rated value  • at output 1 rated value  • parallel switching of outputs  • bridging of equipment  • bridging of equipment  • bridging of equipment  • attraction of the output voltage of rated value or bridging of equipment  • attraction of the input voltage by +f-15% bytical relative control precision of the output voltage with rapid fluctuation of the input voltage by +f-15% bytical relative control precision of the output voltage with rapid fluctuation of the input voltage by +f-15% bytical relative control precision of the output voltage of restore output voltage by of restore load of protection adjustable current response value setting switching characteristic  • of the excess current  • of the current limitation  • of the current limitation	<ul><li>maximum</li></ul>	100 mV
adjustable output voltage type of output voltage adjustable type of output voltage setting display version for normal operation  3-color LED for operating state device; LED for operating mode minanual/remote; 4 LED for operating state output; LED green for parallel operation Output; 1 and 2 / 3 and 4 Relay contact (changeover contact, contact current capacity DC 60 V/JO.3.A) for "Operating state OK" No overshood to Vout (soft start)  1 symbout or delay of the outputs without or delay of the outputs simultaneous connecting-in of all outputs after device booting or delay time of 25 ms, 10 ms or "idea-dyminized" or sequential cutting-in of the outputs via DIP switches can be set  50 ms  output urrent  1 at output 2 rated value  2 D A  2 at output 2 rated value  2 A at output 3 rated value  3 at output 1 rated value  4 at output 2 rated value  5 A  3 at output 4 rated value  4 at output 2 rated value  5 A  5 A  5 A  5 A  6 A  7 A  8 A  8 A  8 A  8 A  8 A  8 A  8	voltage peak	
yes of output voitage actiting display version for normal operation  display version for normal operation  display version for normal operation  version of the output voitage actiting  type of signal at output  type of signal at output  type of signal at output  behavior of the output voitage when switching on response delay maximum  type of output sonnection  voitage increase time of the output voitage  maximum  display expending the device (soft start)  voitage increase time of the output voitage  maximum  output current  in at output 1 and 2 / 3 and 4  Relay contact (change) are for parallel operation  voitage increase time of the output voitage  maximum  output current  in at output 1 and 2 / 3 and 4  at output 1 and 2 / 3 and 4  at output 1 and 2 / 3 and 4  at output 1 and 2 / 3 and 4  response delay maximum  output current  in a output 2 and voitage increase time of the output voitage  maximum  output current  in a output 1 and 2 / 3 and 4  at output 1 and 2 / 3 and 2 /	maximum	200 mV
yes of output voitage setting display version for normal operation  display version for normal operation  display version for normal operation  version for normal operation  3-color LED for operating state device: LED for operating mode manual/remote; 4 LEDs for communication PROFINET; 3-color LED per output for operating state output; LED green for parallel operation  Version of the output voitage when switching on response delay maximum  type of outputs connection  Voitage increase time of the output voitage  — maximum  output current  — rated value  — and output 1 and 2 / 3 and 4  Relay contact (change) are of the outputs voitage increase time of the output voitage  — maximum  output current  — rated value  — and output 1 rated value  — and output 1 rated value  — and output 2 rated value  — and output 2 rated value  — and output 4 rated value  — and output 4 rated value  — and output 2 rated value  — and output 4 rated value  — parallel switching of outputs  — bridging of equipment  Strickinsory  efficiency in percent  power loss [W]  — at rated output voitage for rated value of the output voitage voit rapid fluctuation of the input voitage by +1 f5% typical relative control precision of the output voitage load step of resistive load 501/00/50 % typical  setting time  — maximum  Protection and monitoring  design of short-circuit protection  solic the current timitation  protect the duptur short-circuit prote design of short-circuit protection  adjustable current response value current of the current-dependent overfoad release  — of the excess current  — of the excess current  — of the current limitation  — of the current limitation  Teach for the current limitatio	adjustable output voltage	4 28 V
via potentiometer or IE/PN Interface. Derating > 24 V 4 V 4 V 7 viv. 7 viax. 120 We per output, max. 480 We overall system display version for normal operation  special properties of the output voltage when switching on response delay maximum type of outputs connection  behavior of the output voltage when switching on response delay maximum type of outputs connection  voltage increase time of the output voltage  maximum type of outputs connection  voltage increase time of the output voltage  maximum type of outputs according to the output voltage  maximum output current  a raided value  per output  a raid value  per output  solve the value  per output	,	Yes
display version for normal operation  display version for normal operation  3-color LED for operating state device; LED for operating mode manual/remote; 4 LEDs for communication PROFINET; 3-color LED per output for operating state output; LED green for parallel operation  type of signal at output  behavior of the output voltage when switching on response delay maximum  type of outputs connection  voltage increase time of the output voltage  maximum  supplied active the control of the output voltage  maximum  output current  at output 1 rated value  per output 1 rated value  per output 1 rated value  per output 1 rated value  at output 2 rated value  at output 3 rated value  at output 4 rated value  5 A  at output 4 rated value  5 A  at output 4 rated value  brade power typical  product feature  parallel switching of outputs  **Yes; Parallel circuit Output 1 with 2 or Output 3 with 4 can be selected via DIP switches  bridging of equipment  **Yes; Parallel circuit Output 1 with 2 or Output 3 with 4 can be selected via DIP switches  current typical  relative control precision of the output voltage with rapid fluctuation of the input voltage by **1 - 15% typical relative control precision of the output voltage load step of resistive load \$01/00.50 % typical  relative control precision of the output voltage with rapid fluctuation of the input voltage by **1 - 15% typical relative control precision of the output voltage with rapid fluctuation of the input voltage with rapid fluctuation of the input voltage by **1 - 15% typical relative control precision of the output voltage with rapid fluctuation of the input voltage via profit of the current dependent overfoad release  maximum  10 ms  protection and monitoring  design of short-circuit profection  property of the output short-circuit proof design of short-circuit profection  adjustable current response value current of the current dependent overfoad release  yee of response value setting  switching characteristic  of the excess current  efficiency is precision from		
display version for normal operation  3-color LED for operating state device; LED for operating mode manual/remote; 4. LEDs for communication PROFINET; 3-color LED per output for operating state device; LED for operating state output 1. LED green for parallel operation Output 1 and 27; 3 and 4  Relay contact (changeover contact, contact current capacity DC 60 VJ 3.5 /) for "Operating state OX".  No overshoot of Vout (soft start)  1 s. Without on-delay of the outputs  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 output via DIP switches can be set  voltage increase time of the output voltage  * maximum  output current  voltage increase time of the output voltage  * maximum  output current  * rated value  * at output 1 rated value  * at a output 1 rated value  * at a output 1 rated value  * at a output 2 rated value  * at a output 3 rated value  * at a output 4 rated value  * at a output 5 A  * at output 5 A  * at output 6 rated value  * at parallel switching of outputs  * bridging of equipment  * parallel switching of outputs  * bridging of equipment  * prailel switching of outputs  * bridging of equipment  * prailel switching of outputs  * bridging of equipment  * parallel switching of output voltage with rapid flictuation of the input voltage for rated value of the output current typical  * during no-load operation maximum  1 at W  **Closed-loop control  relative control precision of the output voltage load step of resistive load \$010050 % typical  relative control precision of the output voltage load step of resistive load \$010050 % typical  relative control precision of the output voltage load step of resistive load \$010050 % typical  relative control precision of the output voltage load step of resistive load \$010050 % typical  relative control prec	type of output voltage setting	
behavior of the output voltage when switching on response delay maximum type of outputs connection  No overshoot of Vou (soft start) 1 s; Without on-delay of the outputs after device booting or delay time of 25 ms. 100 ms or 'load-optimized' for sequential cutting-in of the output since of 25 ms. 100 ms or 'load-optimized' for sequential cutting-in of the output voltage  • maximum  output current  • rated value • per output • at output 1 rated value • at output 2 rated value • at output 3 rated value • at output 3 rated value • at output 4 rated value • at output 4 rated value • rated range supplied active power typical product feature • parallel switching of outputs • bridging of equipment  • bridging of equipment  * bridging of equipment  * bridging of equipment  * bridging of equipment  * bridging of load operation maximum  * Closed-loop control  relative control precision of the output voltage with rapid fluctuation of the input voltage by +1 - 15% typical relative control precision of the output voltage load step of resistive load 50/10050% typical setting time • maximum  * output switching of outputs  * output switching of outputs  * output voltage for rated value of the output current typical • during no-load operation maximum  10 ms  **Totaction and monitoring**  design of the overvoltage protection property of the output short-circuit proof design of short-circuit protection  adjustable current response value setting switching characteristic • of the excess current  • of the excess current  • of the current limitation    A threshold permissible for 5 s, la limit (= 1.5 x la threshold) permissible for 5 s, afterwards la threshold continuous	display version for normal operation	manual/remote; 4 LEDs for communication PROFINET; 3-color LED per output for operating state output; LED green for parallel operation
response delay maximum type of outputs connection  1 s: Without on-delay of the outputs Simultaneous connecting-in of all outputs after device booting or delay time of 25 ms. 100 ms or "toad-optimized" for sequential cutting-in of the output via DIP switches can be set  voltage increase time of the output voltage  • maximum output current  • rated value • per output • at output 1 rated value • at output 1 rated value • at output 1 rated value • at output 3 rated value • at output 4 rated value • at output 4 rated value • at output 4 rated value • rated range supplied active power typical product feature • parallel switching of outputs • bridging of equipment • bridging of equipment  • br	type of signal at output	
type of outputs connection  1 s; Without on-delay of the outputs  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 output via DIP switches can be set  voltage increase time of the output voltage  • maximum  output current  • rated value  • per output  • at output 1 rated value  • at output 2 rated value  • at output 3 rated value  • at output 3 rated value  • at output 4 rated value  • at output 4 rated value  • at output 4 rated value  • rated range  supplied active power typical product feature  • parallel switching of outputs  • bridging of equipment  • bridging o	behavior of the output voltage when switching on	
type of outputs connection  Simultaneous connecting-in of all outputs after device booting or delay time of 25 ms, 100 ms or "Orac-optimized" for sequential cutting-in of the output via DIP switches can be set  voltage increase time of the output voltage  maximum  supput current  rated value  per output  at output 1 rated value  at output 2 rated value  at output 2 rated value  at output 3 rated value  rated range  supplied active power typical  product feature  parallel switching of outputs  bridging of equipment  bridging of equipment  power loss [W]  at rated output voltage for rated value of the output current typical  during no-load operation maximum  Closed-loop control  relative control precision of the output voltage with rapid fluctuation of the input voltage by +-15% typical relative control precision of the output voltage load step of resistive load 50/100/50 % typical setting time  maximum  max. 35 V (max. 500 ms)  resistive load 60/100/50 % typical setting switching characteristic  of the excess current  of the current limitation  simultaneous connecting-in of all output voltage in of the output side output side output side output side output side output voltage in output side output voltage in output vo	·	1 s; Without on-delay of the outputs
maximum     output current		time of 25 ms, 100 ms or "load-optimized" for sequential cutting-in of the
maximum     output current	voltage increase time of the output voltage	
output current  • rated value • per output • at output 1 rated value • per output • at output 2 rated value • at output 3 rated value • at output 3 rated value • at output 3 rated value • at output 4 rated value • at output 4 rated value • at output 4 rated value • rated range  supplied active power typical product feature • parallel switching of outputs • bridging of equipment • value of the output voltage for rated value of the output • current typical • at rated output voltage for rated value of the output • current typical • outing no-load operation maximum  Closed-loop control  relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical relative control precision of the output voltage load step of resistive load 50/100/50 % typical setting time • maximum  Protection and monitoring  design of the overvoltage protection property of the output short-circuit proof design of short-circuit protection  adjustable current response value current of the current- dependent overload release type of response value setting switching characteristic • of the current limitation  a la limit (= 1.5 x la threshold) permissible for 5 s, afterwards la threshold continuous  a limit (= 1.5 x la threshold) permissible for 5 s, afterwards la threshold continuous		500 ms
• rated value     • per output     • at output 1 rated value     • at output 2 rated value     • at output 3 rated value     • at output 4 rated value     • parallel switching of outputs     • parallel switching of outputs     • bridging of equipment     • verificationsy  ### Clicionsy  ### Cli		
per output	•	20 A
• at output 1 rated value 5 A   • at output 2 rated value 5 A   • at output 3 rated value 5 A   • at output 4 rated value 5 A   • rated range 0 20 A   supplied active power typical product feature • parallel switching of outputs Yes; Parallel circuit Output 1 with 2 or Output 3 with 4 can be selected via DIP switch   • bridging of equipment No    Efficiency    efficiency in percent power loss [W]   • at rated output voltage for rated value of the output current typical • during no-load operation maximum 14 W    Closed-loop control   relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical relative control precision of the output voltage load step of resistive load 50/100/50 % typical setting time • maximum 10 ms  Protection and monitoring   design of the overvoltage protection property of the output short-circuit proof design of short-circuit proof design of short-circuit protection   adjustable current response value current of the current-dependent overload release type of response value setting   switching characteristic   • of the excess current   • of the current limitation   I a >1.0<1.5 x la threshold permissible for 5 s; la limit (= 1.5 x la threshold) permissible for 5 s, afterwards la threshold continuous		
at output 2 rated value at output 4 rated value 5 A 7 Comments at output 4 rated value 5 A 0 20 A 8 Supplied active power typical product feature product		
at output 3 rated value at output 4 rated value rated range supplied active power typical product feature parallel switching of outputs bridging of equipment  Filicioncy  efficiency in percent power loss [W] at rated output voltage for rated value of the output current typical during no-load operation maximum  Closed-loop control relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical relative control precision of the output voltage load step of resistive load 50/100/50 % typical setting time maximum  Protection and monitoring  design of short-circuit protection property of the output short-circuit proof design of short-circuit protection adjustable current response value current of the current-dependent overload release type of response value setting switching characteristic  of the excess current of the current limitation  final rated output 1 with 2 or Output 3 with 4 can be selected via DIP switch a80 W  yes; Parallel circuit Output 1 with 2 or Output 3 with 4 can be selected via DIP switch  39 W  30 Un Selected on 14 W  Closed-loop control  relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical relative control precision of the output voltage load step of resistive load 50/100/50 % typical setting time  max 35 V (max. 500 ms)  yes  0.5 5 A  via potentiometer or IE/PN interface	·	
• at output 4 rated value • rated range supplied active power typical product feature • parallel switching of outputs • bridging of equipment • bridgi	•	
• rated range supplied active power typical product feature • parallel switching of outputs • bridging of equipment • bridging of equipment  • bridging of equipment  • bridging of equipment  • bridging of equipment  • bridging of equipment  • bridging of equipment  • bridging of equipment  • bridging of equipment  • bridging of equipment  • bridging of equipment  • bridging of equipment  • power loss [W] • at rated output voltage for rated value of the output current typical • during no-load operation maximum  • during no-load operation maximum  • during no-load operation of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical relative control precision of the output voltage load step of resistive load 50/100/50 % typical setting time • maximum  • maximum  • maximum  • maximum  • max. 35 V (max. 500 ms)  • residence overload cut-off; optionally constant current operation can be selected for Output 4 via DIP switches  • of the excess current • of the excess current • of the current limitation  • of the response value setting • of the current limitation  • of the response value setting • of the current limitation  • of the current limitation	•	
supplied active power typical product feature  • parallel switching of outputs  • bridging of equipment  **Pes: Parallel circuit Output 1 with 2 or Output 3 with 4 can be selected via DIP switch  No  **Efficiency**  **Efficiency**  **Efficiency in percent power loss [W]  • at rated output voltage for rated value of the output current typical • during no-load operation maximum  **It W  **Closed-loop control**  relative control precision of the output voltage with rapid fluctuation of the input voltage by +/+ 15% typical relative control precision of the output voltage load step of resistive load 50/100/50 % typical setting time  • maximum  **Protection and monitoring**  design of the overvoltage protection property of the output short-circuit proof design of short-circuit protection  adjustable current response value current of the current-dependent overload release type of response value setting switching characteristic  • of the excess current  • of the current limitation  **A80 W  Yes; Parallel circuit Output 1 with 2 or Output 3 with 4 can be selected via DIP switch  92 %  92 %  92 %  94 **  95 **W  39 W  14 **W  **Closed-loop control**  10 **S  10 **M	<ul> <li>at output 4 rated value</li> </ul>	5 A
product feature  • parallel switching of outputs  • bridging of equipment  Efficiency  efficiency in percent power loss [W]  • during no-load operation maximum  Closed-loop control  relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical relative control precision of the output voltage load step of resistive load 50/100/50 % typical setting time  • maximum  Protection and monitoring  design of short-circuit protection property of the output short-circuit proof design of short-circuit protection adjustable current response value current of the current-dependent overload release type of response value setting switching characteristic  • of the excess current  • of the current limitation  Yes; Parallel circuit Output 1 with 2 or Output 3 with 4 can be selected via DIP switch No  Yes; Parallel circuit Output 1 with 2 or Output 3 with 4 can be selected via DIP switch No  92 %  92 %  93 W  14 W  0.1 %  0.4 %  10 ms  Protection and monitoring  design of the overvoltage protection property of the overvoltage protection adjustable current response value current of the current-dependent overload release type of response value setting switching characteristic  • of the excess current  • of the current limitation  la limit (= 1.5 x la threshold) permissible for 5 s, afterwards la threshold continuous	rated range	0 20 A
parallel switching of outputs         bridging of equipment         No  Efficiency  efficiency    efficiency    efficiency    efficiency    ethic and prevent    power loss [W]  • at rated output voltage for rated value of the output current typical • during no-load operation maximum  14 W  Closed-loop control  relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical relative control precision of the output voltage load step of resistive load 50/100/50 % typical setting time • maximum  10 ms  Protection and monitoring  design of the overvoltage protection property of the output short-circuit proof design of short-circuit protection adjustable current response value current of the current-dependent overload release type of response value setting switching characteristic  • of the excess current  • of the current limitation  Yes, Parallel circuit 1 Output 1 with 2 or Output 3 with 4 can be selected via DIP switch 2 or Dutput 4 via DIP switch 2 or Output 3 with 4 can be selected via DIP switch 2 or Dutput 3 with 4 can be selected via DIP switch 2 or Dutput 4 via DIP switches  0.5 5 A  via potentiometer or IE/PN interface  via potentiometer or IE/PN interface  la >1.0<1.5 x la threshold permissible for 5 s; la limit (= 1.5 x la threshold) permissible for 5 s, afterwards la threshold continuous	supplied active power typical	480 W
bridging of equipment  Efficiency  efficiency  efficiency in percent power loss [W]  at rated output voltage for rated value of the output current typical during no-load operation maximum  14 W  Closed-loop control  relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical relative control precision of the output voltage load step of resistive load 50/100/50 % typical setting time  maximum  Protection and monitoring  design of the overvoltage protection property of the output short-circuit proof design of short-circuit protection adjustable current response value current of the current-dependent overload release type of response value setting switching characteristic  of the excess current  iva DIP switch  39 W  0.1 %  flow 10	product feature	
efficiency  efficiency in percent power loss [VI]  • at rated output voltage for rated value of the output current typical  • during no-load operation maximum  14 W  Closed-loop control  relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical relative control precision of the output voltage load step of resistive load 50/100/50 % typical setting time  • maximum  10 ms  Protection and monitoring  design of the overvoltage protection property of the output short-circuit proof design of short-circuit protection adjustable current response value current of the current-dependent overload release type of response value setting switching characteristic  • of the excess current  • of the current limitation  92 %  92 %  92 %  93 W  24 W  95 W  96 W  96 W  97 W  98		via DIP switch
efficiency in percent power loss [W]  • at rated output voltage for rated value of the output current typical • during no-load operation maximum  14 W  Closed-loop control  relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical relative control precision of the output voltage load step of resistive load 50/100/50 % typical setting time • maximum  10 ms  Protection and monitoring  design of the overvoltage protection property of the output short-circuit proof design of short-circuit protection adjustable current response value current of the current-dependent overload release type of response value setting switching characteristic • of the excess current  • of the current limitation  92 %  39 W  20 1	bridging of equipment	No
power loss [W]  • at rated output voltage for rated value of the output current typical  • during no-load operation maximum  14 W  Closed-loop control  relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical relative control precision of the output voltage load step of resistive load 50/100/50 % typical setting time  • maximum  10 ms  Protection and monitoring  design of the overvoltage protection property of the output short-circuit proof design of short-circuit protection adjustable current response value current of the current-dependent overload release type of response value setting switching characteristic  • of the excess current  • of the current limitation  39 W  39 W  39 W  39 W  39 W  44 W  50.1 %  50.4 %  50.4 %  60.4 %  60.4 %  60.4 %  60.5 50 ms)  7 yes  61.5 × la threshold permissible for 5 s; la limit (= 1.5 x la threshold) permissible for 200 ms  80.5 5 x la threshold) permissible for 5 s, afterwards la threshold continuous	Efficiency	
<ul> <li>at rated output voltage for rated value of the output current typical</li> <li>during no-load operation maximum</li> <li>14 W</li> <li>Closed-loop control</li> <li>relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical relative control precision of the output voltage load step of resistive load 50/100/50 % typical setting time         <ul> <li>maximum</li> <li>maximum</li> </ul> </li> <li>Protection and monitoring         <ul> <li>design of the overvoltage protection property of the output short-circuit proof design of short-circuit protection</li> <li>adjustable current response value current of the current-dependent overload release type of response value setting switching characteristic</li> <li>of the excess current</li> <li>of the current limitation</li> </ul> </li> <li>at &gt;1.0&lt;1.5 x la threshold permissible for 5 s, afterwards la threshold continuous</li> </ul>	efficiency in percent	92 %
at rated output voltage for rated value of the output current typical  butting no-load operation maximum  14 W  Closed-loop control  relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical relative control precision of the output voltage load step of resistive load 50/100/50 % typical setting time  maximum  10 ms  Protection and monitoring  design of the overvoltage protection property of the output short-circuit proof design of short-circuit protection  adjustable current response value current of the current-dependent overload release type of response value setting switching characteristic  of the excess current  of the current limitation  at rated output 4 W  14 W  0.1 %  0.2 %  10 ms  Protection and monitoring  design of the overvoltage protection property of the output short-circuit proof electronic overload cut-off; optionally constant current operation can be selected for Output 4 via DIP switches  0.5 5 A  via potentiometer or IE/PN interface  la >1.0<1.5 x la threshold permissible for 5 s; la limit (= 1.5 x la threshold) permissible for 200 ms  la limit (= 1.5 x la threshold) permissible for 5 s, afterwards la threshold continuous	power loss [W]	
relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical relative control precision of the output voltage load step of resistive load 50/100/50 % typical setting time  • maximum  **maximum*	at rated output voltage for rated value of the output	39 W
relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical relative control precision of the output voltage load step of resistive load 50/100/50 % typical setting time  • maximum  10 ms  Protection and monitoring  design of the overvoltage protection property of the output short-circuit proof design of short-circuit protection  adjustable current response value current of the current-dependent overload release type of response value setting switching characteristic  • of the excess current  • of the current limitation  0.1 %  0.4 %  max. 35 V (max. 500 ms)  Yes electronic overload cut-off; optionally constant current operation can be selected for Output 4 via DIP switches  0.5 5 A  via potentiometer or IE/PN interface  Ia >1.0 <1.5 x Ia threshold permissible for 5 s; Ia limit (= 1.5 x Ia threshold) permissible for 200 ms  Ia limit (= 1.5 x Ia threshold) permissible for 5 s, afterwards Ia threshold continuous	<ul> <li>during no-load operation maximum</li> </ul>	14 W
relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical relative control precision of the output voltage load step of resistive load 50/100/50 % typical setting time  • maximum  10 ms  Protection and monitoring  design of the overvoltage protection property of the output short-circuit proof design of short-circuit protection  adjustable current response value current of the current-dependent overload release type of response value setting switching characteristic  • of the excess current  • of the current limitation  0.1 %  0.4 %  max. 35 V (max. 500 ms)  Yes electronic overload cut-off; optionally constant current operation can be selected for Output 4 via DIP switches  0.5 5 A  via potentiometer or IE/PN interface  Ia >1.0 <1.5 x Ia threshold permissible for 5 s; Ia limit (= 1.5 x Ia threshold) permissible for 200 ms  Ia limit (= 1.5 x Ia threshold) permissible for 5 s, afterwards Ia threshold continuous	Closed-loop control	
relative control precision of the output voltage load step of resistive load 50/100/50 % typical setting time  • maximum  10 ms  Protection and monitoring  design of the overvoltage protection property of the output short-circuit proof design of short-circuit protection  adjustable current response value current of the current-dependent overload release type of response value setting switching characteristic  • of the excess current  • of the current limitation  0.4 %  max. 35 V (max. 500 ms)  Yes  electronic overload cut-off; optionally constant current operation can be selected for Output 4 via DIP switches  0.5 5 A  via potentiometer or IE/PN interface    la >1.0 < 1.5 x la threshold permissible for 5 s; la limit (= 1.5 x la threshold) permissible for 200 ms    la limit (= 1.5 x la threshold) permissible for 5 s, afterwards la threshold continuous	relative control precision of the output voltage with rapid	0.1 %
• maximum  Protection and monitoring  design of the overvoltage protection property of the output short-circuit proof design of short-circuit protection  adjustable current response value current of the current- dependent overload release type of response value setting switching characteristic  • of the excess current  • of the current limitation  10 ms  max. 35 V (max. 500 ms) Yes electronic overload cut-off; optionally constant current operation can be selected for Output 4 via DIP switches  0.5 5 A  via potentiometer or IE/PN interface  la >1.0<1.5 x la threshold permissible for 5 s; la limit (= 1.5 x la threshold) permissible for 200 ms  la limit (= 1.5 x la threshold) permissible for 5 s, afterwards la threshold continuous	relative control precision of the output voltage load step of	0.4 %
design of the overvoltage protection property of the output short-circuit proof design of short-circuit protection  adjustable current response value current of the current- dependent overload release type of response value setting switching characteristic  of the excess current  of the current limitation  max. 35 V (max. 500 ms) Yes electronic overload cut-off; optionally constant current operation can be selected for Output 4 via DIP switches 0.5 5 A  via potentiometer or IE/PN interface  la >1.0<1.5 x la threshold permissible for 5 s; la limit (= 1.5 x la threshold) permissible for 200 ms la limit (= 1.5 x la threshold) permissible for 5 s, afterwards la threshold continuous	setting time	
design of the overvoltage protection property of the output short-circuit proof design of short-circuit protection  adjustable current response value current of the current- dependent overload release type of response value setting switching characteristic  • of the excess current  • of the current limitation  max. 35 V (max. 500 ms)  Yes electronic overload cut-off; optionally constant current operation can be selected for Output 4 via DIP switches  0.5 5 A  via potentiometer or IE/PN interface  la >1.0<1.5 x la threshold permissible for 5 s; la limit (= 1.5 x la threshold) permissible for 200 ms  la limit (= 1.5 x la threshold) permissible for 5 s, afterwards la threshold continuous	• maximum	10 ms
property of the output short-circuit proof design of short-circuit protection  adjustable current response value current of the current- dependent overload release type of response value setting switching characteristic  • of the excess current  • of the current limitation  Yes  electronic overload cut-off; optionally constant current operation can be selected for Output 4 via DIP switches  0.5 5 A  via potentiometer or IE/PN interface  la >1.0<1.5 x la threshold permissible for 5 s; la limit (= 1.5 x la threshold) permissible for 200 ms  la limit (= 1.5 x la threshold) permissible for 5 s, afterwards la threshold continuous	Protection and monitoring	
property of the output short-circuit proof design of short-circuit protection  adjustable current response value current of the current- dependent overload release type of response value setting switching characteristic  • of the excess current  • of the current limitation  Yes  electronic overload cut-off; optionally constant current operation can be selected for Output 4 via DIP switches  0.5 5 A  via potentiometer or IE/PN interface  la >1.0<1.5 x la threshold permissible for 5 s; la limit (= 1.5 x la threshold) permissible for 200 ms  la limit (= 1.5 x la threshold) permissible for 5 s, afterwards la threshold continuous	design of the overvoltage protection	max. 35 V (max. 500 ms)
design of short-circuit protection  electronic overload cut-off; optionally constant current operation can be selected for Output 4 via DIP switches  0.5 5 A  via potentiometer or IE/PN interface  via potentiometer or IE/PN interface  via potentiometer or IE/PN interface  is a >1.0<1.5 x la threshold permissible for 5 s; la limit (= 1.5 x la threshold) permissible for 200 ms  of the current limitation  of the current limitation  electronic overload cut-off; optionally constant current operation can be selected for Output 4 via DIP switches  0.5 5 A  via potentiometer or IE/PN interface  la >1.0<1.5 x la threshold permissible for 5 s; la limit (= 1.5 x la threshold) permissible for 5 s, afterwards la threshold continuous	0 1	
dependent overload release type of response value setting switching characteristic  • of the excess current  • of the current limitation  via potentiometer or IE/PN interface via potentiometer or IE/PN interface  la >1.0<1.5 x la threshold permissible for 5 s; la limit (= 1.5 x la threshold) permissible for 200 ms  la limit (= 1.5 x la threshold) permissible for 5 s, afterwards la threshold continuous		electronic overload cut-off; optionally constant current operation can be
<ul> <li>switching characteristic</li> <li>of the excess current</li> <li>la &gt;1.0&lt;1.5 x la threshold permissible for 5 s; la limit (= 1.5 x la threshold) permissible for 200 ms</li> <li>of the current limitation</li> <li>la limit (= 1.5 x la threshold) permissible for 5 s, afterwards la threshold continuous</li> </ul>	•	0.5 5 A
<ul> <li>of the excess current</li> <li>la &gt;1.0&lt;1.5 x la threshold permissible for 5 s; la limit (= 1.5 x la threshold) permissible for 200 ms</li> <li>of the current limitation</li> <li>la limit (= 1.5 x la threshold) permissible for 5 s, afterwards la threshold continuous</li> </ul>	type of response value setting	via potentiometer or IE/PN interface
• of the current limitation	switching characteristic	
continuous	• of the excess current	
design of the reset device/resetting mechanism  via sensor per output or IE/PN interface	• of the current limitation	
	design of the report device/reporting machanism	

remote reset function overcurrent overload capability in normal operation display version for overload and short circuit Non-electrically isolated 24 V input (signal level "high" at > 15 V)
Total system overloadable 150% Ia rated to 5 s/min
3-color LED for operating state device: 3-color LED per output for

3-color LED for operating state device; 3-color LED per output for operating state output

display version for overload and short official	operating state output
Interface	
design of the interface	Ethernet/PROFINET
PROFINET protocol	Yes
protocol is supported OPC UA	Yes
Safety	
galvanic isolation between input and output	Yes
galvanic isolation	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178
operating resource protection class	Class I
leakage current	
• maximum	3.5 mA
protection class IP	IP20
Approvals	
certificate of suitability	
CE marking	Yes
UL approval	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1)
CSA approval	No; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1)
• cCSAus, Class 1, Division 2	No
• ATEX	No
certificate of suitability	
• IECEX	No
NEC Class 2     High and a constant in the constant in th	No No
ULhazloc approval     TM registration	No No
FM registration     FM registration CR contificate	No Voc
type of certification CB-certificate certificate of suitability	Yes
<ul> <li>EAC approval</li> </ul>	Yes
• C-Tick	No
certificate of suitability shipbuilding approval	No
Marine classification association	No
<ul> <li>American Bureau of Shipping Europe Ltd. (ABS)</li> <li>French marine classification society (BV)</li> </ul>	No
DNV GL	No
Lloyds Register of Shipping (LRS)	No
Nippon Kaiji Kyokai (NK)	No
EMC	
standard	
for emitted interference	EN 55022 Class B
for mains harmonics limitation	EN 61000-3-2
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 input	L1/+, N/L2/-, PE: Plug-in terminal with 1 screwed connection each for 0.2 4 mm² single-wire / fine stranded
• 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 <sup>2</sup> ; 0 V: Plug-in terminal with 3 screwed connections for 0.2 4 mm <sup>2</sup>
• for auxiliary contacts	RST (Reset): Plug-in terminal (together with alarm signal) with 1 screwed connection for 0.2 1.5 mm <sup>2</sup>
• for signaling contact	11, 12, 14 (alarm signal): Plug-in terminal (together with Reset) with 1 screwed connection each for 0.2 1.5 mm <sup>2</sup>
product function	
removable terminal at input	Yes

• removable terminal at output

design of the interface for communication suitability for interaction modular system

width of the enclosure height of the enclosure depth of the enclosure required spacing

- top
- bottom
- left
- right

net weight

product feature of the enclosure housing can be lined up

fastening method electrical accessories

mechanical accessories

MTBF at 40 °C other information

Yes

PROFINET/Ethernet: two RJ45 sockets (2-port switch)

Yes 125 mm 125 mm 150 mm

50 mm 50 mm 0 mm 0 mm 2.6 kg Yes

Snaps onto DIN rail EN 60715 35x15

Expansion modules CNX8600, buffer modules BUF8600, module UPS8600  $\,$ 

Device identification label 20 mm × 7 mm, TI-grey 3RT2900-1SB20 186 700 h  $\,$ 

Specifications at rated input voltage and ambient temperature +25  $^{\circ}\text{C}$  (unless otherwise specified)

