**Data sheet** 

## 6EP3310-6SB00-0AY0



LOGO!Power/1AC/5VDC/3A

LOGO! POWER 5 V / 3 A stabilized power supply input: 100-240 V AC output: 5 V DC / 3 A

supply voltage at AC  • minimum rated value • maximum rated value • initial va	input			
• minimum rated value         240 V           • initial value         85 V           • full-scale value         264 V           input voltage at DC         110300 V           wide range input         Yes           overvoltage overload capability         300 V AC for 1 s           buffering time for rated value of the output current in the event of power failure minimum         40 ms           operating condition of the mains buffering         at Vin = 187 V           line frequency         5060 Hz           line frequency         47 63 Hz           input current         • at rated input voltage 120 V         0.36 A           • at rated input voltage 230 V         0.22 A           current limitation of inrush current at 25 °C maximum         26 A           Liz value maximum         0.8 A²s           fuse protection type in the feeder         Recommended miniature circuit breaker; from 6 A characteristic B or from 2 A characteristic C           output voltage curve at output         Controlled, isolated DC voltage           output voltage at DC rated value         5 V           output voltage adjustable         4 s 5 4 V           adjustable output voltage         4 s 5 4 V           on slow fluctuation of input voltage         5 V           on slow fluctuation of input voltage <td>type of the power supply network</td> <td>1-phase AC or DC</td>	type of the power supply network	1-phase AC or DC		
• maximum rated value • initial value • initial value • initial value • full-scale value  284 ∨  Input voltage at DC  vide range input  ves  overvoltage overload capability  buffering time for rated value of the output current in the event of pover failure minimum  operating condition of the mains buffering  line frequency  100 Hz  110 - 300 ∨ AC for 1 s  40 ms  at Vin = 187 ∨  100 Hz  110 - 187 ∨  110 - 187	supply voltage at AC			
• initial value • full-scale value • vervoltage overload capability • vervoltage overload capability • buffering time for rated value of the output current in the event of buffering time for rated value of the output current • at vin = 187 ∨ • line frequency • or solo Hz • at rated input voltage 120 ∨ • at rated input voltage 120 V • at rated input voltage 230 ∨ • current limitation of inrush current at 25 °C maximum • 10 s A²-s • Recommended miniature circuit breaker: from 6 A characteristic B or from 2 A • characteristic C   output  voltage curve at output  voltage curve at output  output voltage at DC rated value • at output 1 at DC rated value  output voltage • at output 1 at DC rated value  output voltage adjustable adjustable output voltage • at output 1 oldrage • at output 1 toldrance of the voltage • relative corrotrol precision of the output voltage • on slow fluctuation of input voltage • on slow fluctuation of input voltage • on slow fluctuation of ohn loading • residual ripple • maximum • typical • maximum • 100 mV  voltage peak • maximum • 100 mV	<ul> <li>minimum rated value</li> </ul>	100 V		
	<ul> <li>maximum rated value</li> </ul>	240 V		
input voltage at DC wide range input voltage overload capability buffering time for rated value of the output current in the event of power failure minimum operating condition of the mains buffering line frequency line frequency so/80 Hz line frequency input current • at rated input voltage 120 V • at rated input voltage 230 V current limitation of inrush current at 25 °C maximum 26 A  Lit value maximum supported to the feder voltage curve at output voltage curve at output voltage curve at output voltage • at output 1 at DC rated value output voltage • at output 1 at DC rated value  output voltage • at output 1 at DC rated value  output voltage • at output 1 output voltage • at output 1 output voltage • at output voltage • at output voltage • at output voltage • an output vol	• initial value	85 V		
wide range input  overvoltage overload capability  buffering time for rated value of the output current in the event of power failure minimum  operating condition of the mains buffering  line frequency  fine frequency  at rated input voltage 120 V  at rated input voltage 230 V  current limitation of inrush current at 25 °C maximum  286 A  12t value maximum  fuse protection type  internal  fuse protection type in the feeder  output voltage at DC rated value  at output voltage at DC rated value  at output 1 at DC rated value  output voltage  at output 1 at DC rated value  fuse relative control procision of the output voltage  on slow fluctuation of input voltage  on slow fluctuation of ohm loading  on slow fluctuation of input voltage  on slow fl	• full-scale value	264 V		
overvoltage overload capability  buffering time for rated value of the output current in the event of power failure minimum  operating condition of the mains buffering  at Vin = 187 V  line frequency  line frequency  so 160 Hz  line frequency  at rated input voltage 120 V  at rated input voltage 230 V  current limitation of inrush current at 25 °C maximum  28 A  Lit value maximum  fuse protection type  internal  fuse protection type in the feeder  voltage curve at output  voltage curve at output  voltage at DC rated value  at output 1 at DC rated value  at output 1 at DC rated value  at output voltage adjustable  adjustable output voltage  a on slow fluctuation of him loading  residual ripple  maximum  100 mV  voltage peak  maximum  100 mV	input voltage at DC	110 300 V		
buffering time for rated value of the output current in the event of power failure minimum operating condition of the mains buffering line frequency so/60 Hz line frequency so/60 Hz line frequency so/60 Hz line frequency so 30 Hz so 4 Tated input voltage 120 V so 36 A so 4 rated input voltage 230 V so 22 A current limitation of inrush current at 25 °C maximum so 8 A 2-s so 12t value maximum so 8 A 2-s so 12t value maximum so 90 Hz fuse protection type in the feeder Recommended miniature circuit breaker: from 6 A characteristic B or from 2 A characteristic C  output voltage curve at output coutput voltage at DC rated value so 15 V output voltage at DC rated value so 15 V output voltage adjustable so 10 to 11 A DC rated value so 15 V relative overall tolerance of the voltage relative overall tolerance of the voltage so no slow fluctuation of input voltage so no slow fluctuation of the output voltage so no slow fluctuation of hm loading residual ripple so maximum so 100 mV voltage peak so maximum so 100 mV	wide range input	Yes		
power failure minimum operating condition of the mains buffering line frequency line frequency at Vin = 187 V line frequency 47 63 Hz line frequency 47 63 Hz linput current • at rated input voltage 120 V • at rated input voltage 230 V 0.22 A current limitation of inrush current at 25 °C maximum 0.8 A²-s fuse protection type linternal fuse protection type in the feeder Recommended miniature circuit breaker: from 6 A characteristic B or from 2 A characteristic C  output  voltage curve at output coutput voltage at DC rated value output voltage • at output 1 at DC rated value  output voltage adjustable versult output voltage 4.6 5.4 V  relative overall tolerance of the voltage relative control precision of the output voltage • on slow fluctuation of ohm loading residual ripple • maximum • typical  voltage peak • maximum 100 mV  voltage peak • maximum 100 mV	overvoltage overload capability	300 V AC for 1 s		
line frequency 50/60 Hz line frequency 47 63 Hz input current  • at rated input voltage 120 V • at rated input voltage 230 V 0.22 A current limitation of inrush current at 25 °C maximum 26 A 12t value maximum 0.8 A²-s fuse protection type internal fuse protection type in the feeder Recommended miniature circuit breaker: from 6 A characteristic B or from 2 A characteristic C  output  voltage curve at output Controlled, isolated DC voltage output voltage at DC rated value 5 V  output voltage at DC rated value 5 V  output voltage adjustable Yes; via potentiometer adjustable output voltage 4.6 5.4 V  relative overall becance of the voltage • on slow fluctuation of input voltage • on slow fluctuation of input voltage • on slow fluctuation of ohm loading 0.1 %  residual ripple • maximum • typical • maximum • maxim		40 ms		
line frequency 47 63 Hz  input current  • at rated input voltage 120 V • at rated input voltage 230 V 0.22 A  current limitation of inrush current at 25 °C maximum 26 A  [2t value maximum 0.8 A²-s  fuse protection type inthe feeder Recommended miniature circuit breaker: from 6 A characteristic B or from 2 A characteristic C  output  voltage curve at output Controlled, isolated DC voltage  output voltage at DC rated value 5 V  output voltage • at output 1 at DC rated value 5 V  output voltage  • at output voltage adjustable Yes; via potentiometer 46.6 5.4 V  relative courlol precision of the output voltage  • on slow fluctuation of input voltage  • on slow fluctuation of input voltage 0.1 %  residual ripple  • maximum 100 mV  voltage peak  • maximum 100 mV	operating condition of the mains buffering	at Vin = 187 V		
input current  • at rated input voltage 120 V • at rated input voltage 230 V 0.22 A  current limitation of inrush current at 25 °C maximum 26 A 12t value maximum 10.8 A²-s  fuse protection type internal fuse protection type in the feeder Recommended miniature circuit breaker: from 6 A characteristic B or from 2 A characteristic C  output  voltage curve at output cutput voltage at DC rated value output voltage • at output 1 at DC rated value  output voltage adjustable Yes; via potentiometer adjustable output voltage 4.6 5.4 V  relative overall tolerance of the voltage e on slow fluctuation of input voltage • on slow fluctuation of ohm loading residual ripple • maximum • typical  voltage peak • maximum  100 mV  voltage peak • maximum  100 mV	line frequency	50/60 Hz		
<ul> <li>at rated input voltage 120 V</li> <li>at rated input voltage 230 V</li> <li>0.22 A</li> <li>current limitation of inrush current at 25 °C maximum</li> <li>12t value maximum</li> <li>0.8 A²-s</li> <li>fuse protection type</li> <li>internal</li> <li>fuse protection type in the feeder</li> <li>Recommended miniature circuit breaker: from 6 A characteristic B or from 2 A characteristic C</li> <li>output</li> <li>voltage curve at output</li> <li>controlled, isolated DC voltage</li> <li>output voltage at DC rated value</li> <li>output voltage</li> <li>at output 1 at DC rated value</li> <li>output voltage adjustable</li> <li>adjustable output voltage</li> <li>4.6 5.4 V</li> <li>relative overall tolerance of the voltage</li> <li>on slow fluctuation of input voltage</li> <li>on slow fluctuation of input voltage</li> <li>on slow fluctuation of ohm loading</li> <li>on typical</li> <li>on maximum</li> <li>on typical</li> <li>on woltage peak</li> <li>maximum</li> </ul>	line frequency	47 63 Hz		
• at rated input voltage 230 V  current limitation of inrush current at 25 °C maximum  26 A  12t value maximum  0.8 A²-s  fuse protection type  fuse protection type in the feeder  voltage curve at output  voltage curve at output  cutput voltage  • at output 1 at DC rated value  output voltage  • at output 1 at DC rated value  output voltage adjustable  adjustable output voltage  relative coverall tolerance of the voltage  • on slow fluctuation of input voltage  • on slow fluctuation of ohm loading  residual ripple  • maximum  • typical  • maximum  100 mV  100 mV  108 A²-s  internal  26 A  0.8 A²-s  internal  26 A  28 A  29 A  20	input current			
current limitation of inrush current at 25 °C maximum  12t value maximum  0.8 A²-s fuse protection type internal  Recommended miniature circuit breaker: from 6 A characteristic B or from 2 A characteristic C  output  voltage curve at output  cutput voltage at DC rated value  • at output 1 at DC rated value  output voltage adjustable  adjustable output voltage  relative overall tolerance of the voltage  • on slow fluctuation of input voltage  • on slow fluctuation of ohm loading  residual ripple  • maximum  100 mV  voltage pak  • maximum  100 mV	<ul> <li>at rated input voltage 120 V</li> </ul>	0.36 A		
12t value maximum   0.8 A²-s     fuse protection type   internal     fuse protection type in the feeder   Recommended miniature circuit breaker: from 6 A characteristic B or from 2 A characteristic C     output     voltage curve at output   Controlled, isolated DC voltage     output voltage at DC rated value   5 V     output voltage   41 DC rated value   5 V     output voltage adjustable   Yes; via potentiometer     adjustable output voltage   4.6 5.4 V     relative overall tolerance of the voltage   0.1 %     on slow fluctuation of input voltage   0.1 %     on slow fluctuation of ohm loading   0.1 %     residual ripple     o maximum   100 mV     typical   30 mV     voltage peak     o maximum   100 mV     table	at rated input voltage 230 V	0.22 A		
fuse protection type fuse protection type in the feeder  Recommended miniature circuit breaker: from 6 A characteristic B or from 2 A characteristic C  output  voltage curve at output output voltage at DC rated value  • at output 1 at DC rated value  • at output 1 at DC rated value  output voltage adjustable adjustable output voltage  • all output voltage  • on slow fluctuation of input voltage  • on slow fluctuation of ohm loading  residual ripple  • maximum  • typical  voltage paak • maximum  100 mV  100 mV	current limitation of inrush current at 25 °C maximum	26 A		
fuse protection type in the feeder  Recommended miniature circuit breaker: from 6 A characteristic B or from 2 A characteristic C  output  voltage curve at output  output voltage at DC rated value  output 1 at DC rated value  output 1 at DC rated value  output voltage adjustable  e at output 1 oltrage adjustable  Yes; via potentiometer  adjustable output voltage  4.6 5.4 V  relative overall tolerance of the voltage  on slow fluctuation of input voltage  on slow fluctuation of ohm loading  residual ripple  maximum  typical  on wolvantee  on typical	12t value maximum	0.8 A²-s		
characteristic C  output  voltage curve at output	fuse protection type	internal		
voltage curve at output output voltage at DC rated value output voltage • at output 1 at DC rated value  • at output 1 at DC rated value  5 V  output voltage adjustable output voltage adjustable adjustable output voltage 4.6 5.4 V  relative overall tolerance of the voltage relative control precision of the output voltage  • on slow fluctuation of input voltage • on slow fluctuation of ohm loading  residual ripple • maximum  100 mV  • typical  voltage peak • maximum  100 mV	fuse protection type in the feeder			
output voltage  • at output 1 at DC rated value  5 V  output voltage  • at output 1 at DC rated value  5 V  output voltage adjustable  adjustable output voltage  4.6 5.4 V  relative overall tolerance of the voltage  relative control precision of the output voltage  • on slow fluctuation of input voltage  • on slow fluctuation of ohm loading  residual ripple  • maximum  • typical  voltage peak  • maximum  100 mV  voltage peak  • maximum  100 mV	output			
output voltage  • at output 1 at DC rated value  5 V  output voltage adjustable  adjustable output voltage  4.6 5.4 V  relative overall tolerance of the voltage  • on slow fluctuation of input voltage  • on slow fluctuation of ohm loading  residual ripple  • maximum  • typical  voltage peak  • maximum  100 mV	voltage curve at output	Controlled, isolated DC voltage		
<ul> <li>at output 1 at DC rated value</li> <li>output voltage adjustable</li> <li>yes; via potentiometer</li> <li>adjustable output voltage</li> <li>4.6 5.4 V</li> <li>relative overall tolerance of the voltage</li> <li>relative control precision of the output voltage</li> <li>on slow fluctuation of input voltage</li> <li>on slow fluctuation of ohm loading</li> <li>on slow fluctuation of ohm loading</li> <li>residual ripple</li> <li>maximum</li> <li>typical</li> <li>voltage peak</li> <li>maximum</li> <li>100 mV</li> </ul> voltage peak <ul> <li>maximum</li> <li>100 mV</li> </ul>	output voltage at DC rated value	5 V		
output voltage adjustable  adjustable output voltage  4.6 5.4 V  relative overall tolerance of the voltage  relative control precision of the output voltage  on slow fluctuation of input voltage  on slow fluctuation of ohm loading  residual ripple  maximum  typical  voltage peak  maximum  100 mV	output voltage			
adjustable output voltage  relative overall tolerance of the voltage  relative control precision of the output voltage  on slow fluctuation of input voltage  on slow fluctuation of ohm loading  residual ripple  maximum  typical  voltage peak  maximum  100 mV	at output 1 at DC rated value	5 V		
relative overall tolerance of the voltage relative control precision of the output voltage on slow fluctuation of input voltage on slow fluctuation of ohm loading on slow fluctuation of ohm loading residual ripple maximum typical voltage peak maximum maximum 100 mV	output voltage adjustable	Yes; via potentiometer		
relative control precision of the output voltage  on slow fluctuation of input voltage on slow fluctuation of ohm loading  on slow fluctuation of ohm loading  residual ripple maximum  typical  voltage peak maximum  100 mV	adjustable output voltage	4.6 5.4 V		
on slow fluctuation of input voltage     on slow fluctuation of ohm loading  residual ripple     maximum     typical  voltage peak     maximum     100 mV	relative overall tolerance of the voltage	3 %		
on slow fluctuation of ohm loading  residual ripple     maximum     typical  voltage peak     maximum     100 mV  100 mV  100 mV	relative control precision of the output voltage			
residual ripple  • maximum  • typical  voltage peak  • maximum  100 mV  100 mV	on slow fluctuation of input voltage	0.1 %		
● maximum         100 mV           ● typical         30 mV           voltage peak         • maximum           ● maximum         100 mV	<ul> <li>on slow fluctuation of ohm loading</li> </ul>	0.1 %		
• typical 30 mV  voltage peak      • maximum 100 mV	residual ripple			
voltage peak  ● maximum 100 mV	• maximum	100 mV		
• maximum 100 mV	• typical	30 mV		
	voltage peak			
• typical 50 mV	• maximum	100 mV		
	• typical	50 mV		

display version for normal operation	Green LED for output voltage OK
behavior of the output voltage when switching on	No overshoot of Vout (soft start)
response delay maximum	0.5 s
voltage increase time of the output voltage	0.0 \$
typical	100 ms
output current	100 1113
• rated value	3 A
• rated range	0 3 A; +55 +70 °C: Derating 2%/K
supplied active power typical	15 W
bridging of equipment	Yes
number of parallel-switched equipment resources for increasing the power	2
efficiency	
efficiency in percent	76 %
power loss [W]	
at rated output voltage for rated value of the output	4.7 W
current typical	
<ul> <li>during no-load operation maximum</li> </ul>	0.3 W
closed-loop control	
relative control precision of the output voltage with rapid	0.2 %
fluctuation of the input voltage by +/- 15% typical	50/
relative control precision of the output voltage at load step of resistive load 10/90/10 % typical	5 %
setting time	
<ul><li>load step 10 to 90% typical</li></ul>	1 ms
• load step 90 to 10% typical	1 ms
protection and monitoring	
design of the overvoltage protection	Yes, according to EN 60950-1
property of the output short-circuit proof	Yes
design of short-circuit protection	Constant current characteristic
• typical	3.8 A
overcurrent overload capability	
when switching on	150% lout rated typ. 200 ms
in normal operation	overload capability 150% lout rated typ. 200 ms
enduring short circuit current RMS value	
• maximum	3.8 A
measuring point for output current	Yes; 50 mV =^ 3 A
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 II (without protective conductor)
protection class IP	IP20
EMC	
standard	
for emitted interference	EN 55022 Class B
for mains harmonics limitation	not applicable
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; cURus-
	Recognized (UL 60950, CSA C22.2 No. 60950), File E151273, NEC class 2 (acc. to UL 1310)
CSA approval	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cURus- Recognized (UL 60950, CSA C22.2 No. 60950), File E151273, NEC class 2 (acc. to UL 1310)
EAC approval	Yes
• NEC Class 2	Yes; according to UL1310, File E151273
• SEMI F47	Yes
type of certification	
CB-certificate	Yes
MTBF at 40 °C	2 931 709 h
2. 40.10 0	200.0001

standards, specifications, approvals hazardous environments	
certificate of suitability	
• IECEx	No
• ATEX	No
ULhazloc approval	No
<ul> <li>cCSAus, Class 1, Division 2</li> </ul>	No
<ul> <li>FM registration</li> </ul>	No
standards, specifications, approvals marine classification	
shipbuilding approval	Yes
Marine classification association	
<ul> <li>American Bureau of Shipping Europe Ltd. (ABS)</li> </ul>	Yes
<ul> <li>French marine classification society (BV)</li> </ul>	Yes
<ul> <li>Det Norske Veritas (DNV)</li> </ul>	Yes
<ul> <li>Lloyds Register of Shipping (LRS)</li> </ul>	Yes
standards, specifications, approvals Environmental Product De	eclaration
Environmental Product Declaration	Yes
global warming potential [CO2 eq]	
• total	131 kg
during manufacturing	2.3 kg
during operation	128.6 kg
after end of life	0.08 kg
ambient conditions	
ambient temperature	
during operation	-25 +70 °C; with natural convection
during operation     during transport	-40 +85 °C
during transport     during storage	-40 +85 °C
	Climate class 3K3, 5 95% no condensation
environmental category according to IEC 60721 connection method	Climate class 3N3, 5 95 /6 no condensation
	a availy forms in all
type of electrical connection	screw terminal
• at input	L, N: 1 screw terminal each for 0.5 2.5 mm2 single-core/finely stranded
• at output	+, -: 1 screw terminal each for 0.5 2.5 mm <sup>2</sup>
for auxiliary contacts	•
mechanical data	00.00.70
width × height × depth of the enclosure	36 × 90 × 53 mm
installation width × mounting height	36 mm × 130 mm
required spacing	
• top	20 mm
• bottom	20 mm
• left	0 mm
• right	0 mm
fastening method	Snaps onto DIN rail EN 60715 35x7.5/15, direct mounting in different mounting positions
DIN-rail mounting	Yes
S7 rail mounting	No
wall mounting	Yes
housing can be lined up	Yes
net weight	0.12 kg
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
<ul><li>to web page: power supplies</li></ul>	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	9	EC002540
ETIM	8	EC002540
ETIM	7	EC002540
IDEA	4	4130
UNSPSC	15	39-12-10-04
	eClass eClass eClass eClass eClass eClass eTIM ETIM ETIM IDEA	eClass 14 eClass 9.1 eClass 9.1 eClass 9 eClass 6 eClass 7.1 eClass 6 ETIM 9 ETIM 8 ETIM 7 IDEA 4

## **Approvals Certificates**

## **General Product Approval**









Manufacturer Declara-<u>tion</u>

**Declaration of Con**formity

## **General Product Approval**







**Miscellaneous** 



Maritime application



Maritime application

**Environment** 







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4/4/2025