**Data sheet** 

6EP3320-6SB00-0AY0



LOGO!Power/1AC/12VDC/0.9A

LOGO! POWER 12 V / 0.9 A stabilized power supply input: 100-240 V AC output: 12 V DC/ 0.9 A

type of the power supply network	1-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	264 V	
input voltage at DC	110 300 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	50/60 Hz	
line frequency	47 63 Hz	
input current		
<ul> <li>at rated input voltage 120 V</li> </ul>	0.3 A	
<ul> <li>at rated input voltage 230 V</li> </ul>	0.2 A	
current limitation of inrush current at 25 °C maximum	20 A	
I2t value maximum	0.8 A <sup>2</sup> ·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	12 V	
output voltage		
at output 1 at DC rated value	12 V	
output voltage adjustable	No	
relative overall tolerance of the voltage	3 %	
relative control precision of the output voltage		
on slow fluctuation of input voltage	0.1 %	
on slow fluctuation of hipat voltage      on slow fluctuation of ohm loading	0.1 %	
residual ripple		
• maximum	200 mV	
• typical	30 mV	
voltage peak		
maximum	300 mV	
• typical	50 mV	
display version for normal operation	Green LED for output voltage OK	
English Store (St. Horrish Specialion)	2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2	

hohavior of the output voltage when quitables as	No everyheet of Vout (noft start)
behavior of the output voltage when switching on	No overshoot of Vout (soft start)
response delay maximum  voltage increase time of the output voltage	0.5 s
	100 ms
• typical	100 IIIS
output current	0.0 A
• rated value	0.9 A
• rated range	0 0.9 A; +55 +70 °C: Derating 2%/K
supplied active power typical	10.8 W
bridging of equipment	No
efficiency	
efficiency in percent	78 %
power loss [W]	
<ul> <li>at rated output voltage for rated value of the output current typical</li> </ul>	3 W
during no-load operation maximum	0.3 W
closed-loop control	0.0 **
relative control precision of the output voltage with rapid	0.2 %
fluctuation of the input voltage by +/- 15% typical	0.2 /0
relative control precision of the output voltage at load step of	3 %
resistive load 10/90/10 % typical	
setting time	
• load step 10 to 90% typical	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	1.3 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	1.3 A
measuring point for output current	No
safety	V
	Yes
galvanic isolation between input and output	
galvanic isolation	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178
galvanic isolation operating resource protection class	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Class II (without protective conductor)
galvanic isolation operating resource protection class protection class IP	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178
galvanic isolation operating resource protection class protection class IP EMC	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Class II (without protective conductor)
galvanic isolation operating resource protection class protection class IP  EMC standard	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Class II (without protective conductor)  IP20
galvanic isolation operating resource protection class protection class IP  EMC standard • for emitted interference	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Class II (without protective conductor)  IP20  EN 55022 Class B
galvanic isolation operating resource protection class protection class IP  EMC standard  • for emitted interference • for mains harmonics limitation	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Class II (without protective conductor)  IP20  EN 55022 Class B  not applicable
galvanic isolation operating resource protection class protection class IP  EMC standard  • for emitted interference • for mains harmonics limitation • for interference immunity	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Class II (without protective conductor)  IP20  EN 55022 Class B
galvanic isolation operating resource protection class protection class IP  EMC standard • for emitted interference • for mains harmonics limitation • for interference immunity standards, specifications, approvals	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Class II (without protective conductor)  IP20  EN 55022 Class B  not applicable
galvanic isolation operating resource protection class protection class IP  EMC  standard  • for emitted interference • for mains harmonics limitation • for interference immunity  standards, specifications, approvals certificate of suitability	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Class II (without protective conductor)  IP20  EN 55022 Class B  not applicable  EN 61000-6-2
galvanic isolation operating resource protection class protection class IP  EMC standard • for emitted interference • for mains harmonics limitation • for interference immunity standards, specifications, approvals certificate of suitability • CE marking	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Class II (without protective conductor)  IP20  EN 55022 Class B  not applicable  EN 61000-6-2  Yes
galvanic isolation operating resource protection class protection class IP  EMC  standard  • for emitted interference • for mains harmonics limitation • for interference immunity  standards, specifications, approvals certificate of suitability	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Class II (without protective conductor)  IP20  EN 55022 Class B  not applicable  EN 61000-6-2
galvanic isolation operating resource protection class protection class IP  EMC standard • for emitted interference • for mains harmonics limitation • for interference immunity standards, specifications, approvals certificate of suitability • CE marking	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Class II (without protective conductor)  IP20  EN 55022 Class B  not applicable  EN 61000-6-2  Yes  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
galvanic isolation operating resource protection class protection class IP  EMC  standard  • for emitted interference • for mains harmonics limitation • for interference immunity  standards, specifications, approvals certificate of suitability • CE marking • UL approval	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Class II (without protective conductor)  IP20  EN 55022 Class B  not applicable  EN 61000-6-2  Yes  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)  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
galvanic isolation operating resource protection class protection class IP  EMC  standard  • for emitted interference • for mains harmonics limitation • for interference immunity  standards, specifications, approvals  certificate of suitability • CE marking • UL approval  • CSA approval	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Class II (without protective conductor)  IP20  EN 55022 Class B  not applicable  EN 61000-6-2  Yes  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)  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)
galvanic isolation operating resource protection class protection class IP  EMC  standard  • for emitted interference • for mains harmonics limitation • for interference immunity  standards, specifications, approvals  certificate of suitability • CE marking • UL approval  • CSA approval  • EAC approval	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Class II (without protective conductor)  IP20  EN 55022 Class B  not applicable  EN 61000-6-2  Yes  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)  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)  Yes
galvanic isolation operating resource protection class protection class IP  EMC standard  • for emitted interference • for mains harmonics limitation • for interference immunity standards, specifications, approvals certificate of suitability • CE marking • UL approval  • CSA approval  • EAC approval • NEC Class 2	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Class II (without protective conductor)  IP20  EN 55022 Class B  not applicable EN 61000-6-2  Yes  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)  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)  Yes  Yes; according to UL1310, File E151273
galvanic isolation operating resource protection class protection class IP  EMC standard  • for emitted interference • for mains harmonics limitation • for interference immunity  standards, specifications, approvals certificate of suitability • CE marking • UL approval  • CSA approval  • EAC approval  • NEC Class 2 • SEMI F47	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Class II (without protective conductor)  IP20  EN 55022 Class B  not applicable EN 61000-6-2  Yes  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)  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)  Yes  Yes; according to UL1310, File E151273
galvanic isolation operating resource protection class protection class IP  EMC standard	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Class II (without protective conductor)  IP20  EN 55022 Class B  not applicable  EN 61000-6-2  Yes  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)  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)  Yes  Yes; according to UL1310, File E151273  Yes
galvanic isolation operating resource protection class protection class IP  EMC  standard  • for emitted interference • for mains harmonics limitation • for interference immunity  standards, specifications, approvals  certificate of suitability • CE marking • UL approval  • CSA approval  • EAC approval • NEC Class 2 • SEMI F47  type of certification • CB-certificate	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Class II (without protective conductor)  IP20  EN 55022 Class B  not applicable  EN 61000-6-2  Yes  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)  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)  Yes  Yes; according to UL1310, File E151273  Yes
galvanic isolation operating resource protection class protection class IP  EMC  standard  • for emitted interference • for mains harmonics limitation • for interference immunity  standards, specifications, approvals  certificate of suitability • CE marking • UL approval  • CSA approval  • EAC approval  • NEC Class 2 • SEMI F47  type of certification • CB-certificate  MTBF at 40 °C	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Class II (without protective conductor)  IP20  EN 55022 Class B  not applicable  EN 61000-6-2  Yes  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)  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)  Yes  Yes; according to UL1310, File E151273  Yes
galvanic isolation operating resource protection class protection class IP  EMC standard	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Class II (without protective conductor)  IP20  EN 55022 Class B  not applicable  EN 61000-6-2  Yes  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)  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)  Yes  Yes; according to UL1310, File E151273  Yes

• ATEX	No		
<ul> <li>ULhazloc approval</li> </ul>	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		
Lloyds Register of Shipping (LRS)	Yes		
standards, specifications, approvals Environmental Product De	claration		
Environmental Product Declaration	Yes		
Global Warming Potential [CO2 eq]			
• total	95.1 kg		
<ul> <li>during manufacturing</li> </ul>	1.4 kg		
<ul> <li>during operation</li> </ul>	93.7 kg		
after end of life	0.04 kg		
ambient conditions			
ambient temperature			
during operation	-25 +70 °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	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			
width × height × depth of the enclosure	18 × 90 × 53 mm		
installation width × mounting height	18 mm × 130 mm		
installation width × mounting height required spacing	18 mm × 130 mm		
	18 mm × 130 mm		
required spacing  • top  • bottom	20 mm 20 mm		
required spacing  ● top	20 mm 20 mm 0 mm		
required spacing	20 mm 20 mm 0 mm 0 mm		
required spacing	20 mm 20 mm 0 mm		
required spacing	20 mm 20 mm 0 mm 0 mm Snaps onto DIN rail EN 60715 35x7.5/15, direct mounting in different mounting		
required spacing  • top  • bottom  • left  • right  fastening method	20 mm 20 mm 0 mm 0 mm Snaps onto DIN rail EN 60715 35x7.5/15, direct mounting in different mounting positions		
required spacing	20 mm 20 mm 0 mm 0 mm Snaps onto DIN rail EN 60715 35x7.5/15, direct mounting in different mounting positions Yes		
required spacing  • top  • bottom  • left  • right  fastening method  • standard rail mounting  • S7 rail mounting	20 mm 20 mm 0 mm 0 mm Snaps onto DIN rail EN 60715 35x7.5/15, direct mounting in different mounting positions Yes No		
required spacing  • top  • bottom  • left  • right  fastening method  • standard rail mounting  • S7 rail mounting  • wall mounting	20 mm 20 mm 0 mm 0 mm Snaps onto DIN rail EN 60715 35x7.5/15, direct mounting in different mounting positions Yes No Yes		
required spacing  • top  • bottom  • left  • right  fastening method  • standard rail mounting  • S7 rail mounting  • wall mounting  housing can be lined up	20 mm 20 mm 0 mm 0 mm Snaps onto DIN rail EN 60715 35x7.5/15, direct mounting in different mounting positions Yes No Yes Yes		
required spacing  • top  • bottom  • left  • right  fastening method  • standard rail mounting  • S7 rail mounting  • wall mounting  housing can be lined up  net weight	20 mm 20 mm 0 mm 0 mm Snaps onto DIN rail EN 60715 35x7.5/15, direct mounting in different mounting positions Yes No Yes Yes		
required spacing  • top  • bottom  • left  • right  fastening method  • standard rail mounting  • S7 rail mounting  • wall mounting  housing can be lined up  net weight  further information internet links	20 mm 20 mm 0 mm 0 mm Snaps onto DIN rail EN 60715 35x7.5/15, direct mounting in different mounting positions Yes No Yes Yes		
required spacing  • top  • bottom  • left  • right  fastening method  • standard rail mounting  • S7 rail mounting  • wall mounting  housing can be lined up  net weight  further information internet links  internet link	20 mm 0 mm 0 mm Snaps onto DIN rail EN 60715 35x7.5/15, direct mounting in different mounting positions Yes No Yes Yes 0.07 kg		
required spacing  • top  • bottom  • left  • right  fastening method  • standard rail mounting  • S7 rail mounting  • wall mounting  housing can be lined up  net weight  further information internet links  internet link  • to website: Industry Mall	20 mm 20 mm 0 mm 0 mm Snaps onto DIN rail EN 60715 35x7.5/15, direct mounting in different mounting positions Yes No Yes Yes 0.07 kg		
required spacing  • top  • bottom  • left  • right  fastening method  • standard rail mounting  • S7 rail mounting  • wall mounting  housing can be lined up  net weight  further information internet links  internet link  • to website: Industry Mall  • to website: Industrial communication	20 mm 20 mm 0 mm 0 mm Snaps onto DIN rail EN 60715 35x7.5/15, direct mounting in different mounting positions Yes No Yes Yes O.07 kg  https://mall.industry.siemens.com https://siemens.com/industrial-communication		
required spacing  • top  • bottom  • left  • right  fastening method  • standard rail mounting  • S7 rail mounting  • wall mounting  housing can be lined up  net weight  further information internet links  internet link  • to website: Industry Mall  • to website: Industrial communication  • to website: CAx-Download-Manager	20 mm 20 mm 0 mm 0 mm Snaps onto DIN rail EN 60715 35x7.5/15, direct mounting in different mounting positions Yes No Yes Yes O.07 kg  https://mall.industry.siemens.com https://siemens.com/industrial-communication https://siemens.com/cax		
required spacing  • top  • bottom  • left  • right  fastening method  • standard rail mounting  • S7 rail mounting  • wall mounting  housing can be lined up  net weight  further information internet links  internet link  • to website: Industry Mall  • to website: Industrial communication  • to website: Industry Online Support	20 mm 20 mm 0 mm 0 mm Snaps onto DIN rail EN 60715 35x7.5/15, direct mounting in different mounting positions Yes No Yes Yes 0.07 kg  https://mall.industry.siemens.com https://siemens.com/industrial-communication https://siemens.com/cax https://support.industry.siemens.com  Specifications at rated input voltage and ambient temperature +25 °C (unless		
required spacing  • top  • bottom  • left  • right  fastening method  • standard rail mounting  • S7 rail mounting  • wall mounting  housing can be lined up  net weight  further information internet links  internet link  • to website: Industry Mall  • to website: Industrial communication  • to website: Industry Online Support  additional information  other information	20 mm 0 mm 0 mm Snaps onto DIN rail EN 60715 35x7.5/15, direct mounting in different mounting positions Yes No Yes Yes 0.07 kg  https://mall.industry.siemens.com https://siemens.com/industrial-communication https://siemens.com/cax https://support.industry.siemens.com		
required spacing  • top  • bottom  • left  • right  fastening method  • standard rail mounting  • S7 rail mounting  • wall mounting  housing can be lined up  net weight  further information internet links  internet link  • to website: Industry Mall  • to website: Industrial communication  • to website: Industry Online Support  additional information	20 mm 20 mm 0 mm 0 mm Snaps onto DIN rail EN 60715 35x7.5/15, direct mounting in different mounting positions Yes No Yes Yes 0.07 kg  https://mall.industry.siemens.com https://siemens.com/industrial-communication https://siemens.com/cax https://support.industry.siemens.com  Specifications at rated input voltage and ambient temperature +25 °C (unless		

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)

	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	12 9.1 9 8 7.1 6 9 8 7	27-04-07-01 27-04-07-01 27-04-07-01 27-04-90-02 27-04-90-02 27-04-90-02 EC002540 EC002540 EC002540 4130

## Approvals Certificates

**General Product Approval** 







Manufacturer Declara-<u>tion</u>

**Declaration of Con**formity



**General Product Ap-**

proval

Marine / Shipping













**Environment** 

last modified:

