**Data sheet** 

## 6EP3331-6SB00-0AY0



LOGO!Power/1AC/24VDC/1.3A

LOGO! Power 24 V / 1.3 A stabilized power supply input: 100-240 V AC output: 24 V DC/ 1.3 A \*Ex approval no longer available\*

| Input  |   |
|--|---|
| type of the power supply network   | 1-phase AC or DC  |
| supply voltage at AC   |   |
| minimum rated value  | 100 V   |
| <ul> <li>maximum rated value</li> </ul>  | 240 V   |
| • initial value  | 85 V  |
| • full-scale value   | 264 V   |
| input voltage  |   |
| • at DC  | 110 300 V   |
| design of input wide range input   | Yes   |
| overvoltage overload capability  | 300 V AC for 1 s  |
| operating condition of the mains buffering   | at Vin = 187 V  |
| 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   |   |
| • 1 rated value  | 50 Hz   |
| • 2 rated value  | 60 Hz   |
| line frequency   | 47 63 Hz  |
| input current  |   |
| <ul> <li>at rated input voltage 120 V</li> </ul>   | 0.7 A   |
| at rated input voltage 230 V   | 0.35 A  |
| current limitation of inrush current at 25 °C maximum                                      | 25 A  |
| I2t value maximum  | 0.8 A²-s  |
| fuse protection type   | internal  |
| • 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   | 24 V  |
| output voltage   |   |
| at output 1 at DC rated value  | 24 V  |
| relative overall tolerance of the voltage  | 3 %   |
| relative control precision of the output voltage   |   |
| <ul> <li>on slow fluctuation of input voltage</li> </ul>                                   | 0.1 %   |
| on slow fluctuation of ohm loading   | 0.1 %   |
| residual ripple  |   |
| • maximum  | 200 mV  |
| • typical  | 30 mV   |
| voltage peak   |   |
| maximum  | 300 mV  |

| • typical  | 50 mV   |
|--|---|
| adjustable output voltage  | 22.2 26.4 V   |
| product function output voltage adjustable   | Yes   |
| type of output voltage setting   | via potentiometer   |
| 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  |   |
| • typical  | 100 ms  |
| output current   |   |
| • rated value  | 1.3 A   |
| rated range  | 0 1.3 A; +55 +70 °C: Derating 2%/K  |
| supplied active power typical  | 31.2 W  |
| product feature  |   |
| <ul> <li>bridging of equipment</li> </ul>  | Yes   |
| number of parallel-switched equipment resources for increasing   | 2   |
| the power  |   |
| Efficiency   |   |
| efficiency in percent  | 86 %  |
| power loss [W]   |   |
| <ul> <li>at rated output voltage for rated value of the output</li> </ul>  | 5.1 W   |
| current typical  |   |
| during no-load operation maximum   | 0.3 W   |
| Closed-loop control  |   |
| relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical  | 0.2 %   |
| relative control precision of the output voltage at load step of resistive load 10/90/10 % typical   | 1 %   |
| setting time   |   |
| • load step 10 to 90% typical  | 1 ms  |
| • load step 90 to 10% typical  | 1 ms  |
| Protection and monitoring  |   |
| Trotection and monitoring  |   |
| design of the overvoltage protection   | Yes, according to EN 60950-1  |
|  | Yes, according to EN 60950-1 1.7 A  |
| design of the overvoltage protection  • typical  | _   |
| design of the overvoltage protection  • typical  property of the output short-circuit proof  | 1.7 A   |
| design of the overvoltage protection  • typical  property of the output short-circuit proof  design of short-circuit protection  | 1.7 A<br>Yes  |
| design of the overvoltage protection  • typical  property of the output short-circuit proof  | 1.7 A Yes Constant current characteristic   |
| design of the overvoltage protection  • typical  property of the output short-circuit proof  design of short-circuit protection  enduring short circuit current RMS value  • maximum   | 1.7 A Yes Constant current characteristic  1.7 A  |
| design of the overvoltage protection  • typical  property of the output short-circuit proof  design of short-circuit protection  enduring short circuit current RMS value  • maximum  overcurrent overload capability in normal operation  | 1.7 A Yes Constant current characteristic  1.7 A overload capability 150% lout rated typ. 200 ms  |
| design of the overvoltage protection  • typical  property of the output short-circuit proof  design of short-circuit protection  enduring short circuit current RMS value  • maximum  overcurrent overload capability in normal operation  display version for overload and short circuit  | 1.7 A Yes Constant current characteristic  1.7 A overload capability 150% lout rated typ. 200 ms -  |
| design of the overvoltage protection  • typical  property of the output short-circuit proof  design of short-circuit protection  enduring short circuit current RMS value  • maximum  overcurrent overload capability in normal operation  display version for overload and short circuit  measuring point for output current  | 1.7 A Yes Constant current characteristic  1.7 A overload capability 150% lout rated typ. 200 ms - 50 mV =^ 1.3 A   |
| design of the overvoltage protection  • typical  property of the output short-circuit proof  design of short-circuit protection  enduring short circuit current RMS value  • maximum  overcurrent overload capability in normal operation  display version for overload and short circuit  measuring point for output current  overcurrent overload capability when switching on   | 1.7 A Yes Constant current characteristic  1.7 A overload capability 150% lout rated typ. 200 ms -  |
| design of the overvoltage protection  • typical  property of the output short-circuit proof  design of short-circuit protection  enduring short circuit current RMS value  • maximum  overcurrent overload capability in normal operation  display version for overload and short circuit  measuring point for output current  overcurrent overload capability when switching on  Safety   | 1.7 A Yes Constant current characteristic  1.7 A overload capability 150% lout rated typ. 200 ms - 50 mV =^ 1.3 A 150% lout rated typ. 200 ms   |
| design of the overvoltage protection  • typical  property of the output short-circuit proof  design of short-circuit protection  enduring short circuit current RMS value  • maximum  overcurrent overload capability in normal operation  display version for overload and short circuit  measuring point for output current  overcurrent overload capability when switching on  Safety  galvanic isolation between input and output  | 1.7 A Yes Constant current characteristic  1.7 A overload capability 150% lout rated typ. 200 ms - 50 mV =^ 1.3 A 150% lout rated typ. 200 ms  Yes  |
| design of the overvoltage protection  • typical property of the output short-circuit proof design of short-circuit protection enduring short circuit current RMS value • maximum overcurrent overload capability in normal operation display version for overload and short circuit measuring point for output current overcurrent overload capability when switching on Safety galvanic isolation between input and output galvanic isolation   | 1.7 A Yes Constant current characteristic  1.7 A overload capability 150% lout rated typ. 200 ms - 50 mV =^ 1.3 A 150% lout rated typ. 200 ms  Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178   |
| design of the overvoltage protection  • typical  property of the output short-circuit proof  design of short-circuit protection  enduring short circuit current RMS value  • maximum  overcurrent overload capability in normal operation  display version for overload and short circuit  measuring point for output current  overcurrent overload capability when switching on  Safety  galvanic isolation between input and output  galvanic resource protection class  | 1.7 A Yes Constant current characteristic  1.7 A overload capability 150% lout rated typ. 200 ms - 50 mV =^ 1.3 A 150% lout rated typ. 200 ms  Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class II (without protective conductor)   |
| design of the overvoltage protection  • typical  property of the output short-circuit proof  design of short-circuit protection  enduring short circuit current RMS value  • maximum  overcurrent overload capability in normal operation  display version for overload and short circuit  measuring point for output current  overcurrent overload capability when switching on  Safety  galvanic isolation between input and output  galvanic isolation  operating resource protection class  protection class IP  | 1.7 A Yes Constant current characteristic  1.7 A overload capability 150% lout rated typ. 200 ms - 50 mV =^ 1.3 A 150% lout rated typ. 200 ms  Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178   |
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| design of the overvoltage protection  • typical  property of the output short-circuit proof  design of short-circuit protection  enduring short circuit current RMS value  • maximum  overcurrent overload capability in normal operation  display version for overload and short circuit  measuring point for output current  overcurrent overload capability when switching on  Safety  galvanic isolation between input and output  galvanic isolation  operating resource protection class  protection class IP  Approvals  certificate of suitability   | 1.7 A Yes Constant current characteristic  1.7 A overload capability 150% lout rated typ. 200 ms - 50 mV =^ 1.3 A 150% lout rated typ. 200 ms  Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class II (without protective conductor) IP20  |
| design of the overvoltage protection  • typical  property of the output short-circuit proof  design of short-circuit protection  enduring short circuit current RMS value  • maximum  overcurrent overload capability in normal operation  display version for overload and short circuit  measuring point for output current  overcurrent overload capability when switching on  Safety  galvanic isolation between input and output  galvanic isolation  operating resource protection class  protection class IP  Approvals   | 1.7 A Yes Constant current characteristic  1.7 A overload capability 150% lout rated typ. 200 ms - 50 mV =^ 1.3 A 150% lout rated typ. 200 ms  Yes Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 Class II (without protective conductor) IP20  Yes   |
| design of the overvoltage protection  • typical  property of the output short-circuit proof  design of short-circuit protection  enduring short circuit current RMS value  • maximum  overcurrent overload capability in normal operation  display version for overload and short circuit  measuring point for output current  overcurrent overload capability when switching on  Safety  galvanic isolation between input and output  galvanic isolation  operating resource protection class  protection class IP  Approvals  certificate of suitability   | 1.7 A  Yes  Constant current characteristic  1.7 A  overload capability 150% lout rated typ. 200 ms  - 50 mV =^ 1.3 A  150% lout rated typ. 200 ms  Yes  Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Class II (without protective conductor)  IP20  |
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| design of the overvoltage protection  • typical  property of the output short-circuit proof  design of short-circuit protection  enduring short circuit current RMS value  • maximum  overcurrent overload capability in normal operation  display version for overload and short circuit  measuring point for output current  overcurrent overload capability when switching on  Safety  galvanic isolation between input and output  galvanic isolation  operating resource protection class  protection class IP  Approvals  certificate of suitability  • CE marking  • UL approval  | 1.7 A  Yes  Constant current characteristic  1.7 A  overload capability 150% lout rated typ. 200 ms  -  50 mV =^ 1.3 A  150% lout rated typ. 200 ms  Yes  Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178  Class II (without protective conductor)  IP20  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. 60950), File E151273, NEC class 2  Recognized (UL 60950, CSA C22.2 No. 60950), File E151273, NEC class 2                   |
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| type of certification CB-certificate                          | Yes   |
|---|---|
| •   | 165   |
| certificate of suitability                                    | Yes   |
| EAC approval  Type of partification DIS                       |   |
| type of certification BIS                                     | Yes   |
| certificate of suitability shipbuilding approval              | Yes   |
| shipbuilding approval   | ABS, BV, DNV GL, LRS  |
| Marine classification association                             |   |
| American Bureau of Shipping Europe Ltd. (ABS)                 | Yes   |
| <ul> <li>French marine classification society (BV)</li> </ul> | Yes   |
| DNV GL  | Yes   |
| <ul> <li>Lloyds Register of Shipping (LRS)</li> </ul>         | Yes   |
| Nippon Kaiji Kyokai (NK)                                      | No  |
| EMC   |   |
| standard  |   |
| • for emitted interference                                    | EN 55022 Class B  |
| <ul> <li>for mains harmonics limitation</li> </ul>            | not applicable  |
| <ul> <li>for interference immunity</li> </ul>                 | EN 61000-6-2  |
| environmental conditions                                      |   |
| ambient temperature   |   |
| <ul> <li>during operation</li> </ul>                          | -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  |
| Mechanics   |   |
| type of electrical connection                                 | screw-type terminals  |
| • 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  | -   |
| width of the enclosure  | 36 mm   |
| height of the enclosure                                       | 90 mm   |
| depth of the enclosure  | 53 mm   |
| required spacing  |   |
| • top   | 20 mm   |
| • bottom  | 20 mm   |
| • left  | 0 mm  |
| <ul><li>right</li></ul>                                       | 0 mm  |
| net weight  | 0.12 kg   |
| product feature of the enclosure housing can be lined up      | Yes   |
| fastening method  | Snaps onto DIN rail EN 60715 35x7.5/15, direct mounting in different mounting positions           |
| MTBF at 40 °C   | 3 094 996 h   |
| other information   | Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified) |

