

Siemens 6EP1336-2BA10 Manual

Brand	Siemens
Product Series	Siemens
Product Type	of the power supply network 1-phase AC

Description

6EP1336-2BA10

SITOP PSU100S/1AC/24VDC/20A

SITOP PSU100S 20 A stabilized power supply input: 120/230 V AC output: 24 V DC/20 A

input

type of the power supply network 1-phase AC

supply voltage at AC Automatic range selection

supply voltage 120 V/230 V

input voltage 1 at AC 85 ... 132 V

input voltage 2 at AC 176 ... 264 V

wide range input No

overvoltage overload capability 2.3 A Vin rated, 3 ms

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 = 120/230 V

line frequency 50/60 Hz

line frequency 47 ... 63 Hz

input current

- at rated input voltage 120 V 7.5 A

- at rated input voltage 230 V 3.5 A

current limitation of inrush current at 25 °C maximum 11 A

I²t value maximum 10 A²·s

fuse protection type T 10 A (not accessible)

fuse protection type in the feeder Recommended miniature circuit breaker: from 10 A characteristic C or circuitbreaker 3RV2411-1JA10 (120 V) or 3RV2411-1FA10 (230 V)

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

output voltage adjustable Yes; via potentiometer

adjustable output voltage 24 ... 28 V; max. 480 W

relative overall tolerance of the voltage 3 %

relative control precision of the output voltage

- on slow fluctuation of input voltage 0.5 %

- on slow fluctuation of ohm loading 1 %

residual ripple

- maximum 150 mV

voltage peak

- maximum 240 mV

display version for normal operation Green LED for 24 V OK

type of signal at output Relay contact (NO contact, rating 50 V DC/ 0.3 A) for "24 V OK"

behavior of the output voltage when switching on No overshoot of Vout (soft start)

response delay maximum 1.5 s

voltage increase time of the output voltage

- typical 50 ms
- maximum 500 ms

output current

- rated value 20 A
- rated range 0 ... 20 A; 24 A up to +45°C; +60 ... +70 °C: Derating 5%/K

supplied active power typical 480 W

short-term overload current

- on short-circuiting during the start-up typical 35 A
- at short-circuit during operation typical 35 A

duration of overloading capability for excess current

- on short-circuiting during the start-up 100 ms
- at short-circuit during operation 100 ms

bridging of equipment Yes

number of parallel-switched equipment resources for increasing

the power

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efficiency

efficiency in percent 90 %

power loss [W]

- at rated output voltage for rated value of the output

current typical

53 W

closed-loop control

relative control precision of the output voltage with rapid

fluctuation of the input voltage by +/- 15% typical

1 %

relative control precision of the output voltage load step of

resistive load 50/100/50 % typical

3 %

setting time

- maximum 10 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 Electronic shutdown, automatic restart

- typical 21 A

overcurrent overload capability

- in normal operation overload capability 150 % Iout rated up to 5 s/min

enduring short circuit current RMS value

- maximum 7 A

safety

galvanic isolation between input and output Yes

galvanic isolation Safety extra-low output voltage U_{out} acc. to EN 60950-1 and EN 50178

operating resource protection class Class I

leakage current

- maximum 3.5 mA
- typical 1 mA

protection class IP IP20

EMC

standard

- for emitted interference EN 55022 Class B
- for mains harmonics limitation EN 61000-3-2
- 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; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1)
- CSA approval Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1)
- UKCA marking Yes
- EAC approval Yes
- NEC Class 2 No

type of certification

- BIS Yes; R-41183539

CB-certificate Yes

MTBF at 40 °C 1 778 916 h

standards, specifications, approvals hazardous environments

certificate of suitability

- IECEx No
- ATEX No
- ULhazloc approval No
- cCSAus, Class 1, Division 2 No
- FM registration No

standards, specifications, approvals marine classification

shipbuilding approval Yes

Marine classification association

- American Bureau of Shipping Europe Ltd. (ABS) No
- French marine classification society (BV) No
- Det Norske Veritas (DNV) Yes
- Lloyds Register of Shipping (LRS) No

standards, specifications, approvals Environmental Product Declaration

Environmental Product Declaration Yes

Global Warming Potential [CO₂ eq]

- total 1 707.2 kg
- during manufacturing 47.4 kg
- during operation 1 658.2 kg
- after end of life 0.72 kg

ambient conditions

ambient temperature

- during operation 0 ... 70 °C; with natural convection
- during transport -40 ... +85 °C

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- 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 L1, N, PE: 1 screw terminal each for 0.2 ... 4 mm² single-core/finely stranded
- at output +, -: 2 screw terminals each for 0.2 ... 4 mm²
- for auxiliary contacts 13, 14 (alarm signal): 1 screw terminal each for 0.14 ... 1.5 mm²

mechanical data

width × height × depth of the enclosure 115 × 145 × 150 mm

installation width × mounting height 120 mm × 245 mm

required spacing

- top 50 mm
- bottom 50 mm
- left 0 mm
- right 0 mm

fastening method Snaps onto DIN rail EN 60715 35x7.5/15

- standard rail mounting Yes
- S7 rail mounting No
- wall mounting No

housing can be lined up Yes

net weight 2.4 kg

accessories

electrical accessories Buffer module

mechanical accessories Device identification label 20 mm × 7 mm, pale turquoise 3RT1900-1SB20

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