

Siemens 6EP1336-3BA10 Manual

Brand	Siemens
Product Series	Siemens
Product Type	of the power supply network 1-phase and 2-phase AC or DC

Description

6EP1336-3BA10

SITOP PSU8200/1ACDC/24VDC/20A

SITOP PSU8200 20 A stabilized power supply input: 120-230 V AC 110-220 V DC

output: 24 V DC/20 A

input

type of the power supply network 1-phase and 2-phase AC or DC

supply voltage at AC

- minimum rated value 120 V
- maximum rated value 230 V
- initial value 85 V
- full-scale value 275 V

supply voltage at AC temperature derating necessary at $U_{in} < 100$ V AC or DC at 50 °C; additional derating at $U_{in} < 100$ V: $U_{in}=95$ V Pa max=460 W, $U_{in}=90$ V Pa max=440 W,

$U_{in}=85$ V Pa max=420 W

supply voltage at DC 110 ... 220 V

input voltage at DC 88 ... 350 V

wide range input Yes

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 $V_{in} = 230$ V

line frequency 50/60 Hz

line frequency 47 ... 63 Hz

input current

- at rated input voltage 120 V 4.6 A
- at rated input voltage 230 V 2.5 A

current limitation of inrush current at 25 °C maximum 20 A

I_2t value maximum 5 A²·s

fuse protection type Yes

fuse protection type in the feeder Recommended miniature circuit breaker at 1-phase operation: 10 A

characteristic C; required at 2-phase operation: circuit breaker 2-pole

connected or circuit breaker 3RV2711-1HD10 (UL 489) at 120 V or 3RV2711-

1ED10 (UL 489) at 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

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 ohm loading 0.3 %

residual ripple

- maximum 100 mV
- typical 80 mV

voltage peak

- maximum 200 mV
- typical 100 mV

display version for normal operation Green LED for 24 V OK

type of signal at output Relay contact (NO contact, rating 60 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 250 ms

output current

- rated value 20 A
- rated range 0 ... 20 A; +60 ... +70 °C: Derating 3%/K

supplied active power typical 480 W

short-term overload current

- at short-circuit during operation typical 60 A

duration of overloading capability for excess current

- at short-circuit during operation 25 ms

constant overload current

- on short-circuiting during the start-up typical 30 A

bridging of equipment Yes; switchable characteristic

number of parallel-switched equipment resources for increasing the power

2

efficiency

efficiency in percent 94 %

power loss [W]

- at rated output voltage for rated value of the output

current typical

31 W

closed-loop control

relative control precision of the output voltage with rapid

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

0.5 %

relative control precision of the output voltage load step of

resistive load 50/100/50 % typical

1 %

setting time

- load step 50 to 100% typical 1 ms
- load step 100 to 50% typical 1 ms

setting time

- maximum 5 ms

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protection and monitoring

design of the overvoltage protection < 31.8 V

property of the output short-circuit proof Yes

design of short-circuit protection Alternatively, constant current characteristic approx. 21.5 A or latching shutdown

- typical 21.5 A

overcurrent overload capability

- in normal operation overload capability 150 % I_{out} rated up to 5 s/min

enduring short circuit current RMS value

- typical 21.5 A

display version for overload and short circuit LED yellow for "overload", LED red for "latching shutdown"

safety

galvanic isolation between input and output Yes

galvanic isolation SELV (ES1) output voltage V_{out} according to EN 61204-7, transformer

according to EN 61558-2-16

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

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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. 62368-1, UL 62368-1)
- CSA approval Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 62368-1, UL 62368-1)
- UKCA marking Yes
- EAC approval Yes
- Regulatory Compliance Mark (RCM) Yes
- NEC Class 2 No
- SEMI F47 Yes

type of certification

- BIS Yes; R-41183539
- CB-certificate Yes

MTBF at 40 °C 583 500 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) Yes
- 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 989.5 kg
- during manufacturing 18.9 kg
- during operation 970 kg
- after end of life 0.27 kg

ambient conditions

ambient temperature

- during operation -25 ... +70 °C; With natural convection; startup tested starting from -40 °C

nominal voltage

- 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, 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), 15, 16 (Remote ON OFF): 1 screw terminal each for 0.14 ... 1.5 mm²

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mechanical data

width × height × depth of the enclosure 90 × 125 × 125 mm

installation width × mounting height 90 mm × 225 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 1.2 kg

accessories

electrical accessories Buffer module

mechanical accessories Device identification label 20 mm × 7 mm, TI-grey 3RT2900-1SB20