

# Siemens 6EP1322-1SH03 Manual

|                |            |
|----------------|------------|
| Brand          | Siemens    |
| Product Series | Siemens    |
| Product Type   | 12 V/4.5 A |

## Description

6EP1322-1SH03

LOGO!POWER 12 V/4.5 A STABILIZED POWER SUPPLY INPUT:

100-240 V AC (110-300 V DC) OUTPUT: 12 V/4.5 A DC

Technical specifications

Product LOGO!Power

Power supply, type 12 V/4.5 A

Input

Input 1-phase AC or DC

Rated voltage value  $V_{in}$  rated 100 ... 240 V

Voltage range AC 85 ... 264 V

Input voltage for DC 110 ... 300 V

Wide-range input Yes

Overvoltage resistance  $2.3 \times V_{in}$  rated, 1.3 ms

Mains buffering at  $I_{out}$  rated, min. 40 ms; at  $V_{in} = 187$  V

Rated line frequency 50 ... 60 Hz

Rated line range 47 ... 63 Hz

Input current at rated input voltage 120 V Rated

value

1.13 A

Input current at rated input voltage 230 V Rated

value

0.61 A

Switch-on current limiting (+25 °C), max. 55 A

$I^2t$ , max. 3 A<sup>2</sup>·s

Built-in incoming fuse internal

Protection in the mains power input (IEC 898) Recommended miniature circuit breaker: from 16 A characteristic

B or from 10 A characteristic C

Output

Output Controlled, isolated DC voltage

Rated voltage  $V_{out}$  DC 12 V

Total tolerance, static  $\pm 3$  %

Static mains compensation, approx. 0.1 %

Static load balancing, approx. 1.5 %

Residual ripple peak-peak, max. 200 mV

Residual ripple peak-peak, typ. 10 mV

Spikes peak-peak, max. (bandwidth: 20 MHz) 300 mV

Spikes peak-peak, typ. (bandwidth: 20 MHz) 70 mV

Adjustment range 10.5 ... 16.1 V

Product function Output voltage adjustable Yes

Output voltage setting via potentiometer

Status display Green LED for output voltage OK

On/off behavior No overshoot of Vout (soft start)

Startup delay, max. 0.5 s

Voltage rise, typ. 10 ms

Rated current value Iout rated 4.5 A

Current range 0 ... 4.5 A

• Note +55 ... +70 °C: Derating 2%/K

Active power supplied typical 50 W

Parallel switching for enhanced performance Yes

Numbers of parallel switchable units for enhanced performance

2

Efficiency

Efficiency at Vout rated, Iout rated, approx. 85 %

Power loss at Vout rated, Iout rated, approx. 10 W

Active power loss during no-load operation maximum 1.9 W

Closed-loop control

Dynamic mains compensation (Vin rated  $\pm 15$  %), max.

0.2 %

Dynamic load smoothing (Iout: 10/90/10 %), Uout  $\pm$

typ.

4 %

Load step setting time 10 to 90%, typ. 1 ms

Load step setting time 90 to 10%, typ. 1 ms

Protection and monitoring

Output overvoltage protection Yes, according to EN 60950-1

Current limitation, typ. 5.8 A

Property of the output Short-circuit proof Yes

Short-circuit protection Constant current characteristic

Enduring short circuit current RMS value maximum 7 A

Overload/short-circuit indicator -

Safety

Primary/secondary isolation Yes

Galvanic isolation Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178

Protection class Class II (without protective conductor)

CE mark Yes

UL/CSA approval Yes

UL/cUL (CSA) approval cULus-listed (UL 508, CSA C22.2 No. 107.1), File E197259;

cURus-recognized (UL 60950, CSA C22.2 No. 60950), File

E151273

Explosion protection ATEX (EX) II 3G Ex nA IIC T3; cCSAus (CSA C22.2 No. 213-

M1987, ANSI/ISA-12.12.01-2007) Class I, Div. 2, Group ABCD,

T4

Certificate of suitability IECEx No

Certificate of suitability NEC Class 2 No

FM approval Class I, Div. 2, Group ABCD, T4

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CB approval Yes

Marine approval GL, ABS

Degree of protection (EN 60529) IP20

EMC

Emitted interference EN 55022 Class B

Supply harmonics limitation not applicable

Noise immunity EN 61000-6-2

Operating data

Ambient temperature during operation -20 ... +70 °C

• Note with natural convection

Ambient temperature during transport -40 ... +85 °C

Ambient temperature during storage -40 ... +85 °C

Humidity class according to EN 60721 Climate class 3K3, no condensation

Mechanics

Connection technology screw-type terminals

Connections Supply input L, N: 1 screw terminal each for 0.5 ... 2.5 mm<sup>2</sup> single-core/finely stranded

Connections Output +, -: 2 screw terminals each for 0.5 ... 2.5 mm<sup>2</sup>

Connections Auxiliary -

Width of the enclosure 72 mm

Height of the enclosure 90 mm

Depth of the enclosure 52.6 mm

Weight, approx. 0.25 kg

Product property of the enclosure housing for sideby-side mounting

Yes

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

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