SIEMENS

Data sheet 6EP1332-1SH31

SITOP POWER 24 V/3.5 A FOR S7-200
SITOP power 3.5 A, Univ. Line Stabilized power supply input: 120/230 V AC, output: 24 V DC/3.5 A S7-200 Design

Input	
Input	1-phase AC
• Note	Set via wire jumper
Supply voltage	
• 1 at AC Rated value	120 V
• 2 at AC Rated value	230 V
Input voltage	
• 1 at AC	93 ... 132 V
• 2 at AC	187 ... 264 V
Wide-range input	No
Overvoltage resistance	2.3 × Vin rated, 1.3 ms
Mains buffering at Iout rated, min.	20 ms; at Vin = 187 V
Rated line frequency 1	50 Hz
Rated line frequency 2	60 Hz
Rated line range	47 ... 63 Hz
Input current	
• at rated input voltage 120 V	1.65 A
• at rated input voltage 230 V	0.95 A
Switch-on current limiting (+25 °C), max.	33 A

Duration of inrush current limiting at 25 °C	
• maximum	3 ms
I²t, max.	1 A²·s
Built-in incoming fuse	T 2.5 A/250 V (not accessible)
Protection in the mains power input (IEC 898)	Recommended: 2-pole miniature circuit breaker from 10 A characteristic C or from 6 A characteristic D

Output	
Output	Controlled, isolated DC voltage
Rated voltage Vout DC	24 V
Total tolerance, static ±	5 %
Static mains compensation, approx.	0.1 %
Static load balancing, approx.	0.2 %
Residual ripple peak-peak, max.	150 mV
Residual ripple peak-peak, typ.	30 mV
Spikes peak-peak, max. (bandwidth: 20 MHz)	240 mV
Spikes peak-peak, typ. (bandwidth: 20 MHz)	110 mV
Product function Output voltage adjustable	No
Output voltage setting	-
Status display	-
On/off behavior	No overshoot of Vout (soft start)
Startup delay, max.	1 s
Voltage rise, typ.	80 ms
Rated current value Iout rated	3.5 A
Current range	0 ... 3.5 A
Supplied active power typical	84 W
Short-term overload current	
• on short-circuiting during the start-up typical	5 A
• at short-circuit during operation typical	5 A
Duration of overloading capability for excess current	
• on short-circuiting during the start-up	100 ms
• at short-circuit during operation	100 ms
Parallel switching for enhanced performance	Yes
Numbers of parallel switchable units for enhanced performance	5

Efficiency	
Efficiency at Vout rated, Iout rated, approx.	84 %
Power loss at Vout rated, Iout rated, approx.	16 W

Closed-loop control	
Dynamic mains compensation (Vin rated ±15 %), max.	0.3 %
Dynamic load smoothing (Iout: 50/100/50 %), Uout ± typ.	3 %

Setting time maximum	5 ms

Protection and monitoring	
Output overvoltage protection	Yes, according to EN 60950-1
Current limitation, typ.	3.8 A
Property of the output Short-circuit proof	Yes
Short-circuit protection	Constant current characteristic up to typ. 14 V, electronic shutdown below that, automatic restart
Enduring short circuit current RMS value	
• maximum	4 A
Overload/short-circuit indicator	-

Safety	
Primary/secondary isolation	Yes
Galvanic isolation	Safety extra low output voltage Vout according to EN 60950-1
Protection class	Class I
Leakage current	
• maximum	3.5 mA
CE mark	Yes
UL/cUL (CSA) approval	cULus-Listed (UL 508, CSA C22.2 No. 142), File E143289
Explosion protection	-
FM approval	-
CB approval	No
Marine approval	-
Degree of protection (EN 60529)	IP20

EMC	
Emitted interference	EN 55022 Class B
Supply harmonics limitation	EN 61000-3-2
Noise immunity	EN 61000-6-2

Operating data	
Ambient temperature	
• during operation	0 ... 60 °C
— Note	with natural convection
• during transport	-40 ... +85 °C
• 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, PE: 1 screw terminal each for 0.5 ... 1.5 mm² single-core/finely stranded
• Output	L+: 1 screw terminal for 0.5 ... 1 mm²; M: 2 screw terminals for 0.5 ... 1 mm²

• Auxiliary	-
Width of the enclosure	160 mm
Height of the enclosure	80 mm
Depth of the enclosure	62 mm
Required spacing	
• top	100 mm
• bottom	100 mm
• left	0 mm
• right	0 mm
Weight, approx.	0.5 kg
Product feature of the enclosure housing for side-by-side mounting	Yes
Installation	Snaps onto DIN rail EN 60715 35x7.5/15, wall mounting
MTBF at 40 °C	714 286 h
Other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)