SIEMENS

Data sheet 6EP1332-4BA00

POWER SUPPLY S7-1500 PM1507
SIMATIC PM 1507 24 V/3 A STABILIZED POWER SUPPLY FOR SIMATIC S7-1500 INPUT: 120/230 V AC OUTPUT: 24 V/3 A DC



Input	
Input	1-phase AC
Supply voltage	
• 1 at AC Rated value	120 V
• 2 at AC Rated value	230 V
• Note	Automatic range selection
Input voltage	
• 1 at AC	85 ... 132 V
• 2 at AC	170 ... 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 = 93/187 V
Rated line frequency	50 ... 60 Hz
Rated line range	45 ... 65 Hz
Input current	
• at rated input voltage 120 V	1.4 A
• at rated input voltage 230 V	0.8 A
Switch-on current limiting (+25 °C), max.	23 A
Duration of inrush current limiting at 25 °C	

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• maximum	3 ms
I^2t, max.	1.3 $A^2 \cdot s$
Built-in incoming fuse	T 3,15 A/250 V (not accessible)
Protection in the mains power input (IEC 898)	Recommended miniature circuit breaker: 10 A characteristic B or 6 A characteristic C

Output	
Output	Controlled, isolated DC voltage
Rated voltage Vout DC	24 V
Total tolerance, static ±	1 %
Static mains compensation, approx.	0.1 %
Static load balancing, approx.	0.1 %
Residual ripple peak-peak, max.	50 mV
Spikes peak-peak, max. (bandwidth: 20 MHz)	150 mV
Product function Output voltage adjustable	No
Status display	LED green for 24 V OK; LED red for error; LED yellow for stand-by
On/off behavior	No overshoot of Vout (soft start)
Startup delay, max.	1.5 s
Voltage rise, typ.	10 ms
Rated current value Iout rated	3 A
Current range	0 ... 3 A
Supplied active power typical	72 W
Short-term overload current	
• on short-circuiting during the start-up typical	12 A
• at short-circuit during operation typical	12 A
Duration of overloading capability for excess current	
• on short-circuiting during the start-up	70 ms
• at short-circuit during operation	70 ms
Parallel switching for enhanced performance	No

Efficiency	
Efficiency at Vout rated, Iout rated, approx.	87 %
Power loss at Vout rated, Iout rated, approx.	11 W

Closed-loop control	
Dynamic mains compensation (Vin rated ±15 %), max.	0.1 %
Dynamic load smoothing (Iout: 50/100/50 %), Uout ± typ.	1 %
Dynamic load smoothing (Iout: 10/90/10 %), Uout ± typ.	3 %
Load step setting time 10 to 90%, typ.	5 ms
Load step setting time 90 to 10%, typ.	5 ms
Setting time maximum	5 ms

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Protection and monitoring	
Output overvoltage protection	Additional control loop, limitation (closed loop control) at < 28.8 V
Current limitation	3.15 ... 3.6 A
Current limitation, typ.	3.4 A
Property of the output Short-circuit proof	Yes
Short-circuit protection	Electronic shutdown, automatic restart
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 and EN 61131-2
Protection class	Class I
Leakage current	
• maximum	3.5 mA
• typical	0.4 mA
CE mark	Yes
UL/CSA approval	Yes
UL/cUL (CSA) approval	cULus-Listed (UL 508, CSA C22.2 No. 142), File E143289
Explosion protection	IECEx Ex nA nC IIC T4 Gc; ATEX (EX) II 3G Ex nA nC IIC T4 Gc; cULus (ISA 12.12.01, CSA C22.2 No.213) Class I, Div. 2, Group ABCD, T4, File E330455
Certificate of suitability IECEx	Yes
Certificate of suitability NEC Class 2	No
FM approval	Class I, Div. 2, Group ABCD, T4
CB approval	Yes
Marine approval	GL, ABS, BV, DNV
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-/spring clamp connection
Connections	
• Supply input	L, N, PE: 1 screw terminal each for 0.5 ... 2.5 mm²

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• Output	L+, M: 2 spring-loaded terminals each for 0.5 to 2.5 mm²
Product function	
• removable terminal at input	Yes
• removable terminal at output	Yes
Width of the enclosure	50 mm
Height of the enclosure	147 mm
Depth of the enclosure	129 mm
Weight, approx.	0.45 kg
Product feature of the enclosure housing for side-by-side mounting	Yes
Installation	Can be mounted onto S7-1500 rail
MTBF at 40 °C	1 611 993 h
Other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

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