SIEMENS

Data sheet 6EP1332-4BA00

SIMATIC PM1507/1AC/24VDC/3A

SIMATIC PM 1507 24 V/3 A
Stabilized power supply for
SIMATIC S7-1500 input: 120/230
V AC, output: 24 V DC/3 A

Input	
Input	1-phase AC
● Note	Automatic range selection
supply voltage	
● 1 at AC rated value	120 V
● 2 at AC rated value	230 V
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 Vin = 93/187 V
Mains buffering at Iout rated, min.	20 ms; at Vin = 93/187 V
Rated line frequency 1	50 Hz
Rated line frequency 2	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	
● 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	Yes
Numbers of parallel switchable units for enhanced performance	2
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
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
Degree of protection (EN 60529)	IP20
Approvals	
CE mark	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 (ANSI/ISA 12.12.01, CSA C22.2 No.213) Class I, Div. 2, Group ABCD, T4, File E330455
certificate of suitability NEC Class 2	No
FM approval	Class I, Div. 2, Group ABCD, T4
CB approval	Yes
certificate of suitability EAC approval	Yes
Marine approval	ABS, BV, DNV GL
EMC	
Emitted interference	EN 55022 Class B
Supply harmonics limitation	EN 61000-3-2
Noise immunity	EN 61000-6-2
environmental conditions	

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, 5 … 95% 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
● 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
required spacing	
● top	40 mm
● bottom	40 mm
● left	0 mm
● right	0 mm
Weight, approx.	0.45 kg
product feature of the enclosure housing can be lined up	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)