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	
type of the power supply network	1-phase AC
supply voltage at AC	
● initial value	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
design of input wide range input	No
overvoltage overload capability	2.3 × Vin rated, 1.3 ms
operating condition of the mains buffering	at Vin = 93/187 V
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 Vin = 93/187 V
line frequency	
● 1 rated value	50 Hz
● 2 rated value	60 Hz
line frequency	45 ... 65 Hz
input current	
● at rated input voltage 120 V	1.4 A
● at rated input voltage 230 V	0.8 A
current limitation of inrush current at 25 °C maximum	23 A
duration of inrush current limiting at 25 °C	
● maximum	3 ms
I2t value maximum	1.3 A²·s
fuse protection type	T 3,15 A/250 V (not accessible)
● in the feeder	Recommended miniature circuit breaker: 10 A characteristic B or 6 A characteristic C
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
relative overall tolerance of the voltage	1 %
relative control precision of the output voltage	
● on slow fluctuation of input voltage	0.1 %
● on slow fluctuation of ohm loading	0.1 %
residual ripple	

● maximum	50 mV
voltage peak	
● maximum	150 mV
product function output voltage adjustable	No
display version for normal operation	LED green for 24 V OK; LED red for error; LED yellow for stand-by
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	10 ms
output current	
● rated value	3 A
● rated 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
product feature	
● bridging of equipment	Yes
number of parallel-switched equipment resources for increasing the power	2
Efficiency	
efficiency in percent	87 %
power loss [W]	
● at rated output voltage for rated value of the output current typical	11 W
Closed-loop control	
relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical	0.1 %
relative control precision of the output voltage load step of resistive load 50/100/50 % typical	1 %
relative control precision of the output voltage at load step of resistive load 10/90/10 % typical	3 %
setting time	
● load step 10 to 90% typical	5 ms
● load step 90 to 10% typical	5 ms
● maximum	5 ms
Protection and monitoring	
design of the overvoltage protection	Additional control loop, limitation (closed loop control) at < 28.8 V
response value current limitation	3.15 ... 3.6 A
response value current limitation typical	3.4 A
property of the output short-circuit proof	Yes
design of short-circuit protection	Electronic shutdown, automatic restart
display version for overload and short circuit	-
Safety	
galvanic isolation between input and output	Yes
galvanic isolation	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 and EN 61131-2
operating resource protection class	Class I
leakage current	
● maximum	3.5 mA
● typical	0.4 mA
protection class IP	IP20
Approvals	
certificate of suitability	
● CE marking	Yes
● UL approval	Yes; cULus-Listed (UL 508, CSA C22.2 No. 142), File E143289
● CSA approval	Yes; cULus-Listed (UL 508, CSA C22.2 No. 142), File E143289
● cCSAus, Class 1, Division 2	No

● ATEX	Yes; ATEX (EX) II 3G Ex nA nC IIC T4 Gc
certificate of suitability	
● relating to ATEX	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
● IECEx	Yes; IECEx Ex nA nC IIC T4 Gc
● NEC Class 2	No
● ULhazloc approval	Yes
● FM registration	Yes; Class I, Div. 2, Group ABCD, T4
type of certification CB-certificate	Yes
certificate of suitability	
● EAC approval	Yes
certificate of suitability shipbuilding approval	Yes
shipbuilding approval	ABS, BV, DNV GL
Marine classification association	
● American Bureau of Shipping Europe Ltd. (ABS)	Yes
● French marine classification society (BV)	Yes
● DNV GL	Yes
● Lloyds Register of Shipping (LRS)	No
● Nippon Kaiji Kyokai (NK)	No
EMC	
standard	
● for emitted interference	EN 55022 Class B
● for mains harmonics limitation	EN 61000-3-2
● for interference immunity	EN 61000-6-2
environmental conditions	
ambient temperature	
● during operation	0 ... 60 °C; with natural convection
● during transport	-40 ... +85 °C
● during storage	-40 ... +85 °C
environmental category according to IEC 60721	Climate class 3K3, 5 … 95% no condensation
Mechanics	
type of electrical connection	Screw-/spring clamp connection
● at input	L, N, PE: 1 screw terminal each for 0.5 ... 2.5 mm²
● at 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
net weight	0.45 kg
product feature of the enclosure housing can be lined up	Yes
fastening method	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)