SIEMENS

Data sheet 6EP1333-4BA00



SIMATIC PM1507/1AC/24VDC/8A

SIMATIC PM 1507 24 V/8 A Regulated power supply for SIMATIC S7-1500 input: 120/230 V AC, output: 24 V DC/8 A

type of the power suply network supply voltage at AC initial value supply voltage 1 120 V 2 at AC rated value 2 30 V input voltage 1 1 at AC rated value 2 30 V input voltage 1 1 at AC rated value 2 30 V input voltage 1 1 at AC rated value 2 30 V input voltage 1 170 264 V design of input wide range input voervoltage overload capability operating condition of the mains buffering buffering time for rated value of the output current in the event of power failure minimum operating condition of the mains buffering buffering time for rated value of the output current in the event of power failure minimum operating condition of the mains buffering buffering time for rated value of the output current in the event of power failure minimum operating condition of the mains buffering buffering time for rated value 10 frequency 11 rated value 12 rated value 13 rated value 14 rated input voltage 120 V 15 rated value 16 rated input voltage 230 V 17 rated value 17 rated value 18 rated input voltage 230 V 19 rated input voltage 230 V 19 rated input voltage 230 V 10 rated value 19 rated input voltage 230 V 10 rated value 10 raximum 10 raximum 11 raximum 12 raximum 12 raximum 12 raximum 13 raximum 14 raximum 15 raximum 16 raximum 17 raximum 18 raximum 19 raximum 19 raximum 10 raximum 10 raximum 10 raximum 11 raximum 11 raximum 12 raximum 13 raximum 14 raximum 15 raximum 16 raximum 17 raximum 18 raximum 19 raximum 19 raximum 19 raximum 10 raximum 10 raximum 10 raximum 10 raximum 10 raximum 11 raximum 12 raximum 13 raximum 14 raximum 15 raximum 16 raximum 17 raximum 18 raximum 19 raximum 19 raximum 19 raximum 10 raximu	Input	
• initial value supply voltage • 1 at AC rated value • 2 at AC rated value • 2 at AC rated value • 2 at AC rated value • 1 at AC • 2 at AC • 3 5 132 V • 2 at AC • 2 at AC • 3 5 132 V • 2 at AC • 2 at AC • 2 at AC • 3 5 132 V • 2 at AC • 2 at AC • 3 5 132 V • 2 at AC • 2 at AC • 3 5 132 V • 2 at AC • 2 at AC • 3 5 132 V • 2 at AC • 2 at AC • 3 7 V In rated, 1.3 ms • 20	type of the power supply network	1-phase AC
supply voltage 1 at AC rated value 2 at AC rated value 2 at AC input voltage 1 at AC 2 at AC 3 tat AC 2 at AC 3 tat AC 4 at AC 4 at AC 6 at AC 5 at AC 6 at A	supply voltage at AC	
• 1 at AC rated value • 2 at AC rated value input voltage • 1 at AC • 2 at AC • 3 at Vin rated, 1.3 ms at Vin = 93/187 V 2 0 ms • 2 1 at AC • 3 1 at AC • 4 1	initial value	Automatic range selection
	supply voltage	
input voltage • 1 at AC • 2 at AC design of input wide range input overvoltage overload capability operating condition of the mains buffering buffering time for rated value of the output current in the event of power failure minimum operating condition of the mains buffering ine frequency • 1 rated value • 2 rated value • 2 rated value • 2 rated value • 3 65 Hz input current • at rated input voltage 120 V • at rated input voltage 230 V current limitation of inrush current at 25 °C maximum duration of inrush current limiting at 25 °C • maximum 12t value maximum fuse protection type • in the feeder voltage curve at output output voltage • at output 1 at DC rated value e on slow fluctuation of input voltage • on slow fluctuation of input voltage	1 at AC rated value	120 V
• 1 at AC • 2 at AC 6 2 at AC 6 2 at AC 70 264 V design of input wide range input 0 vervoltage overload capability 0 perating condition of the mains buffering 0 buffering time for rated value of the output current in the event of power failure minimum 0 perating condition of the mains buffering 0 buffering time for rated value of the output current in the event of power failure minimum 0 perating condition of the mains buffering 0 at Vin = 93/187 V 20 ms 4 Vin = 93/187 V 20 ms 4 Vin = 93/187 V 5 O Hz 6 O Hz 7 O Hz 7 O Hz 8 O Hz 9 O	2 at AC rated value	230 V
e 2 at AC design of input wide range input overvoltage overload capability overvoltage overload capability perating condition of the mains buffering buffering time for rated value of the output current in the event of power failure minimum operating condition of the mains buffering line frequency e 1 rated value 2 rated value 1 ine frequency input current e at rated input voltage 120 V at rated input voltage 230 V current limitation of inrush current at 25 °C maximum duration of inrush current limiting at 25 °C e maximum 12t value value	input voltage	
design of input wide range input overvoltage overload capability 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 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 operating condition of the mains buffering at Vin = 93/187 V buffering time frequency • 1 rated value • 2 rated value • 2 rated value • 2 rated value • 30 Hz input current • at rated input voltage 120 V • at rated input voltage 230 V current limitation of inrush current at 25 °C maximum duration of inrush current limiting at 25 °C • maximum 12 Value maximum 12 Value maximum 12 Value maximum 12 A²-s fuse protection type • in the feeder To 3 A/250 V (not accessible) Recommended miniature circuit breaker: 16 A characteristic B or 10 A characteristic C Dutput voltage curve at output output voltage • at output 1 at DC rated value output voltage • at output 1 at DC rated value relative control precision of the output voltage • at output operacion of the output voltage • on slow fluctuation of input voltage	• 1 at AC	85 132 V
overvoltage overload capability operating condition of the mains buffering buffering time for rated value of the output current in the event of power failure minimum operating condition of the mains buffering line frequency • 1 rated value • 2 rated value • 2 rated value line frequency input current • at rated input voltage 120 V • at rated input voltage 230 V current limitation of inrush current at 25 °C maximum duration of inrush current limiting at 25 °C • maximum 12 t value maximum fuse protection type • in the feeder voltage curve at output output voltage at DC rated value output voltage • at output 1 at DC rated value • at output 1 at DC rated value • on slow fluctuation of input voltage • on slow fluctuation of input voltage	• 2 at AC	170 264 V
operating condition of the mains buffering buffering time for rated value of the output current in the event of power failure minimum operating condition of the mains buffering line frequency 1 rated value 2 rated value 2 rated value 2 rated value 3 rated input voltage 120 V 3 rated input voltage 230 V 3 rated input voltage 230 V 3 rated input of inrush current at 25 °C maximum duration of inrush current limitation of inrush current at 25 °C maximum 12 value maximum 12 value maximum 12 value maximum 12 value maximum 12 value maximum 12 value maximum 12 value protection type 16 value value international protection of the othput voltage 16 value voltage of the voltage 17 value voltage 18 value voltage of the voltage 19 value voltage 10 value voltage 11 value va	design of input wide range input	No
buffering time for rated value of the output current in the event of power failure minimum operating condition of the mains buffering line frequency	overvoltage overload capability	2.3 × Vin rated, 1.3 ms
event of power failure minimum operating condition of the mains buffering line frequency • 1 rated value • 2 rated value line frequency input current • at rated input voltage 120 V • at rated input voltage 230 V current limitation of inrush current at 25 °C maximum duration of inrush current limiting at 25 °C • maximum l2t value maximum fuse protection type • in the feeder voltage curve at output voltage at DC rated value • at output 1 at DC rated value • at output 1 at DC rated value relative control precision of the output voltage • on slow fluctuation of input voltage • on slow fluctuation of input voltage • on slow fluctuation of input voltage • on slow fluctuation of input voltage • on slow fluctuation of input voltage • on slow fluctuation of input voltage • on slow fluctuation of input voltage • on slow fluctuation of input voltage • on slow fluctuation of input voltage • on slow fluctuation of input voltage • on slow fluctuation of input voltage • on slow fluctuation of input voltage • on slow fluctuation of input voltage	operating condition of the mains buffering	at Vin = 93/187 V
line frequency • 1 rated value • 2 rated value • 2 rated value • 30 Hz 60 Hz line frequency • at rated input voltage 120 V • at rated input voltage 230 V current limitation of inrush current at 25 °C maximum duration of inrush current limiting at 25 °C • maximum 12t value at output • in the feeder voltage curve at output voltage curve at output output voltage at DC rated value • at output 1 at DC rated value • at output voltage • on slow fluctuation of input voltage		20 ms
• 1 rated value • 2 rated value 1 ine frequency 1 input current • at rated input voltage 120 V • at rated input voltage 230 V • maximum 1 25 °C • maximum 2 A²-s 1 12 A²-s 1 2 A²-s 1 2 A²-s 1 2 A²-s 1 3 A/250 V (not accessible) • in the feeder 1	operating condition of the mains buffering	at Vin = 93/187 V
2 rated value 60 Hz line frequency input current at rated input voltage 120 V at rated input voltage 230 V outrent limitation of inrush current at 25 °C maximum duration of inrush current limiting at 25 °C maximum 12 value value voltage output voltage • at output 1 at DC rated value • at output 1 at DC rated value • at output 1 at DC rated value • at output 1 olerance of the voltage • at output 1 olerance of the voltage • on slow fluctuation of input voltage	line frequency	
line frequency input current	1 rated value	50 Hz
input current • at rated input voltage 120 V • at rated input voltage 230 V current limitation of inrush current at 25 °C maximum duration of inrush current limiting at 25 °C • maximum 12t value value virtuit breaker: 16 A characteristic B or 10 A characteristic C Cutput Voltage curve at output voltage at DC rated value 24t V relative overall tolerance of the voltage 1 % relative control precision of the output voltage • on slow fluctuation of input voltage • on slow fluctuation of input voltage 0.1 %	2 rated value	60 Hz
 at rated input voltage 120 V at rated input voltage 230 V current limitation of inrush current at 25 °C maximum duration of inrush current limiting at 25 °C maximum 3 ms I2t value maximum 12 A²·s fuse protection type in the feeder Recommended miniature circuit breaker: 16 A characteristic B or 10 A characteristic C Dutput Voltage curve at output output voltage at DC rated value output voltage at output 1 at DC rated value e at output 1 at DC rated value e at output 1 olerance of the voltage relative overall tolerance of the output voltage on slow fluctuation of input voltage on slow fluctuation of input voltage 0.1 % 	line frequency	45 65 Hz
 at rated input voltage 230 V current limitation of inrush current at 25 °C maximum duration of inrush current limiting at 25 °C maximum 12 A²-s fuse protection type in the feeder recommended miniature circuit breaker: 16 A characteristic B or 10 A characteristic C Dutput voltage curve at output output voltage at DC rated value output voltage at output 1 at DC rated value e at output 1 at DC rated value e at output 1 at DC rated value overall tolerance of the voltage relative overall tolerance of the output voltage on slow fluctuation of input voltage on slow fluctuation of input voltage 0.1 % 	input current	
current limitation of inrush current at 25 °C maximum duration of inrush current limiting at 25 °C • maximum 12t value maximum 12 A²-s fuse protection type • in the feeder voltage curve at output voltage curve at output voltage at DC rated value • at output 1 at DC rated value relative overall tolerance of the voltage • on slow fluctuation of input voltage • on slow fluctuation of input voltage 62 A 62	 at rated input voltage 120 V 	3.7 A
duration of inrush current limiting at 25 °C • maximum 12 value maximum 12 A²-s fuse protection type • in the feeder • in the feeder voltage curve at output output voltage at DC rated value output voltage • at output 1 at DC rated value relative overall tolerance of the voltage relative control precision of the output voltage • on slow fluctuation of input voltage • on slow fluctuation of input voltage 0.1 %	 at rated input voltage 230 V 	1.7 A
 ■ maximum 12t value maximum 12 A²-s fuse protection type ■ in the feeder T 6.3 A/250 V (not accessible) Recommended miniature circuit breaker: 16 A characteristic B or 10 A characteristic C Dutput voltage curve at output output voltage at DC rated value output voltage at output 1 at DC rated value e at output 1 at DC rated value relative overall tolerance of the voltage relative control precision of the output voltage e on slow fluctuation of input voltage 0.1 % 	current limitation of inrush current at 25 °C maximum	62 A
12 t value maximum fuse protection type	duration of inrush current limiting at 25 °C	
fuse protection type	• maximum	3 ms
● in the feeder Recommended miniature circuit breaker: 16 A characteristic B or 10 A characteristic C Putput Voltage curve at output output voltage at DC rated value output voltage ● at output 1 at DC rated value relative overall tolerance of the voltage relative control precision of the output voltage ● on slow fluctuation of input voltage 0.1 %	I2t value maximum	12 A ² ·s
characteristic C Putput Voltage curve at output output voltage at DC rated value output voltage • at output 1 at DC rated value relative overall tolerance of the voltage relative control precision of the output voltage • on slow fluctuation of input voltage 0.1 %	fuse protection type	T 6.3 A/250 V (not accessible)
voltage curve at output output voltage at DC rated value output voltage • at output 1 at DC rated value relative overall tolerance of the voltage relative control precision of the output voltage • on slow fluctuation of input voltage 0.1 %	• in the feeder	
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 %	Output	
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 %	voltage curve at output	Controlled, isolated DC voltage
 at output 1 at DC rated value relative overall tolerance of the voltage relative control precision of the output voltage on slow fluctuation of input voltage 0.1 % 	output voltage at DC rated value	
relative overall tolerance of the voltage relative control precision of the output voltage • on slow fluctuation of input voltage 0.1 %	output voltage	
relative control precision of the output voltage • on slow fluctuation of input voltage 0.1 %	at output 1 at DC rated value	24 V
relative control precision of the output voltage • on slow fluctuation of input voltage 0.1 %	relative overall tolerance of the voltage	1 %
• on slow fluctuation of input voltage 0.1 %	_	
		0.1 %
	·	0.1 %

residual ripple

• maximum

voltage peak

50 mV

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
• •	10 1113
output current	0.4
rated value	8 A
rated range	0 8 A
supplied active power typical	192 W
short-term overload current	
 on short-circuiting during the start-up typical 	35 A
 at short-circuit during operation typical 	35 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	90 %
power loss [W]	
 at rated output voltage for rated value of the output 	21 W
current typical	
Closed-loop control	
relative control precision of the output voltage with rapid	0.1 %
fluctuation of the input voltage by +/- 15% typical	0.1 /6
relative control precision of the output voltage load step of	2 %
resistive load 50/100/50 % typical	2 /0
relative control precision of the output voltage at load step	3 %
of resistive load 10/90/10 % typical	
setting time	
load step 10 to 90% typical	5 ms
•	5 ms
• load step 90 to 10% typical	
• 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	8.4 9.6 A
response value current limitation typical	9 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	1.3 mA
protection class IP	IP20
Approvals	
certificate of suitability	Voc
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 T3 Gc
certificate of suitability	100,71127 (271) 1100 27117110 110 1000
ocitinoate of suitability	100, 7(127(EX) II 00 EX III (II 0 II 0 I 0 00
• relating to ATEX	IECEx Ex nA nC IIC T3 Gc; ATEX (EX) II 3G Ex nA nC IIC T3 Gc; cULus (ANSI/ISA 12.12.01, CSA C22.2 No.213) Class I, Div. 2, Group ABCD, T3, File E330455

IECEx Yes; IECEx Ex nA nC IIC T3 Gc • NEC Class 2 No ULhazloc approval Yes • FM registration Yes; Class I, Div. 2, Group ABCD, T4 type of certification CB-certificate 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 EN 55022 Class B • for emitted interference • 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 L, N, PE: 1 screw terminal each for 0.5 ... 2.5 mm² • at input at output L+, M: 2 spring-loaded terminals each for 0.5 to 2.5 mm² product function Yes • removable terminal at input · removable terminal at output Yes width of the enclosure 75 mm height of the enclosure 147 mm depth of the enclosure 129 mm required spacing 40 mm top bottom 40 mm left 0 mm right 0 mm net weight 0.74 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 1 362 918 h other information Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)



SIEMENS KALA