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

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 lout 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 	3.7 A
 at rated input voltage 230 V 	1.7 A
Switch-on current limiting (+25 °C), max.	62 A
duration of inrush current limiting at 25 °C	
maximum	3 ms
I²t, max.	12 A ² ·s
Built-in incoming fuse	T 6.3 A/250 V (not accessible)
Protection in the mains power input (IEC 898)	Recommended miniature circuit breaker: 16 A characteristic B or 10 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 lout rated	8 A
Current range	0 8 A
supplied active power typical	192 W
short-term overload current	
	35 A
on short-circuiting during the start-up typical at short-circuit during operation typical	35 A
at short-circuit during operation typical duration of overloading capability for excess current	
	70 ms
on short-circuiting during the start-up at chart circuit during expertion.	
at short-circuit during operation Parallel switching for exhaused performance.	70 ms
Parallel switching for enhanced performance	Yes
Numbers of parallel switchable units for enhanced performance	2
Efficiency	
Efficiency at Vout rated, lout rated, approx.	90 %
Power loss at Vout rated, lout rated, approx.	21 W
Closed-loop control	
Dynamic mains compensation (Vin rated ±15 %), max.	0.1 %
Dynamic load smoothing (lout: 50/100/50 %), Uout ± typ.	2 %
Dynamic load smoothing (lout: 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	CITIC
Output overvoltage protection	Additional control loop, limitation (along disconnected) at < 29.9 V
Current limitation	Additional control loop, limitation (closed loop control) at < 28.8 V 8.4 9.6 A
Current limitation, typ.	9 A
property of the output short-circuit proof	Yes
Short-circuit protection Overload/short-circuit indicator	Electronic shutdown, automatic restart
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	1.3 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 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
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
117	
Noise immunity	EN 61000-6-2

ambient temperature • during operation — Note • during transport • during storage 40 +85 °C • during storage 40 +85 °C Humidity class according to EN 60721 Climate class 3K3, 5 95% no condensation Mechanics Connection technology Connections • Supply input • Output • Output • removable terminal at input • removable terminal at output • removable terminal at output • removable terminal at output • reguired spacing • top • bottom • left • right • orm Weight, approx. product feature of the enclosure housing can be lined up Installation MTBF at 40 °C other information Outpus with natural convection • with natural convection • with natural convection • 40 +85 °C Climate class 3K3, 5 95% no condensation Minatural convection • Climate class 3K3, 5 95% no condensation **Elemostric Climate class 3K3, 5			
- Note	ambient temperature		
 during transport 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 Output L, N, PE: 1 screw terminal each for 0.5 2.5 mm² product function removable terminal at input removable terminal at output Yes width of the enclosure height of the enclosure top bottom bottom left right o mm left o mm Weight, approx. product feature of the enclosure housing can be lined up Installation MTBF at 40 °C other information Screw-/spring clamp connection 40 mm obet on.5 2.5 mm² Weight, approx. Can be mounted onto S7-1500 rail TTSP 1362 918 h other information Specifications at rated input voltage and ambient temperature +25 °C	 during operation 	0 60 °C	
 • during storage -40 +85 °C Humidity class according to EN 60721 Climate class 3K3, 5 95% no condensation Mechanics Connection technology Connections • Supply input • Output L, N, PE: 1 screw terminal each for 0.5 2.5 mm² Product function • removable terminal at input • removable terminal at output Yes • removable terminal at output Yes width of the enclosure height of the enclosure 147 mm depth of the enclosure required spacing • top • bottom • bottom • left • right 0 mm Weight, approx. product feature of the enclosure housing can be lined up Installation MTBF at 40 °C other information 	— Note	with natural convection	
Humidity class according to EN 60721 Climate class 3K3, 5 95% no condensation Mechanics Connection technology Connections Supply input Output Cutput Curpout function In removable terminal at input In removable terminal at output Width of the enclosure Height of the enclosure Output Outp	 during transport 	-40 +85 °C	
Connection technology Connections Supply input Output Connection In Missian Supply input Output Coutput Connection In Missian Supply input Output Coutput Co	during storage	-40 +85 °C	
Connection technology Connections Supply input Output Ut, M: 2 spring-loaded terminals each for 0.5 2.5 mm² Product function removable terminal at input removable terminal at output Width of the enclosure required spacing top bottom left right Ves right Ves 40 mm Veight, approx. product feature of the enclosure housing can be lined up Installation MTBF at 40 °C Output L, N, PE: 1 screw terminal each for 0.5 2.5 mm² L, N, PE: 1 screw terminal each for 0.5 2.5 mm² L, N, PE: 1 screw terminal each for 0.5 2.5 mm² L, N, PE: 1 screw terminal each for 0.5 2.5 mm² L, N, PE: 1 screw terminal each for 0.5 2.5 mm² L, N, PE: 1 screw terminal each for 0.5 2.5 mm² Ves To mm Yes 40 mm 40 mm 0 mm 0 mm 0 mm Ves Can be mounted onto S7-1500 rail 1 362 918 h Specifications at rated input voltage and ambient temperature +25 °C	Humidity class according to EN 60721	Climate class 3K3, 5 95% no condensation	
Connections Supply input Output L, N, PE: 1 screw terminal each for 0.5 2.5 mm² L+, M: 2 spring-loaded terminals each for 0.5 to 2.5 mm² Product function removable terminal at input removable terminal at output Yes width of the enclosure height of the enclosure top top bottom left right right Weight, approx. product feature of the enclosure housing can be lined up Installation MTBF at 40 °C other information L, N, PE: 1 screw terminal each for 0.5 2.5 mm² L+, M: 2 spring-loaded terminals each for 0.5 to 2.5 mm² L+, M: 2 spring-loaded terminals each for 0.5 to 2.5 mm² L+, M: 2 spring-loaded terminals each for 0.5 to 2.5 mm² Yes 75 mm 44 mm 40 mm 40 mm 0 mm 0 mm Veyght, approx. product feature of the enclosure housing can be lined up Installation Can be mounted onto S7-1500 rail Specifications at rated input voltage and ambient temperature +25 °C	Mechanics		
Supply input Output Output Cutput Droduct function In removable terminal at input In removable terminal at output Width of the enclosure Depth	Connection technology	Screw-/spring clamp connection	
Output L+, M: 2 spring-loaded terminals each for 0.5 to 2.5 mm² product function	Connections		
product function	 Supply input 	L, N, PE: 1 screw terminal each for 0.5 2.5 mm ²	
removable terminal at input removable terminal at output width of the enclosure height of the enclosure depth of the enclosure depth of the enclosure required spacing • top • bottom • left • right Weight, approx. product feature of the enclosure housing can be lined up Installation MTBF at 40 °C other information Yes 147 mm 147 mm 40 mm 40 mm 40 mm 40 mm 40 mm 70 mm 71 mm 72 mm 73 mm 74 kg 75 mm 75 mm 75 mm 75 mm 76 mm 77 mm 78 mm 79 mm 70 mm	Output	L+, M: 2 spring-loaded terminals each for 0.5 to 2.5 mm ²	
 ◆ removable terminal at output ✓ width of the enclosure height of the enclosure depth of the enclosure 129 mm required spacing ◆ top ◆ bottom ◆ left ◆ right ✓ right ✓ wight, approx. Installation MTBF at 40 °C Other information 75 mm 40 mm 40 mm 0 mm 0 mm 0 74 kg Yes 1 362 918 h Other information Specifications at rated input voltage and ambient temperature +25 °C 	product function		
width of the enclosure height of the enclosure depth of the enclosure 129 mm required spacing • top • bottom • left • right Weight, approx. Product feature of the enclosure housing can be lined up Installation MTBF at 40 °C other information 75 mm 447 mm 440 mm 40 mm 40 mm 9 m	 removable terminal at input 	Yes	
height of the enclosure depth of the enclosure required spacing top bottom left right right Weight, approx. product feature of the enclosure housing can be lined up Installation MTBF at 40 °C other information 147 mm 149 mm 40 mm 40 mm 0 mm 0 mm Venture of the enclosure housing can be lined up Yes 1362 918 h Specifications at rated input voltage and ambient temperature +25 °C	 removable terminal at output 	Yes	
depth of the enclosure required spacing • top • bottom • left • right Weight, approx. product feature of the enclosure housing can be lined up Installation MTBF at 40 °C other information 129 mm 40 mm 40 mm 0 mm 70 mm 0 mm Can be mounted onto S7-1500 rail 1 362 918 h Other information Specifications at rated input voltage and ambient temperature +25 °C	width of the enclosure	75 mm	
required spacing • top • bottom • left • right Weight, approx. product feature of the enclosure housing can be lined up Installation MTBF at 40 °C other information 40 mm 40 mm 0 mm Very 0 mm Very 10 mm Can be mounted onto S7-1500 rail 11 362 918 h Other information Specifications at rated input voltage and ambient temperature +25 °C	height of the enclosure	147 mm	
 top bottom left right 0 mm Weight, approx. product feature of the enclosure housing can be lined up Installation MTBF at 40 °C other information 40 mm 0 mm Ves Can be mounted onto S7-1500 rail 1 362 918 h other information Specifications at rated input voltage and ambient temperature +25 °C 	depth of the enclosure	129 mm	
 bottom left right 0 mm Weight, approx. product feature of the enclosure housing can be lined up Installation MTBF at 40 °C other information 40 mm 0 mm Ves Can be mounted onto S7-1500 rail 1 362 918 h other information Specifications at rated input voltage and ambient temperature +25 °C 	required spacing		
● left ● right 0 mm Weight, approx. 0.74 kg product feature of the enclosure housing can be lined up Installation MTBF at 40 °C other information 0 mm Can be mounted onto S7-1500 rail 1 362 918 h Specifications at rated input voltage and ambient temperature +25 °C	• top	40 mm	
● right 0 mm Weight, approx. 0.74 kg product feature of the enclosure housing can be lined up Yes Installation Can be mounted onto S7-1500 rail MTBF at 40 °C 1 362 918 h other information Specifications at rated input voltage and ambient temperature +25 °C	• bottom	40 mm	
Weight, approx. product feature of the enclosure housing can be lined up Installation MTBF at 40 °C other information O.74 kg Yes Can be mounted onto S7-1500 rail 1 362 918 h Other information Specifications at rated input voltage and ambient temperature +25 °C	• left	0 mm	
product feature of the enclosure housing can be lined up Installation MTBF at 40 °C other information Yes Can be mounted onto S7-1500 rail 1 362 918 h Specifications at rated input voltage and ambient temperature +25 °C	• right	0 mm	
Installation Can be mounted onto S7-1500 rail MTBF at 40 °C 1 362 918 h other information Can be mounted onto S7-1500 rail Specifications at rated input voltage and ambient temperature +25 °C	Weight, approx.	0.74 kg	
MTBF at 40 °C other information 1 362 918 h Specifications at rated input voltage and ambient temperature +25 °C	product feature of the enclosure housing can be lined up	Yes	
other information Specifications at rated input voltage and ambient temperature +25 °C	Installation	Can be mounted onto S7-1500 rail	
	MTBF at 40 °C	1 362 918 h	
	other information		

