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 supply network 1-phase AC supply voltage at AC Automatic range selection supply voltage 1 at AC rated value 1 at AC rated value 20 V 2 at AC rated value 200 V input voltage 6 S 132 V 2 at AC rated value 200 V input voltage 8 S 132 V 2 at AC 170 264 V design of input wide range input No overvoltage coverload 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 4 Vin = 93/187 V in at rated value 50 Hz in at rated value 50 Hz in at rated input voltage 120 V 3.7 A i at rated input voltage 230 V 1.7 A current limitation of inrush current at 25 °C maximum 62 A i trated input voltage 230 V 1.7 A i trated input voltage 230 V 1.7 A	Input	
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 on slow fluctuation of input voltage on slow fluctuation of ohm loading residual ripple maximum 50 mV 	relative control precision of the output voltage	
 on slow fluctuation of ohm loading residual ripple maximum 50 mV 		0.1 %
residual ripple • maximum 50 mV	. –	0.1 %
• maximum 50 mV	-	
voltage peak		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	1.0 5
typical	10 ms
	10 113
output current	0.4
rated value	8 A
rated range	08A
supplied active power typical	192 W
short-term overload current	05.4
 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	70
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	2
increasing the power	
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	
relative control precision of the output voltage load step of	2 %
resistive load 50/100/50 % typical	0.0/
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 maximum 	5 ms
	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	
• 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	
 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
	Yes
ULhazloc approval TM registration	
• 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 mm ²
at output	L+, M: 2 spring-loaded terminals each for 0.5 to 2.5 mm ²
product function	
 removable terminal at input 	Yes
 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	129 11111
required spacing ● top	
• top	40 mm
topbottom	40 mm 40 mm
topbottomleft	40 mm 40 mm 0 mm
 top bottom left right 	40 mm 40 mm 0 mm 0 mm
 top bottom left right net weight 	40 mm 40 mm 0 mm 0 mm 0.74 kg
 top bottom left right net weight product feature of the enclosure housing can be lined up 	40 mm 40 mm 0 mm 0.74 kg Yes
 top bottom left right net weight product feature of the enclosure housing can be lined up fastening method 	40 mm 40 mm 0 mm 0 mm 0.74 kg Yes Can be mounted onto S7-1500 rail
 top bottom left right net weight product feature of the enclosure housing can be lined up fastening method MTBF at 40 °C 	40 mm 40 mm 0 mm 0 mm 0.74 kg Yes Can be mounted onto S7-1500 rail 1 362 918 h
 top bottom left right net weight product feature of the enclosure housing can be lined up fastening method 	40 mm 40 mm 0 mm 0 mm 0.74 kg Yes Can be mounted onto S7-1500 rail

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