SIEMENS

Data sheet 6EP1333-4BA00

SIMATIC PM 1507/1AC/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	
type of the power supply network	1-phase AC
supply voltage at AC	Automatic range selection
supply voltage	120 V/230 V
input voltage 1 at AC	85 ... 132 V
input voltage 2 at AC	170 ... 264 V
wide range input	No
overvoltage overload capability	2.3 × Vin rated, 1.3 ms
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	50/60 Hz
line frequency	45 ... 65 Hz
input current	
● at rated input voltage 120 V	3.7 A
● at rated input voltage 230 V	1.7 A
current limitation of inrush current at 25 °C maximum	62 A
duration of inrush current limiting at 25 °C	
● maximum	3 ms
I2t value maximum	12 A²·s
fuse protection type	T 6.3 A/250 V (not accessible)
fuse protection type in the feeder	Recommended miniature circuit breaker: 16 A characteristic B or 10 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
output voltage adjustable	No
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
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	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
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 current typical	21 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	2 %
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
property of the output short-circuit proof	Yes
design of short-circuit protection	Electronic shutdown, automatic restart
response value current limitation	8.4 ... 9.6 A
● typical	9 A
safety	
galvanic isolation between input and output	Yes
galvanic isolation	Safety extra-low output voltage Vout 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
EMC	
standard	
● for emitted interference	EN 55022 Class B
● for mains harmonics limitation	EN 61000-3-2
● for interference immunity	EN 61000-6-2
standards, specifications, 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
● UKCA marking	Yes
● EAC approval	Yes
● Regulatory Compliance Mark (RCM)	Yes
● NEC Class 2	No
type of certification	
● BIS	Yes; R-41183539

● CB-certificate	Yes
MTBF at 40 °C	1 362 918 h
standards, specifications, approvals hazardous environments	
certificate of suitability	
● IECEx	Yes; IECEx Ex nA nC IIC T3 Gc
● ATEX	Yes; ATEX (EX) II 3G Ex nA nC IIC T3 Gc
● ULhazloc approval	Yes; cULus (ANSI/ISA 12.12.01, CSA C22.2 No.213) Class I, Div. 2, Group ABCD, T3, File E330455
● cCSAus, Class 1, Division 2	No
● UKEX	Yes
● CCC for hazardous zone according to GB standard	Yes
● FM registration	Yes; Class I, Div. 2, Group ABCD, T4
standards, specifications, approvals marine classification	
shipbuilding approval	Yes
Marine classification association	
● American Bureau of Shipping Europe Ltd. (ABS)	Yes
● French marine classification society (BV)	Yes
● Det Norske Veritas (DNV)	Yes
● Lloyds Register of Shipping (LRS)	No
standards, specifications, approvals Environmental Product Declaration	
global warming potential [CO2 eq]	
● total	589.1 kg
● during manufacturing	14 kg
● during operation	574.4 kg
● after end of life	0.51 kg
ambient conditions	
ambient temperature	
● during operation	0 ... 60; with natural convection
● during transport	-40 ... +85
● during storage	-40 ... +85
environmental category according to IEC 60721	Climate class 3K3, 5 ... 95% no condensation
connection method	
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
removable terminal at input	Yes
removable terminal at output	Yes
mechanical data	
width × height × depth of the enclosure	75 × 147 × 129 mm
installation width × mounting height	75 mm × 205 mm
required spacing	
● top	40 mm
● bottom	40 mm
● left	0 mm
● right	0 mm
fastening method	Can be mounted onto S7-1500 rail
● DIN-rail mounting	No
● S7 rail mounting	Yes
● wall mounting	No
housing can be lined up	Yes
net weight	0.74 kg
further information internet links	
internet link	
● to website: Industry Mall	https://mall.industry.siemens.com
● to web page: selection aid TIA Selection Tool	https://www.siemens.com/tstcloud
● to web page: power supplies	https://siemens.com/sitop
● to website: CAx-Download-Manager	https://siemens.com/cax
● to website: Industry Online Support	https://support.industry.siemens.com
additional information	
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

security information

security information	Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit www.siemens.com/cybersecurity-industry. Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under https://www.siemens.com/cert. (V4.7)

Classifications

	Version	Classification
eClass	14	27-04-07-01
eClass	12	27-04-07-01
eClass	9.1	27-04-07-01
eClass	9	27-04-07-01
eClass	8	27-04-90-02
eClass	7.1	27-04-90-02
eClass	6	27-04-90-02
ETIM	9	EC002540
ETIM	8	EC002540
ETIM	7	EC002540
IDEA	4	4130
UNSPSC	15	39-12-10-04

Approvals Certificates

General Product Approval

CB CB | CB CB | Manufacturer Declaration | UKCA | UL UL | Miscellaneous

General Product Approval	For use in hazardous locations				
BIS CRS	BUREAU VERITAS	IECEx IECEx	ATEX	FM	CCC-Ex

For use in hazardous locations	Marine / Shipping			Environment
UL UL	BUREAU VERITAS	DNV DNV	Lloyd's Register LRS	EPD

last modified: 12/22/2024