



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	
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	$2.3 \times V_{in}$ 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 $V_{in} = 93/187$ 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
I ² t value maximum	12 A ² ·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 V _{out} (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 mm ²
• at output	L+, M: 2 spring-loaded terminals each for 0.5 to 2.5 mm ²
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
• standard 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

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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



[Manufacturer Declaration](#)





[Miscellaneous](#)

General Product Approval

For use in hazardous locations

[BIS CRS](#)







[FM](#)

[CCC-Ex](#)

For use in hazardous locations

Marine / Shipping

Environment











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