



SIMATIC PM1207/1AC/24VDC/2.5A

SIMATIC S7-1200 Power Module PM1207 Stabilized power supply input:
120/230 V AC, output: DC 24 V/2,5 A

Input	
type of the power supply network	1-phase AC
supply voltage at AC	Automatic range selection
• initial value	
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	176 ... 264 V
design of input wide range input	No
overvoltage overload 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	
• 1 rated value	50 Hz
• 2 rated value	60 Hz
line frequency	47 ... 63 Hz
input current	
• at rated input voltage 120 V	1.2 A
• at rated input voltage 230 V	0.67 A
current limitation of inrush current at 25 °C maximum	13 A
duration of inrush current limiting at 25 °C	
• maximum	3 ms
I2t value maximum	0.5 A²·s
fuse protection type	T 3,15 A/250 V (not accessible)
• 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
relative overall tolerance of the voltage	3 %
relative control precision of the output voltage	
• on slow fluctuation of input voltage	0.1 %
• on slow fluctuation of ohm loading	0.2 %
residual ripple	
• maximum	150 mV
voltage peak	

• maximum	240 mV
product function output voltage adjustable	No
type of output voltage setting	-
display version for normal operation	Green LED for 24 V OK
behavior of the output voltage when switching on	No overshoot of Vout (soft start)
response delay maximum	6 s; 2 s at 230 V, 6 s at 120 V
voltage increase time of the output voltage	
• typical	10 ms
output current	
• rated value	2.5 A
• rated range	0 ... 2.5 A
supplied active power typical	60 W
short-term overload current	
• on short-circuiting during the start-up typical	6 A
• at short-circuit during operation typical	6 A
duration of overloading capability for excess current	
• on short-circuiting during the start-up	100 ms
• at short-circuit during operation	100 ms
product feature	
• bridging of equipment	Yes
number of parallel-switched equipment resources for increasing the power	2
Efficiency	
efficiency in percent	83 %
power loss [W]	
• at rated output voltage for rated value of the output current typical	12 W
Closed-loop control	
relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical	0.3 %
relative control precision of the output voltage load step of resistive load 50/100/50 % typical	3 %
setting time	
• load step 50 to 100% typical	5 ms
• load step 100 to 50% typical	5 ms
setting time	
• maximum	5 ms
Protection and monitoring	
design of the overvoltage protection	< 33 V
response value current limitation typical	2.65 A
property of the output short-circuit proof	Yes
design of short-circuit protection	Constant current characteristic
enduring short circuit current RMS value	
• typical	2.7 A
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
operating resource protection class	Class I
leakage current	
• maximum	3.5 mA
protection class IP	IP20
Approvals	
certificate of suitability	
• CE marking	Yes
• UL approval	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cURus-Recognized (UL 60950-1, CSA C22.2 No. 60950-1) File E151273
• CSA approval	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cURus-Recognized (UL 60950-1, CSA C22.2 No. 60950-1) File E151273
• cCSAus, Class 1, Division 2	No
• ATEX	Yes; ATEX (EX) II 3G Ex nA nC IIC T4 Gc
certificate of suitability	

relating to ATEX	IECEx Ex nA nC IIC T4 Gc; ATEX (EX) II 3G Ex nA nC IIC T4 Gc; cULus (ISA 12.12.01, CSA C22.2 No.213) Class I, Div. 2, Group ABCD, T4, File E330455
IECEX	Yes; IECEx Ex nA nC IIC T4 Gc
NEC Class 2	No
ULhazloc approval	Yes
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, LRS, NK
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)	Yes
Nippon Kaiji Kyokai (NK)	Yes
EMC	
standard	
for emitted interference	EN 55022 Class B
for mains harmonics limitation	not applicable
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-type terminals
at input	L, N, PE: 1 screw terminal each for 0.5 ... 2.5 mm ²
at output	L+, M: 2 screw terminals each for 0.5 ... 2.5 mm ²
for auxiliary contacts	-
width of the enclosure	70 mm
height of the enclosure	100 mm
depth of the enclosure	75 mm
required spacing	
top	20 mm
bottom	20 mm
left	0 mm
right	0 mm
net weight	0.3 kg
product feature of the enclosure housing can be lined up	Yes
fastening method	Snaps onto DIN rail EN 60715 35x7.5/15, wall mounting
MTBF at 40 °C	1 492 537 h
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

