



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	
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	176 ... 264 V
Wide-range input	No
Overvoltage resistance	$2.3 \times V_{in}$ rated, 1.3 ms
Mains buffering	at $V_{in} = 93/187$ V
Mains buffering at I <sub>out</sub> rated, min.	20 ms; at $V_{in} = 93/187$ V
Rated line frequency 1	50 Hz
Rated line frequency 2	60 Hz
Rated line range	47 ... 63 Hz
input current	
• at rated input voltage 120 V	1.2 A
• at rated input voltage 230 V	0.67 A
Switch-on current limiting (+25 °C), max.	13 A
duration of inrush current limiting at 25 °C	
• maximum	3 ms
I <sup>2</sup> t, max.	0.5 A <sup>2</sup> ·s
Built-in incoming fuse	T 3,15 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 V <sub>out</sub> DC	24 V
• output voltage at output 1 at DC rated value	24 V
Total tolerance, static ±	3 %
Static mains compensation, approx.	0.1 %
Static load balancing, approx.	0.2 %
Residual ripple peak-peak, max.	150 mV

Spikes peak-peak, max. (bandwidth: 20 MHz)	240 mV
product function output voltage adjustable	No
Output voltage setting	-
Status display	Green LED for 24 V OK
On/off behavior	No overshoot of Vout (soft start)
Startup delay, max.	6 s; 2 s at 230 V, 6 s at 120 V
Voltage rise, typ.	10 ms
Rated current value Iout rated	2.5 A
Current 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
Parallel switching for enhanced performance	Yes
Numbers of parallel switchable units for enhanced performance	2
<b>Efficiency</b>	
Efficiency at Vout rated, Iout rated, approx.	83 %
Power loss at Vout rated, Iout rated, approx.	12 W
<b>Closed-loop control</b>	
Dynamic mains compensation (Vin rated $\pm 15$ %), max.	0.3 %
Dynamic load smoothing (Iout: 50/100/50 %), Uout $\pm$ typ.	3 %
Load step setting time 50 to 100%, typ.	5 ms
Load step setting time 100 to 50%, typ.	5 ms
setting time maximum	5 ms
<b>Protection and monitoring</b>	
Output overvoltage protection	< 33 V
Current limitation, typ.	2.65 A
property of the output short-circuit proof	Yes
Short-circuit protection	Constant current characteristic
enduring short circuit current RMS value	
• typical	2.7 A
Overload/short-circuit indicator	-
<b>Safety</b>	
Primary/secondary isolation	Yes
galvanic isolation	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178
Protection class	Class I
leakage current	
• maximum	3.5 mA
Degree of protection (EN 60529)	IP20
<b>Approvals</b>	
CE mark	Yes
UL/cUL (CSA) approval	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
Explosion protection	IECEX Ex nA nC IIC T4 Gc; ATEX (EX) II 3G Ex nA nC II T4; cULus (ISA 12.12.01, CSA C22.2 No.213) Class I, Div. 2, Group ABCD, T4, 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, LRS, NK
<b>EMC</b>	
Emitted interference	EN 55022 Class B
Supply harmonics limitation	not applicable

Noise immunity	EN 61000-6-2
<b>environmental conditions</b>	
ambient temperature <ul style="list-style-type: none"> <li>during operation <ul style="list-style-type: none"> <li>Note</li> </ul> </li> <li>during transport</li> <li>during storage</li> </ul>	0 ... 60 °C with natural convection -40 ... +85 °C -40 ... +85 °C
Humidity class according to EN 60721	Climate class 3K3, 5 ... 95% no condensation
<b>Mechanics</b>	
Connection technology	screw-type terminals
Connections <ul style="list-style-type: none"> <li>Supply input</li> <li>Output</li> <li>Auxiliary</li> </ul>	L, N, PE: 1 screw terminal each for 0.5 ... 2.5 mm <sup>2</sup> L+, M: 2 screw terminals each for 0.5 ... 2.5 mm <sup>2</sup> -
width of the enclosure	70 mm
height of the enclosure	100 mm
depth of the enclosure	75 mm
required spacing <ul style="list-style-type: none"> <li>top</li> <li>bottom</li> <li>left</li> <li>right</li> </ul>	20 mm 20 mm 0 mm 0 mm
Weight, approx.	0.3 kg
product feature of the enclosure housing can be lined up	Yes
Installation	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)

