



SIMATIC S7-1200 POWER MODULE PM1207 STABILIZED  
POWER SUPPLY INPUT: 120/230 V AC OUTPUT: 24 V  
DC/2.5 A

## Technical specifications

Product	S7-1200 PM1207
Power supply, type	24 V/2.5 A

### Input

Input	1-phase AC
Supply voltage / 1 / with AC / Rated value	120 V
Supply voltage / 2 / with AC / Rated value	230 V
Supply voltage	
• Note	Automatic range selection
Input voltage / 1 / with AC	85 ... 132 V
Input voltage / 2 / with AC	176 ... 264 V
Wide-range input	No
Overvoltage resistance	2.3 × Vin rated, 1.3 ms
Mains buffering at lout rated, min.	20 ms
Mains buffering	at Vin = 93/187 V
Rated line frequency	50 / 60 Hz
Rated line range	47 ... 63 Hz
Input current / at rated input voltage 120 V	1.2 A
Input current / 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
<b>Output</b>	
Output	Controlled, isolated DC voltage
Rated voltage V <sub>out</sub> DC	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 V <sub>out</sub> (soft start)
Startup delay, max.	6 s
• Note	2 s at 230 V, 6 s at 120 V
Voltage rise, typ.	10 ms
Rated current value I <sub>out</sub> rated	2.5 A
Current range	0 ... 2.5 A
Active power supplied / typical	60 W
Short-term overload current / on short-circuiting during the start-up / typical	6 A
Duration of overloading capability for excess current / on short-circuiting during the start-up	100 ms
Short-term overload current / at short-circuit during operation / typical	6 A
Duration of overloading capability for excess current / 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 V <sub>out</sub> rated, I <sub>out</sub> rated, approx.	83 %
Power loss at V <sub>out</sub> rated, I <sub>out</sub> rated, approx.	12 W
<b>Closed-loop control</b>	
Dynamic mains compensation (V <sub>in</sub> rated ±15 %), max.	0.3 %
Dynamic load smoothing (I <sub>out</sub> : 50/100/50 %), U <sub>out</sub> ± 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
CE mark	Yes
UL/CSA approval	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	ATEX (EX) II 3G Ex nA II T4; cULus (ISA 12.12.01, CSA C22.2 No.213) Class I, Div. 2, Group ABCD, T4, File E330455
FM approval	Class I, Div. 2, Group ABCD, T4
CB approval	Yes
Marine approval	GL, ABS, BV, DNV, LRS, NK
Degree of protection (EN 60529)	IP20
<b>EMC</b>	
Emitted interference	EN 55022 Class B
Supply harmonics limitation	not applicable
Noise immunity	EN 61000-6-2
<b>Operating data</b>	
Ambient temperature / during operation	0 ... 60 °C
• Note	with natural convection
Ambient temperature / during transport	-40 ... +85 °C
Ambient temperature / during storage	-40 ... +85 °C
Humidity class according to EN 60721	Climate class 3K3, no condensation
<b>Mechanics</b>	
Connection technology	screw-type terminals
Connections / Supply input	L, N, PE: 1 screw terminal each for 0.5 ... 2.5 mm <sup>2</sup>
Connections / Output	L+, M: 2 screw terminals each for 0.5 ... 2.5 mm <sup>2</sup>
Connections / Auxiliary	-
Width / of the enclosure	70 mm
Height / of the enclosure	100 mm

Depth / of the enclosure	75 mm
Installation width	70 mm
Mounting height	140 mm
Weight, approx.	0.3 kg
Product property / of the enclosure / housing for side-by-side mounting	Yes
Mounting type / wall mounting	Yes
Mounting type / Standard rail mounting	Yes
Mounting type / S7 rail mounting	No
Installation	Snaps onto DIN rail EN 60715 35x7.5/15, wall mounting
Other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

**letzte Änderung:**

Oct 24, 2014