



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 / at AC / nominal value	120 V
Supply voltage / 2 / at AC / nominal value	230 V
Supply voltage	
• Note	Automatic range selection
Input voltage / 1 / at AC	85 ... 132 V
Input voltage / 2 / at AC	176 ... 264 V
Wide-range input	No
Overvoltage resistance	2.3 × Vin rated, 1.3 ms
Mains buffering at Iout 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 nominal level of the input voltage 120 V	1.2 A
Input current / at nominal level of the input voltage 230 V	0.67 A
Switch-on current limiting (+25 °C), max.	13 A
Duration of current limiting / at 25 °C / maximum	3 ms

I ² t, max.	0.5 A ² ·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 _{out} 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 feature / output voltage adjustable	No
Output voltage setting	-
Status display	Green LED for 24 V OK
On/off behavior	No overshoot of V _{out} (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 _{out} rated	2.5 A
Current range	0 ... 2.5 A
delivered active power / typ.	60 W
short-term overload current / at short-circuit during run-up / typical	6 A
Duration of overloading ability 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 ability for excess current / on short-circuiting during the operational phase	100 ms
Parallel switching for enhanced performance	Yes
Numbers of parallel switchable units for enhanced performance	2
Efficiency	
Efficiency at V _{out} rated, I _{out} rated, approx.	83 %
Power loss at V _{out} rated, I _{out} rated, approx.	12 W
Closed-loop control	
Dynamic mains compensation (V _{in} rated ±15 %), max.	0.3 %
Dynamic load smoothing (I _{out} : 50/100/50 %), U _{out} ± 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
Protection and monitoring	

Output overvoltage protection	< 33 V
Current limitation, typ.	2.65 A
Characteristic feature of the output / short-circuit protected	Yes
Short-circuit protection	Constant current characteristic
Enduring short circuit current / Effective level / typical	2.7 A
Overload/short-circuit indicator	-
Safety	
Primary/secondary isolation	Yes
Potential separation	Safety extra-low output voltage U _{out} acc. to EN 60950-1 and EN 50178
Protection class	Class I
stray 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
EMC	
Emitted interference	EN 55022 Class B
Supply harmonics limitation	not applicable
Noise immunity	EN 61000-6-2
Operating data	
Ambient temperature / in operation	0 ... 60 °C
• Note	with natural convection
Ambient temperature / on transport	-40 ... +85 °C
Ambient temperature / in storage	-40 ... +85 °C
Humidity class according to EN 60721	Climate class 3K3, no condensation
Mechanics	
Connection technology	screw-type terminals
Connections / Supply input	L, N, PE: 1 screw terminal each for 0.5 ... 2.5 mm ²
Connections / Output	L+, M: 2 screw terminals each for 0.5 ... 2.5 mm ²
Connections / Auxiliary	-
Width / of the housing	70 mm
Height / of the housing	100 mm
Depth / of the housing	75 mm

Installation width	70 mm
Mounting height	140 mm
Weight, approx.	0.3 kg
Product feature / of the housing / housing for side-by-side mounting	Yes
Mounting type / wall mounting	Yes
Type of mounting / 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:

Sep 1, 2014