



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
supply voltage	120 V/230 V
input voltage 1 at AC	85 ... 132 V
input voltage 2 at AC	176 ... 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	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
I <sup>2</sup> t value maximum	0.5 A <sup>2</sup> ·s
fuse protection type	T 3,15 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	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
display version for normal operation	Green LED for 24 V OK
behavior of the output voltage when switching on	No overshoot of $V_{out}$ (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
bridging of equipment	Yes
number of parallel-switched equipment resources for increasing the power	2
<b>efficiency</b>	
efficiency in percent	83 %
power loss [W]	
• at rated output voltage for rated value of the output current typical	12 W
<b>closed-loop control</b>	
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
<b>protection and monitoring</b>	
design of the overvoltage protection	< 33 V
property of the output short-circuit proof	Yes
design of short-circuit protection	Constant current characteristic
• typical	2.65 A
enduring short circuit current RMS value	
• typical	2.7 A
<b>safety</b>	
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
<b>EMC</b>	
standard	
• for emitted interference	EN 55022 Class B
• for mains harmonics limitation	not applicable
• for interference immunity	EN 61000-6-2
<b>standards, specifications, approvals</b>	
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
• UKCA marking	Yes
• EAC approval	Yes
• NEC Class 2	Yes; according to UL1310, File E151273
type of certification	
• CB-certificate	Yes
MTBF at 40 °C	1 492 537 h

**standards, specifications, approvals hazardous environments**

certificate of suitability	
<ul style="list-style-type: none"> <li>• IECEx</li> <li>• ATEX</li> <li>• ULhazloc approval</li> <li>• cCSAus, Class 1, Division 2</li> <li>• UKEX</li> <li>• CCC for hazardous zone according to GB standard</li> <li>• FM registration</li> </ul>	<p>Yes; IECEx Ex nA nC IIC T4 Gc</p> <p>Yes; ATEX (EX) II 3G Ex nA nC IIC T4 Gc</p> <p>Yes</p> <p>No</p> <p>Yes</p> <p>Yes</p> <p>Yes; Class I, Div. 2, Group ABCD, T4</p>

**standards, specifications, approvals marine classification**

shipbuilding approval	Yes
Marine classification association	
<ul style="list-style-type: none"> <li>• American Bureau of Shipping Europe Ltd. (ABS)</li> <li>• French marine classification society (BV)</li> <li>• Det Norske Veritas (DNV)</li> <li>• Lloyds Register of Shipping (LRS)</li> <li>• Nippon Kaiji Kyokai (NK)</li> </ul>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>

**ambient conditions**

ambient temperature	
<ul style="list-style-type: none"> <li>• during operation</li> <li>• during transport</li> <li>• during storage</li> </ul>	<p>0 ... 60 °C; with natural convection</p> <p>-40 ... +85 °C</p> <p>-40 ... +85 °C</p>
environmental category according to IEC 60721	Climate class 3K3, 5 ... 95% no condensation

**connection method**

type of electrical connection	screw terminal
<ul style="list-style-type: none"> <li>• at input</li> <li>• at output</li> <li>• for auxiliary contacts</li> </ul>	<p>L, N, PE: 1 screw terminal each for 0.5 ... 2.5 mm<sup>2</sup></p> <p>L+, M: 2 screw terminals each for 0.5 ... 2.5 mm<sup>2</sup></p> <p>-</p>

**mechanical data**

width × height × depth of the enclosure	70 × 100 × 75 mm
installation width × mounting height	70 mm × 140 mm
required spacing	
<ul style="list-style-type: none"> <li>• top</li> <li>• bottom</li> <li>• left</li> <li>• right</li> </ul>	<p>20 mm</p> <p>20 mm</p> <p>0 mm</p> <p>0 mm</p>
fastening method	Snaps onto DIN rail EN 60715 35x7.5/15, wall mounting
<ul style="list-style-type: none"> <li>• standard rail mounting</li> <li>• S7 rail mounting</li> <li>• wall mounting</li> </ul>	<p>Yes</p> <p>No</p> <p>Yes</p>
housing can be lined up	Yes
net weight	0.3 kg

**further information internet links**

internet link	
<ul style="list-style-type: none"> <li>• to website: Industry Mall</li> <li>• to web page: selection aid TIA Selection Tool</li> <li>• to website: CAx-Download-Manager</li> <li>• to website: Industry Online Support</li> </ul>	<p><a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a></p> <p><a href="https://www.siemens.com/tstcloud">https://www.siemens.com/tstcloud</a></p> <p><a href="https://siemens.com/cax">https://siemens.com/cax</a></p> <p><a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a></p>

**additional information**

other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)
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**security information**

security information	Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit
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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](#)



**For use in hazardous locations**



[FM](#)

[CCC-Ex](#)



**Marine / Shipping**



[CCS \(China Classification Society\)](#)



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