

SITOP PSU6200/3AC/24VDC/40A

SITOP PSU6200 24 V/40 A stabilized power supply input: 400 - 500 V AC output: 24 V DC/40 A with diagnostic interface

Input	
type of the power supply network	3-phase AC or DC
supply voltage at AC	
• minimum rated value	400 V
• maximum rated value	500 V
• initial value	323 V
• full-scale value	576 V
input voltage	
• at DC	450 ... 600 V
operating condition of the mains buffering	at $V_{in} = 400\text{ V}$
buffering time for rated value of the output current in the event of power failure minimum	18 ms
operating condition of the mains buffering	at $V_{in} = 400\text{ V}$
line frequency	
• 1 rated value	50 Hz
• 2 rated value	60 Hz
line frequency	47 ... 63 Hz
input current	
• at rated input voltage 400 V	1.5 A
• at rated input voltage 500 V	1.2 A
current limitation of inrush current at 25 °C maximum	10 A
fuse protection type	
• in the feeder	three-poled coupled circuit breaker from 4 A characteristic C to 16 A characteristic C or circuit breaker 3RV2011-1EA10 (setting 4 A) or 3RV2711-1ED10 (UL 489)
Output	
voltage curve at output	Controlled, isolated DC voltage
number of outputs	1
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	0.2 %
• on slow fluctuation of ohm loading	0.1 %
residual ripple	
• maximum	80 mV
• typical	50 mV
voltage peak	
• maximum	80 mV
• typical	30 mV
adjustable output voltage	24 ... 28 V
product function output voltage adjustable	Yes
type of output voltage setting	via potentiometer; max. 960 W (1152 W up to 45°C)
display version for normal operation	Green LED for 24 V OK
type of signal at output	Electronic contact (NO contact, contact rating 30 V DC/0.1 A) for DC O.K. or diagnostic interface
behavior of the output voltage when switching on	Overshoot of $V_{out} < 2\%$
response delay maximum	0.5 s
voltage increase time of the output voltage	
• typical	100 ms

output current	
• rated value	40 A
• rated range	0 ... 40 A; 48 A up to +45°C; +60 ... +70 °C: Derating 3%/K
supplied active power typical	960 W
short-term overload current	
• on short-circuiting during the start-up typical	48 A
• at short-circuit during operation typical	48 A
product feature	
• parallel switching of outputs	can be set with DIP switch
• bridging of equipment	Yes; switchable characteristic
number of parallel-switched equipment resources for increasing the power	2
<b>Efficiency</b>	
efficiency in percent	96 %
power loss [W]	
• at rated output voltage for rated value of the output current typical	40 W
• during no-load operation maximum	4.5 W
<b>Closed-loop control</b>	
relative control precision of the output voltage at load step of resistive load 10/90/10 % typical	2 %
setting time	
• load step 10 to 90% typical	2 ms
• load step 90 to 10% typical	10 ms
• maximum	10 ms
<b>Protection and monitoring</b>	
design of the overvoltage protection	< 32 V
• typical	48 A
property of the output short-circuit proof	Yes
design of short-circuit protection	Shutdown and periodic restart attempts
overcurrent overload capability in normal operation	overload capability 150 % I <sub>out</sub> rated up to 5 s/min
<b>Safety</b>	
galvanic isolation between input and output	Yes
galvanic isolation	Safety extra low output voltage V <sub>out</sub> according to EN 60950-1
operating resource protection class	Class I
leakage current	
• maximum	3.5 mA
protection class IP	IP20
<b>Approvals</b>	
certificate of suitability	
• CE marking	Yes
• UL approval	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1)
• CSA approval	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1)
• cCSAus, Class 1, Division 2	No
• ATEX	No
certificate of suitability	
• IECEx	No
• NEC Class 2	No
• ULhazloc approval	No
• FM registration	No
type of certification CB-certificate	Yes
certificate of suitability	
• EAC approval	Yes
• KC approval	No
• C-Tick	No
• Regulatory Compliance Mark (RCM)	No
certificate of suitability shipbuilding approval	Yes
shipbuilding approval	ABS; in process: DNV
Marine classification association	
• American Bureau of Shipping Europe Ltd. (ABS)	Yes

<ul style="list-style-type: none"> <li>• French marine classification society (BV)</li> </ul>	No
<ul style="list-style-type: none"> <li>• DNV GL</li> </ul>	No
<ul style="list-style-type: none"> <li>• Lloyds Register of Shipping (LRS)</li> </ul>	No
<ul style="list-style-type: none"> <li>• Nippon Kaiji Kyokai (NK)</li> </ul>	No
<b>EMC</b>	
standard	
<ul style="list-style-type: none"> <li>• for emitted interference</li> </ul>	EN 55022 Class B
<ul style="list-style-type: none"> <li>• for mains harmonics limitation</li> </ul>	EN 61000-3-2
<ul style="list-style-type: none"> <li>• for interference immunity</li> </ul>	EN 61000-6-2
<b>environmental conditions</b>	
ambient temperature	
<ul style="list-style-type: none"> <li>• during operation</li> </ul>	-30 ... +70 °C; with natural convection a monotonically increasing start-up from -25 °C, safe start-up from -40 °C
<ul style="list-style-type: none"> <li>• during transport</li> </ul>	-40 ... +85 °C
<ul style="list-style-type: none"> <li>• during storage</li> </ul>	-40 ... +85 °C
environmental category according to IEC 60721	Climate class 3K3, 5 ... 95% no condensation
<b>Mechanics</b>	
type of electrical connection	push-in terminals
<ul style="list-style-type: none"> <li>• at input</li> </ul>	L1, L2, L3, PE: push-in for 0.5 ... 10 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>• at output</li> </ul>	+1, +2, -1, -2, -3: push-in for 0.75 ... 16 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>• for auxiliary contacts</li> </ul>	13, 14 (alarm signal): 1 push-in terminal each for 0.2 ... 1.5 mm <sup>2</sup>
width of the enclosure	95 mm
height of the enclosure	135 mm
depth of the enclosure	155 mm
required spacing	
<ul style="list-style-type: none"> <li>• top</li> </ul>	45 mm
<ul style="list-style-type: none"> <li>• bottom</li> </ul>	45 mm
<ul style="list-style-type: none"> <li>• left</li> </ul>	0 mm
<ul style="list-style-type: none"> <li>• right</li> </ul>	0 mm
net weight	2.1 kg
product feature of the enclosure housing can be lined up	Yes
fastening method	Snaps onto DIN rail EN 60715 35x7.5/15
electrical accessories	Buffer module, redundancy module
mechanical accessories	Identification labels SIMATIC ET 200SP 6ES7193-6LF30-0AW0
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

