



Figure similar

SITOP PSU6200/1AC/DC24V/20A/EX

SITOP PSU6200 Ex 20 A stabilized power supply input: 120/230 V AC output: 24 V DC/20 A with diagnostic interface with painted printed circuit boards

Input	
type of the power supply network	1-phase AC or DC
supply voltage at AC	
• minimum rated value	120 V
• maximum rated value	240 V
• initial value	85 V
• full-scale value	264 V
supply voltage	
• at DC	110 ... 240 V
input voltage	
• at DC	85 ... 275 V
design of input wide range input	Yes
overvoltage overload capability	300 V AC for 30 s
operating condition of the mains buffering	at $V_{in} = 240$ V
buffering time for rated value of the output current in the event of power failure minimum	25 ms
operating condition of the mains buffering	at $V_{in} = 240$ V
line frequency	
• 1 rated value	50 Hz
• 2 rated value	60 Hz
line frequency	47 ... 63 Hz
input current	
• at rated input voltage 120 V	4.3 A
• at rated input voltage 240 V	2.3 A
current limitation of inrush current at 25 °C maximum	12 A
fuse protection type	10 A
• in the feeder	Circuit breaker from 6 A characteristic B to 16 A characteristic C or circuit breaker 3RV2011-1HA10 (setting 8A) or 3RV2711-1HD10 (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	0.2 %
residual ripple	
• maximum	80 mV

<ul style="list-style-type: none"> <li>• typical</li> </ul>	50 mV
voltage peak	
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	100 mV
<ul style="list-style-type: none"> <li>• typical</li> </ul>	60 mV
adjustable output voltage	24 ... 28 V
product function output voltage adjustable	Yes
type of output voltage setting	via potentiometer; max. 480 W (576 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 Vout approx. 3 %
response delay maximum	0.5 s
voltage increase time of the output voltage	
<ul style="list-style-type: none"> <li>• typical</li> </ul>	100 ms
output current	
<ul style="list-style-type: none"> <li>• rated value</li> </ul>	20 A
<ul style="list-style-type: none"> <li>• rated range</li> </ul>	0 ... 20 A; 24 A up to +45°C; +60 ... +70 °C: Derating 3%/K
supplied active power typical	480 W
short-term overload current	
<ul style="list-style-type: none"> <li>• on short-circuiting during the start-up typical</li> </ul>	30 A
<ul style="list-style-type: none"> <li>• at short-circuit during operation typical</li> </ul>	30 A
product feature	
<ul style="list-style-type: none"> <li>• parallel switching of outputs</li> </ul>	can be set with DIP switch
<ul style="list-style-type: none"> <li>• bridging of equipment</li> </ul>	Yes; switchable characteristic
number of parallel-switched equipment resources for increasing the power	2

#### Efficiency

efficiency in percent	95.5 %
power loss [W]	
<ul style="list-style-type: none"> <li>• at rated output voltage for rated value of the output current typical</li> </ul>	25 W
<ul style="list-style-type: none"> <li>• during no-load operation maximum</li> </ul>	2.6 W

#### Closed-loop control

relative control precision of the output voltage at load step of resistive load 10/90/10 % typical	3 %
setting time	
<ul style="list-style-type: none"> <li>• load step 10 to 90% typical</li> </ul>	0.5 ms
<ul style="list-style-type: none"> <li>• load step 90 to 10% typical</li> </ul>	0.5 ms
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	1 ms

#### Protection and monitoring

design of the overvoltage protection	< 32 V
<ul style="list-style-type: none"> <li>• typical</li> </ul>	30 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 % Iout rated up to 5 s/min

#### Safety

galvanic isolation between input and output	Yes
galvanic isolation	Safety extra low output voltage Vout according to EN 60950-1
operating resource protection class	Class I
leakage current	
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	3.5 mA
protection class IP	IP20

#### Approvals

certificate of suitability	
<ul style="list-style-type: none"> <li>• CE marking</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• UL approval</li> </ul>	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259
<ul style="list-style-type: none"> <li>• CSA approval</li> </ul>	Yes; CSA C22.2 No. 62368-1
<ul style="list-style-type: none"> <li>• NEC Class 2</li> </ul>	No
<ul style="list-style-type: none"> <li>• UKCA marking</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Regulatory Compliance Mark (RCM)</li> </ul>	Yes
type of certification	
<ul style="list-style-type: none"> <li>• BIS</li> </ul>	Yes: R-41188271

<ul style="list-style-type: none"> <li>• CB-certificate</li> </ul>	Yes
certificate of suitability	
<ul style="list-style-type: none"> <li>• IECEx</li> </ul>	Yes; IECEx Ex ec nC IIC T3 Gc
<ul style="list-style-type: none"> <li>• ATEX</li> </ul>	Yes; ATEX (EX) II 3G Ex ec nA nC IIC T4 Gc
<ul style="list-style-type: none"> <li>• ULhazloc approval</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• cCSAus, Class 1, Division 2</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• FM registration</li> </ul>	No
certificate of suitability shipbuilding approval	Yes
Marine classification association	
<ul style="list-style-type: none"> <li>• American Bureau of Shipping Europe Ltd. (ABS)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• French marine classification society (BV)</li> </ul>	No
<ul style="list-style-type: none"> <li>• Lloyds Register of Shipping (LRS)</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/N/-, PE: push-in for 0.5 ... 4 mm <sup>2</sup> single-core/finely stranded
<ul style="list-style-type: none"> <li>• at output</li> </ul>	+1, +2, -1, -2, -3: push-in for 0.5 ... 6 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	70 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	1.5 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)

