



SITOP PSU6200/3AC/48VDC/20A

SITOP PSU6200 48 V/20 A stabilized power supply input: 400 - 500 V AC
output: 48 V DC/20 A with diagnostic interface

Input	
type of the power supply network	3-phase AC or DC
supply voltage at AC	
<ul style="list-style-type: none"> • minimum rated value • maximum rated value • initial value • full-scale value 	400 V 500 V 323 V 576 V
input voltage	
<ul style="list-style-type: none"> • at DC 	450 ... 600 V
operating condition of the mains buffering	at $V_{in} = 400$ 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 $V_{in} = 400$ V
line frequency	
<ul style="list-style-type: none"> • 1 rated value • 2 rated value 	50 Hz 60 Hz
line frequency	47 ... 63 Hz
input current	
<ul style="list-style-type: none"> • at rated input voltage 400 V • at rated input voltage 500 V 	1.5 A 1.2 A
current limitation of inrush current at 25 °C maximum	10 A
fuse protection type	
<ul style="list-style-type: none"> • 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	48 V
output voltage	
<ul style="list-style-type: none"> • at output 1 at DC rated value 	48 V
relative overall tolerance of the voltage	3 %
relative control precision of the output voltage	
<ul style="list-style-type: none"> • on slow fluctuation of input voltage • on slow fluctuation of ohm loading 	0.2 % 0.1 %
residual ripple	
<ul style="list-style-type: none"> • maximum • typical 	100 mV 80 mV
voltage peak	
<ul style="list-style-type: none"> • maximum 	80 mV

• typical	30 mV
adjustable output voltage	48 ... 56 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 48 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 $V_{out} < 1\%$
response delay maximum	0.5 s
voltage increase time of the output voltage	
• typical	200 ms
output current	
• rated value	20 A
• rated range	0 ... 20 A; 24 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	30 A
• at short-circuit during operation typical	30 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

Efficiency

efficiency in percent	96.6 %
power loss [W]	
• at rated output voltage for rated value of the output current typical	32 W
• during no-load operation maximum	4.5 W

Closed-loop control

relative control precision of the output voltage at load step of resistive load 10/90/10 % typical	4 %
setting time	
• load step 10 to 90% typical	4 ms
• load step 90 to 10% typical	10 ms
• maximum	10 ms

Protection and monitoring

design of the overvoltage protection	< 60 V
response value current limitation typical	24 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 _{out} rated up to 5 s/min

Safety

galvanic isolation between input and output	Yes
galvanic isolation	Safety extra low output voltage V_{out} according to EN 60950-1
operating resource protection class	Class I
leakage current	
• maximum	3.5 mA
protection class IP	IP20

Approvals

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	No
• 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	No
shipbuilding approval	in process: DNV GL, ABS
Marine classification association	
• American Bureau of Shipping Europe Ltd. (ABS)	No
• French marine classification society (BV)	No
• DNV GL	No
• Lloyds Register of Shipping (LRS)	No
• Nippon Kaiji Kyokai (NK)	No
EMC	
standard	
• for emitted interference	EN 55022 Class B
• for mains harmonics limitation	EN 61000-3-2
• for interference immunity	EN 61000-6-2
environmental conditions	
ambient temperature	
• during operation	-30 ... +70 °C; with natural convection a monotonically increasing start-up from -25 °C, safe start-up from -40 °C
• during transport	-40 ... +85 °C
• during storage	-40 ... +85 °C
environmental category acc. to IEC 60721	Climate class 3K3, 5 ... 95% no condensation
Mechanics	
type of electrical connection	Push-in terminals
• at input	L1, L2, L3, PE: PushIn for 0.5 ... 10 mm ²
• at output	+1, +2, -1, -2, -3: PushIn for 0.75 ... 16 mm ²
• for auxiliary contacts	13, 14 (alarm signal): 1 push-in terminal each for 0.2 ... 1.5 mm ²
width of the enclosure	95 mm
height of the enclosure	135 mm
depth of the enclosure	155 mm
required spacing	
• top	45 mm
• bottom	45 mm
• left	0 mm
• right	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)

