



SITOP PSU6200/3AC/DC48V/10A

SITOP PSU6200 48 V/10 A stabilized power supply input: 400 - 500 V AC  
output: 48 V DC/10 A with diagnostic interface

Input	
Input	3-phase AC or DC
Rated voltage value $V_{in}$ rated	400 ... 500 V
Voltage range AC	323 ... 576 V
input voltage	
• at DC	450 ... 600 V
Mains buffering	at $V_{in} = 400$ V
Mains buffering at $I_{out}$ rated, min.	25 ms; at $V_{in} = 400$ V
Rated line frequency 1	50 Hz
Rated line frequency 2	60 Hz
Rated line range	47 ... 63 Hz
input current	
• at rated input voltage 400 V	0.77 A
• at rated input voltage 500 V	0.62 A
Switch-on current limiting (+25 °C), max.	17 A
Protection in the mains power input (IEC 898)	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	
Output	Controlled, isolated DC voltage
number of outputs	1
Rated voltage $V_{out}$ DC	48 V
• output voltage at output 1 at DC rated value	48 V
Total tolerance, static $\pm$	3 %
Static mains compensation, approx.	0.3 %
Static load balancing, approx.	0.3 %
Residual ripple peak-peak, max.	40 mV
Residual ripple peak-peak, typ.	10 mV
Spikes peak-peak, max. (bandwidth: 20 MHz)	30 mV
Spikes peak-peak, typ. (bandwidth: 20 MHz)	20 mV
Adjustment range	48 ... 56 V
product function output voltage adjustable	Yes
Output voltage setting	via potentiometer; max. 480 W (576 W up to 45°C)
Status display	Green LED for 48 V OK
Signaling	Electronic contact (NO contact, contact rating 30 V DC/0.1 A) for DC O.K. or diagnostic interface
On/off behavior	Overshoot of $V_{out} < 2$ %
Startup delay, max.	0.5 s

Voltage rise, typ.	200 ms
Rated current value I <sub>out</sub> rated	10 A
Current range	0 ... 10 A
• Note	12 A up to +45°C; +60 ... +70 °C: Derating 3%/K
supplied active power typical	480 W
short-term overload current	
• on short-circuiting during the start-up typical	15 A
• at short-circuit during operation typical	15 A
Parallel switching for enhanced performance	Yes; switchable characteristic
Numbers of parallel switchable units for enhanced performance	2
<b>Efficiency</b>	
Efficiency at V <sub>out</sub> rated, I <sub>out</sub> rated, approx.	96.2 %
Power loss at V <sub>out</sub> rated, I <sub>out</sub> rated, approx.	19 W
power loss [W] during no-load operation maximum	3 W
<b>Closed-loop control</b>	
Dynamic load smoothing (I <sub>out</sub> : 10/90/10 %), U <sub>out</sub> ± typ.	3 %
Load step setting time 10 to 90%, typ.	5 ms
Load step setting time 90 to 10%, typ.	5 ms
setting time maximum	5 ms
<b>Protection and monitoring</b>	
Output overvoltage protection	< 60 V
Current limitation, typ.	15 A
property of the output short-circuit proof	Yes
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>	
Primary/secondary isolation	Yes
galvanic isolation	Safety extra low output voltage V <sub>out</sub> according to EN 60950-1
Protection class	Class I
leakage current	
• maximum	3.5 mA
Degree of protection (EN 60529)	IP20
<b>Approvals</b>	
CE mark	Yes
UL/cUL (CSA) approval	cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 62368-1, UL 62368-1)
Explosion protection	-
certificate of suitability NEC Class 2	No
FM approval	-
CB approval	Yes
certificate of suitability EAC approval	Yes
Regulatory Compliance Mark (RCM)	No
Marine approval	in process: DNV GL, ABS
<b>EMC</b>	
Emitted interference	EN 55022 Class B
Supply harmonics limitation	EN 61000-3-2
Noise immunity	EN 61000-6-2
<b>environmental conditions</b>	
ambient temperature	
• during operation	-30 ... +70 °C
— Note	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
Humidity class according to EN 60721	Climate class 3K3, 5 ... 95% no condensation
<b>Mechanics</b>	
Connection technology	Push-in terminals

Connections	
<ul style="list-style-type: none"> <li>• Supply input</li> <li>• Output</li> <li>• Auxiliary</li> </ul>	L1, L2, L3, PE: PushIn for 0.5 ... 10 mm <sup>2</sup> +1, +2, -1, -2, -3: PushIn for 0.5 ... 6 mm <sup>2</sup> 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> <li>• bottom</li> <li>• left</li> <li>• right</li> </ul>	45 mm 45 mm 0 mm 0 mm
Weight, approx.	1.5 kg
product feature of the enclosure housing can be lined up	Yes
Installation	Snaps onto DIN rail EN 60715 35x7.5/15
electrical accessories	Redundancy module
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

