



SITOP PSU6200/3AC/DC48V/5A

SITOP PSU6200 48 V/5 A Stabilized power supply Input: 400 - 500 V AC
Output: 48 V DC/5 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	30 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	0.39 A
• at rated input voltage 500 V	0.31 A
current limitation of inrush current at 25 °C maximum	12 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	48 V
output voltage	
• at output 1 at DC rated value	48 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	40 mV
• typical	10 mV
voltage peak	
• maximum	40 mV
• typical	10 mV
adjustable output voltage	48 ... 56 V

product function output voltage adjustable	Yes
type of output voltage setting	via potentiometer; max. 240 W (288 W up to 45°C); max. 240 W (288 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 $V_{out} < 2\%$
response delay maximum	0.5 s
voltage increase time of the output voltage	
• typical	200 ms
output current	
• rated value	5 A
• rated range	0 ... 5 A; 6 A up to +45°C; +60 ... +70 °C: Derating 3%/K
supplied active power typical	240 W
short-term overload current	
• on short-circuiting during the start-up typical	7.5 A
• at short-circuit during operation typical	7.5 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	95.6 %
power loss [W]	
• at rated output voltage for rated value of the output current typical	11 W
• during no-load operation maximum	2.9 W

Closed-loop control

relative control precision of the output voltage at load step of resistive load 10/90/10 % typical	1 %
setting time	
• load step 10 to 90% typical	5 ms
• load step 90 to 10% typical	5 ms
• maximum	5 ms

Protection and monitoring

design of the overvoltage protection	< 60 V
• typical	7.5 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	Yes
• CE marking	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 62368-1, UL 62368-1)
• UL approval	
• CSA approval	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 62368-1, UL 62368-1)
• 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	

<ul style="list-style-type: none"> • EAC approval 	Yes
<ul style="list-style-type: none"> • C-Tick 	No
<ul style="list-style-type: none"> • Regulatory Compliance Mark (RCM) 	No
certificate of suitability shipbuilding approval	Yes
shipbuilding approval	ABS; in process: DNV
Marine classification association	
<ul style="list-style-type: none"> • American Bureau of Shipping Europe Ltd. (ABS) 	Yes
<ul style="list-style-type: none"> • French marine classification society (BV) 	No
<ul style="list-style-type: none"> • DNV GL 	No
<ul style="list-style-type: none"> • Lloyds Register of Shipping (LRS) 	No
<ul style="list-style-type: none"> • Nippon Kaiji Kyokai (NK) 	No

EMC

standard	
<ul style="list-style-type: none"> • for emitted interference 	EN 55022 Class B
<ul style="list-style-type: none"> • for mains harmonics limitation 	EN 61000-3-2
<ul style="list-style-type: none"> • for interference immunity 	EN 61000-6-2

environmental conditions

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

Mechanics

type of electrical connection	Push-in terminals
<ul style="list-style-type: none"> • at input 	L1, L2, L3, PE: PushIn for 0.5 ... 6 mm ²
<ul style="list-style-type: none"> • at output 	+1, +2, -1, -2, -3: PushIn for 0.5 ... 2.5 mm ²
<ul style="list-style-type: none"> • for auxiliary contacts 	13, 14 (alarm signal): 1 push-in terminal each for 0.2 ... 1.5 mm ²
width of the enclosure	45 mm
height of the enclosure	135 mm
depth of the enclosure	155 mm
required spacing	
<ul style="list-style-type: none"> • top 	45 mm
<ul style="list-style-type: none"> • bottom 	45 mm
<ul style="list-style-type: none"> • left 	0 mm
<ul style="list-style-type: none"> • right 	0 mm
net weight	0.9 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	Redundancy module
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

