



SITOP PSU6200/1AC/DC48V/10A

SITOP PSU6200 48 V/10 A stabilized power supply input: 120/230 V AC
output: 48 V DC/10 A with diagnostic interface

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 $V_{in} = 240\text{ V}$
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 $V_{in} = 240\text{ V}$
line frequency	
• 1 rated value	50 Hz
• 2 rated value	60 Hz
line frequency	47 ... 63 Hz
input current	
• at rated input voltage 120 V	4.3 A
• at rated input voltage 240 V	2.3 A
current limitation of inrush current at 25 °C maximum	11 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	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	0.3 %
• on slow fluctuation of ohm loading	0.2 %
residual ripple	
• maximum	70 mV
• typical	20 mV

voltage peak	
• maximum	40 mV
• typical	20 mV
adjustable output voltage	48 ... 56 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 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	10 A
• rated range	0 ... 10 A; 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
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	95.8 %
power loss [W]	
• at rated output voltage for rated value of the output current typical	21 W
• during no-load operation maximum	2.5 W

Closed-loop control

relative control precision of the output voltage at load step of resistive load 10/90/10 % typical	3 %
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	15 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	
• EAC approval	Yes
• 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
• 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 according to IEC 60721	Climate class 3K3, 5 ... 95% no condensation

Mechanics

type of electrical connection	Push-in terminals
• at input	L1/+, L2/N/-, PE: PushIn for 0.5 ... 4 mm ² single-core/finely stranded
• at output	+1, +2, -1, -2, -3: PushIn for 0.5 ... 6 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	70 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	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	Redundancy module
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

