



Figure similar

SITOP PSU6200/1AC/DC24V/10A/EX

SITOP PSU6200 Ex 24 V/10 A stabilized power supply input: 120/230 V AC output: 24 V / 10 A DC 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 $V_{in} = 240\text{ V}$
buffering time for rated value of the output current in the event of power failure minimum	45 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	2.2 A
• at rated input voltage 240 V	1.2 A
current limitation of inrush current at 25 °C maximum	6 A
fuse protection type	5 A
• in the feeder	Circuit breaker from 4 A characteristic C/6 A characteristic B to 10 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	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	0.1 %
• on slow fluctuation of ohm loading	0.1 %
residual ripple	
• maximum	30 mV

<ul style="list-style-type: none"> • typical 	20 mV
voltage peak	
<ul style="list-style-type: none"> • maximum • typical 	30 mV 20 mV
adjustable output voltage	24 ... 28 V
product function output voltage adjustable	Yes
type of output voltage setting	via potentiometer; max. 240 W (288 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 $V_{out} < 2\%$
response delay maximum	0.5 s
voltage increase time of the output voltage	
<ul style="list-style-type: none"> • typical 	200 ms
output current	
<ul style="list-style-type: none"> • rated value • rated range 	10 A 0 ... 10 A; 12 A up to +45°C; +60 ... +70 °C: Derating 3%/K
supplied active power typical	240 W
short-term overload current	
<ul style="list-style-type: none"> • on short-circuiting during the start-up typical • at short-circuit during operation typical 	12 A 12 A
product feature	
<ul style="list-style-type: none"> • parallel switching of outputs • bridging of equipment 	can be set with DIP switch Yes; switchable characteristic
number of parallel-switched equipment resources for increasing the power	2

Efficiency

efficiency in percent	92.8 %
power loss [W]	
<ul style="list-style-type: none"> • at rated output voltage for rated value of the output current typical • during no-load operation maximum 	18 W 2.2 W

Closed-loop control

relative control precision of the output voltage at load step of resistive load 10/90/10 % typical	2 %
setting time	
<ul style="list-style-type: none"> • load step 10 to 90% typical • load step 90 to 10% typical • maximum 	2 ms 2 ms 3 ms

Protection and monitoring

design of the overvoltage protection	< 32 V
<ul style="list-style-type: none"> • typical 	12 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	
<ul style="list-style-type: none"> • maximum 	3.5 mA
protection class IP	IP20

Approvals

certificate of suitability	Yes
<ul style="list-style-type: none"> • CE marking • UL approval • CSA approval • cCSAus, Class 1, Division 2 • ATEX 	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1) No Yes; ATEX (EX) II 3G Ex ec nC IIC T3 Gc
certificate of suitability	
<ul style="list-style-type: none"> • relating to ATEX • IECEx 	IECEx Ex ec nC IIC T3 Gc; ATEX (EX) II 3G Ex ec nC IIC T3 Gc Yes; IECEx Ex ec nC IIC T3 Gc

• NEC Class 2	No
• ULhazloc approval	No
• FM registration	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 ... 2.5 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	45 mm
height of the enclosure	135 mm
depth of the enclosure	125 mm
required spacing	
• top	45 mm
• bottom	45 mm
• left	0 mm
• 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	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)

