



Figure similar

SITOP PSU200M/1-2AC/24VDC/10A/CO

SITOP PSU200M plus 10 A Stabilized power supply input: AC 120-230/230-500 V output: DC 24 V/10 A Option for with protective varnish

Input

type of the power supply network	1-phase and 2-phase AC
supply voltage at AC	Set by means of selector switch on the device
• initial value	
supply voltage	
• 1 at AC	120 ... 230 V
• 2 at AC	230 ... 500 V
input voltage	
• 1 at AC	85 ... 264 V
• 2 at AC	176 ... 550 V
design of input wide range input	Yes
overvoltage overload capability	1300 Vpeak, 1.3 ms
operating condition of the mains buffering	at Vin = 120/230 V, typ. 150 ms at Vin = 400 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 Vin = 120/230 V, typ. 150 ms at Vin = 400 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	4.4 A
• at rated input voltage 230 V	2.4 A
• at rated input voltage 500 V	1.1 A
current limitation of inrush current at 25 °C maximum	35 A
I _{2t} value maximum	4 A ² ·s
fuse protection type	T 6.3 A (not accessible)
• in the feeder	Recommended miniature circuit breaker at 1-phase operation: from 6 A (10 A) characteristic C (B); required at 2-phase operation: circuit breaker 2-pole connected or circuit breaker 3RV2011-1EA10 (setting 3.8 A) or 3RV2711-1ED10 (UL 489) at 230 V; 3RV2011-1DA10 (setting 3 A) or 3RV2711-1DD10 (UL 489) at 400/500 V

Output

voltage curve at output	Controlled, isolated DC voltage
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 voltage peak	50 mV
• maximum adjustable output voltage	200 mV
product function output voltage adjustable	24 ... 28.8 V
type of output voltage setting	Yes
display version for normal operation	via potentiometer
type of signal at output	Green LED for 24 V OK
behavior of the output voltage when switching on	Relay contact (NO contact, rating 60 V DC/ 0.3 A) for "24 V OK"
response delay maximum	Overshoot of Vout approx. 3 %
voltage increase time of the output voltage	1 s
• typical	
output current	50 ms
• rated value	
• rated range	
supplied active power typical	10 A
short-term overload current	0 ... 10 A; +60 ... +70 °C: Derating 2%/K (at 120 V, 230 V) or 3.5%/K (at 400 V)
• at short-circuit during operation typical	240 W
duration of overloading capability for excess current	
• at short-circuit during operation	30 A
constant overload current	25 ms
• on short-circuiting during the start-up typical	
product feature	12 A
• bridging of equipment	
number of parallel-switched equipment resources for increasing the power	Yes; switchable characteristic
	2

Efficiency

efficiency in percent	91 %
power loss [W]	
• at rated output voltage for rated value of the output current typical	24 W
• during no-load operation maximum	6 W

Closed-loop control

relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical	0.1 %
relative control precision of the output voltage load step of resistive load 50/100/50 % typical	3 %
setting time	
• load step 50 to 100% typical	2 ms
• load step 100 to 50% typical	2 ms
setting time	
• maximum	5 ms

Protection and monitoring

design of the overvoltage protection	< 35 V
• typical	12 A
property of the output short-circuit proof	Yes
design of short-circuit protection	Alternatively, constant current characteristic approx. 12 A or latching shutdown
enduring short circuit current RMS value	12 A
• typical	
display version for overload and short circuit	LED yellow for "overload", LED red for "latching shutdown"

Safety

galvanic isolation between input and output	Yes
galvanic isolation	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178
operating resource protection class	Class I
leakage current	
• maximum	3.5 mA
• typical	0.32 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

• CSA approval	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259
• 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	No
certificate of suitability	
• EAC approval	Yes
certificate of suitability shipbuilding approval	Yes
shipbuilding approval	ABS, DNV GL
Marine classification association	
• American Bureau of Shipping Europe Ltd. (ABS)	Yes
• French marine classification society (BV)	No
• DNV GL	Yes
• 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	-25 ... +70 °C; with natural convection
• 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	screw-type terminals
• at input	L, N, PE: 1 screw terminal each for 0.2 ... 2.5 mm ² single-core/finely stranded
• at output	+, -: 2 screw terminals each for 0.2 ... 2.5 mm ²
• for auxiliary contacts	13, 14 (alarm signal): 1 screw terminal each for 0.14 ... 1.5 mm ²
width of the enclosure	70 mm
height of the enclosure	125 mm
depth of the enclosure	121 mm
required spacing	
• top	50 mm
• bottom	50 mm
• left	0 mm
• right	0 mm
net weight	0.8 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
MTBF at 40 °C	1 055 408 h
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

