

SITOP PSU100P 24 V/8 A IP67
SITOP PSU100P IP67 STABILIZED POWER SUPPLY INPUT:
120/230 V AC OUTPUT: 24 V DC/8 A



Input	
Input	1-phase AC
Supply voltage	
• 1 at AC Rated value	120 V
• 2 at AC Rated value	230 V
• Note	Automatic range selection
Input voltage	
• 1 at AC	85 ... 132 V
• 2 at AC	170 ... 264 V
Wide-range input	No
Overvoltage resistance	Implemented internally with varistor
Mains buffering at lout rated, min.	40 ms; at Vin = 120/230 V
Rated line frequency	50 ... 60 Hz
Rated line range	47 ... 63 Hz
Input current	
• at rated input voltage 120 V	3.5 A
• at rated input voltage 230 V	1.52 A
Switch-on current limiting (+25 °C), max.	15 A
I²t, max.	0.6 A²·s

Built-in incoming fuse	T 6.3 A
Protection in the mains power input (IEC 898)	Recommended miniature circuit breaker: from 6 A characteristic C/B

Output	
Output	Controlled, isolated DC voltage
Rated voltage V_{out} DC	24 V
Total tolerance, static $\pm$	3 %
Static mains compensation, approx.	0.1 %
Static load balancing, approx.	0.2 %
Residual ripple peak-peak, max.	50 mV
Spikes peak-peak, max. (bandwidth: 20 MHz)	100 mV
Product function Output voltage adjustable	No
Status display	Green LED: 24 V OK; red LED flashing: "overload/short-circuit"
Signaling	Relay contact (NO contact, rating 30 V AC/ 0.5 A; 30 V DC/1 A) for 24 V OK
On/off behavior	Overshoot of $V_{out} < 3$ %
Startup delay, max.	1.5 s
Voltage rise, typ.	23 ms
Voltage increase time of the output voltage maximum	100 ms
Rated current value I_{out} rated	8 A
Current range	0 ... 8 A
Active power supplied typical	206 W
Short-term overload current	
• on short-circuiting during the start-up typical	30 A
• at short-circuit during operation typical	30 A
Duration of overloading capability for excess current	
• on short-circuiting during the start-up	50 ms
• at short-circuit during operation	50 ms
Parallel switching for enhanced performance	Yes; Symmetric wiring required
Numbers of parallel switchable units for enhanced performance	2

Efficiency	
Efficiency at V_{out} rated, I_{out} rated, approx.	93.6 %
Power loss at V_{out} rated, I_{out} rated, approx.	13.1 W

Closed-loop control	
Dynamic mains compensation (V_{in} rated ± 15 %), max.	0.2 %
Dynamic load smoothing (I_{out} : 50/100/50 %), $U_{out} \pm$ typ.	1 %
Setting time maximum	2 ms

Protection and monitoring	
Output overvoltage protection	< 29 V

Current limitation, typ.	9 A
Property of the output Short-circuit proof	Yes
Short-circuit protection	Electronic shutdown, automatic restart
Enduring short circuit current RMS value	
• maximum	9 A
• typical	8 A
Overload/short-circuit indicator	Red LED flashing for "overload/short-circuit"

Safety

Primary/secondary isolation	Yes
Galvanic isolation	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178
Protection class	Class I
Leakage current	
• maximum	3.5 mA
• typical	1 mA
CE mark	Yes
UL/CSA approval	Yes
UL/cUL (CSA) approval	cULus-Listed (UL 508, CSA C22.2 No. 107.1)
Explosion protection	No
Certificate of suitability IECEx	No
Certificate of suitability NEC Class 2	No
FM approval	-
CB approval	No
Marine approval	No
Degree of protection (EN 60529)	IP67, enclosure type 4 indoor

EMC

Emitted interference	EN 55022 Class B
Supply harmonics limitation	EN 61000-3-2
Noise immunity	EN 61000-6-2

Operating data

Ambient temperature	
• during operation	-25 ... +60 °C
— Note	with natural convection
• during transport	-40 ... +85 °C
• during storage	-40 ... +85 °C
Humidity class according to EN 60721	3K6 without direct sunlight

Mechanics

Connection technology	screw-type terminals
Connections	
• Supply input	L1, N, PE: Plug connector 7/8" (counterpart see "Operating Instructions (compact)")

• Output	+ , - : Plug connector 7/8" (counterpart see "Operating Instructions (compact)")
• Auxiliary	Alarm signals: M12 plug-in connector 4-pin
Product function	
• removable terminal at input	Yes
• removable terminal at output	Yes
Width of the enclosure	120 mm
Height of the enclosure	181 mm
Depth of the enclosure	60.5 mm
Weight, approx.	1.3 kg
Product property of the enclosure housing for side-by-side mounting	Yes
Installation	Wall mounting
Other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)