

SITOP PSU100P 24 V/5 A IP67

SITOP PSU100P IP67 Stabilized power supply input: 120/230 V AC, output: 24 V DC/5 A



Input	
Input	1-phase AC
Supply voltage	
<ul style="list-style-type: none"> <li>• 1 at AC Rated value</li> <li>• 2 at AC Rated value</li> <li>• Note</li> </ul>	120 V 230 V Automatic range selection
Input voltage	
<ul style="list-style-type: none"> <li>• 1 at AC</li> <li>• 2 at AC</li> </ul>	85 ... 132 V 170 ... 264 V
Wide-range input	No
Overvoltage resistance	Implemented internally with varistor
Mains buffering at I <sub>out</sub> rated, min.	40 ms; at V <sub>in</sub> = 120/230 V
Rated line frequency 1	50 Hz
Rated line frequency 2	60 Hz
Rated line range	47 ... 63 Hz
Input current	
<ul style="list-style-type: none"> <li>• at rated input voltage 120 V</li> <li>• at rated input voltage 230 V</li> </ul>	2.25 A 1.24 A
Switch-on current limiting (+25 °C), max.	15 A

I <sup>2</sup> t, max.	0.6 A <sup>2</sup> ·s
Built-in incoming fuse	T 3.15 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 <sub>out</sub> DC	24 V
Total tolerance, static ±	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 <sub>out</sub> < 3 %
Startup delay, max.	1.5 s
Voltage rise, typ.	22 ms
Voltage increase time of the output voltage maximum	100 ms
Rated current value I <sub>out</sub> rated	5 A
Current range	0 ... 5 A
Supplied active power typical	133 W
Short-term overload current	
• on short-circuiting during the start-up typical	20 A
• at short-circuit during operation typical	20 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 <sub>out</sub> rated, I <sub>out</sub> rated, approx.	90 %
Power loss at V <sub>out</sub> rated, I <sub>out</sub> rated, approx.	12.9 W

### Closed-loop control

Dynamic mains compensation (V <sub>in</sub> rated ±15 %), max.	0.2 %
Dynamic load smoothing (I <sub>out</sub> : 50/100/50 %), U <sub>out</sub> ± typ.	1 %
Setting time maximum	2 ms

### Protection and monitoring

Output overvoltage protection	< 29 V
Current limitation, typ.	5.5 A
Property of the output Short-circuit proof	Yes
Short-circuit protection	Electronic shutdown, automatic restart
Enduring short circuit current RMS value	
• maximum	6 A
• typical	5 A
Overload/short-circuit indicator	Red LED flashing for "overload/short-circuit"

## Safety

Primary/secondary isolation	Yes
Galvanic isolation	Safety extra-low output voltage U <sub>out</sub> 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/cUL (CSA) approval	cULus-Listed (UL 508, CSA C22.2 No. 107.1)
Explosion protection	No
FM approval	-
CB approval	No
Marine approval	No
Degree of protection (EN 60529)	IP67, enclosure type 5 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
Required spacing	
• top	50 mm
• bottom	0 mm
• left	0 mm
• right	0 mm
Weight, approx.	1.1 kg
Product feature of the enclosure housing for side-by-side mounting	Yes
Installation	Wall mounting
MTBF at 40 °C	1 500 000 h
Other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)