

SITOP POWER 24 V/20 A

SITOP power 20 stabilized power supply input: 120/230 V AC output: 24 V DC/20 A



Figure similar

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 Set by means of wire jumper on the device
Input voltage	
<ul style="list-style-type: none"> <li>• 1 at AC</li> <li>• 2 at AC</li> </ul>	93 ... 132 V 187 ... 264 V
Wide-range input	No
Overvoltage resistance	$2.3 \times V_{in}$ rated, 1.3 ms
Mains buffering at I <sub>out</sub> rated, min.	10 ms; at $V_{in} = 93/187$ 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> </ul>	8 A

• at rated input voltage 230 V	3.3 A
Switch-on current limiting (+25 °C), max.	81 A
I <sup>2</sup> t, max.	8 A <sup>2</sup> ·s
Built-in incoming fuse	T 10 A (not accessible)
Protection in the mains power input (IEC 898)	Recommended miniature circuit breaker: from 16 A characteristic C

### Output

Output	Controlled, isolated DC voltage
Rated voltage V <sub>out</sub> DC	24 V
Total tolerance, static ±	3 %
Residual ripple peak-peak, max.	150 mV
Spikes peak-peak, max. (bandwidth: 20 MHz)	240 mV
Adjustment range	22.8 ... 26.4 V
Product function Output voltage adjustable	Yes
Output voltage setting	via potentiometer; only permissible at ambient temperature 0 °C to +45 °C
Status display	Green LED for 24 V OK
On/off behavior	No overshoot of V <sub>out</sub> (soft start)
Startup delay, max.	3 s
Voltage rise, typ.	80 ms
Rated current value I <sub>out</sub> rated	20 A
Current range	0 ... 20 A
Supplied active power typical	480 W
Constant overload current	
• on short-circuiting during the start-up typical	20 A
• at short-circuit during operation typical	20 A
Parallel switching for enhanced performance	Yes
Numbers of parallel switchable units for enhanced performance	2

### Efficiency

Efficiency at V <sub>out</sub> rated, I <sub>out</sub> rated, approx.	87 %
Power loss at V <sub>out</sub> rated, I <sub>out</sub> rated, approx.	72 W

### Protection and monitoring

Output overvoltage protection	Yes, according to EN 60950
Current limitation, typ.	22 A
Property of the output Short-circuit proof	Yes
Short-circuit protection	Constant current characteristic
Enduring short circuit current RMS value	
• maximum	22 A
Overload/short-circuit indicator	-

### Safety

Primary/secondary isolation	Yes
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Galvanic isolation	Safety extra low output voltage $V_{out}$ according to EN 60950-1
Protection class	Class I
Leakage current	
• maximum	3.5 mA
CE mark	Yes
UL/cUL (CSA) approval	UL-Listed (UL 508), File E143289, CSA (CSA 22.2 No. 14-95)
Explosion protection	-
FM approval	-
CB approval	No
Marine approval	-
Degree of protection (EN 60529)	IP20

## 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	0 ... 55 °C
— Note	with natural convection
• during transport	-25 ... +85 °C
• during storage	-25 ... +85 °C
Humidity class according to EN 60721	Climate class 3K3, no condensation

## Mechanics

Connection technology	screw-type terminals
Connections	
• Supply input	L, N, PE: 1 screw terminal each for 0.5 ... 2.5 mm <sup>2</sup> single-core/finely stranded
• Output	L+: 1 screw terminal for 0.33 ... 10 mm <sup>2</sup> ; M: 2 screw terminals for 0.33 ... 10 mm <sup>2</sup>
• Auxiliary	-
Width of the enclosure	280 mm
Height of the enclosure	125 mm
Depth of the enclosure	92 mm
Required spacing	
• top	50 mm
• bottom	50 mm
• left	40 mm
• right	0 mm
Weight, approx.	2.4 kg
Product feature of the enclosure housing for side-by-side mounting	No
Installation	Snaps onto DIN rail EN 60715 35x7.5/15

Mechanical accessories	Mounting bracket 90° (6EP1971-2BA00)
MTBF at 40 °C	851 093 h
Other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)