

SITOP POWER DC/DC 24 V/0.375 A  
 SITOP POWER 0.375 A, DC/DC STABILIZED POWER SUPPLY  
 INPUT: 48-220 V DC OUTPUT: 24 V DC/0.375 A



Figure similar

Input	
Input	DC voltage
Supply voltage	
• at DC	48 ... 220 V
Voltage range AC	30 ... 187 V
Input voltage	
• at DC	30 ... 264 V
Wide-range input	Yes
Overvoltage resistance	-
Mains buffering at I <sub>out</sub> rated, min.	10 ms; at V <sub>in</sub> = 220 V
Input current	
• at rated input voltage 48 V	0.3 A
• at rated input voltage 220 V	0.06 A
Switch-on current limiting (+25 °C), max.	35 A
Duration of inrush current limiting at 25 °C	
• typical	3 ms
I <sup>2</sup> t, max.	1.2 A <sup>2</sup> ·s
Built-in incoming fuse	F 4 A/250 V (not accessible)

Protection in the mains power input (IEC 898)	Recommended miniature circuit breaker: from 6 A characteristic C, suitable for DC
<b>Output</b>	
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.	0.1 %
Residual ripple peak-peak, max.	150 mV
Residual ripple peak-peak, typ.	50 mV
Spikes peak-peak, max. (bandwidth: 20 MHz)	240 mV
Spikes peak-peak, typ. (bandwidth: 20 MHz)	50 mV
Product function Output voltage adjustable	No
Output voltage setting	-
Status display	Green LED for 24 V OK
On/off behavior	No overshoot of $V_{out}$ (soft start)
Startup delay, max.	2.5 s
Voltage rise, typ.	90 ms
Rated current value $I_{out}$ rated	0.375 A
Current range	0 ... 0.375 A
• Note	+60 ... +70 °C: Derating 3%/K
Active power supplied typical	9 W
Short-term overload current	
• at short-circuit during operation typical	2.7 A
Duration of overloading capability for excess current	
• at short-circuit during operation	200 ms
Parallel switching for enhanced performance	No
<b>Efficiency</b>	
Efficiency at $V_{out}$ rated, $I_{out}$ rated, approx.	66 %
Power loss at $V_{out}$ rated, $I_{out}$ rated, approx.	4.6 W
<b>Closed-loop control</b>	
Dynamic mains compensation ( $V_{in}$ rated $\pm 15$ %), max.	0.3 %
Dynamic load smoothing ( $I_{out}$ : 50/100/50 %), $U_{out} \pm$ typ.	0.4 %
Load step setting time 50 to 100%, typ.	2 ms
Load step setting time 100 to 50%, typ.	2 ms
<b>Protection and monitoring</b>	
Output overvoltage protection	Yes, according to EN 60950-1
Current limitation	0.41 ... 0.49 A
Property of the output Short-circuit proof	Yes
Short-circuit protection	Electronic shutdown, automatic restart

Enduring short circuit current RMS value	
• maximum	0.9 A
Overload/short-circuit indicator	-

### 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
CE mark	Yes
UL/CSA approval	Yes
UL/cUL (CSA) approval	cULus-Listed (UL 508, CSA C22.2 No. 142), File E143289, cURus-Recognized (UL 60950, CSA C22.2 No. 60950), File E151273
Explosion protection	-
Certificate of suitability IECEx	No
Certificate of suitability NEC Class 2	No
FM approval	-
CB approval	No
Marine approval	-
Degree of protection (EN 60529)	IP20

### EMC

Emitted interference	EN 55022 Class B
Supply harmonics limitation	not applicable
Noise immunity	EN 61000-6-2

### Operating data

Ambient temperature	
• during operation	-25 ... +70 °C
— Note	with natural convection
• during transport	-40 ... +70 °C
• during storage	-40 ... +70 °C
Humidity class according to EN 60721	Climate class 3K3, no condensation

### Mechanics

Connection technology	screw-type terminals
Connections	
• Supply input	L+1, M1, PE: 1 screw terminal each for 0.5 ... 2.5 mm <sup>2</sup> single-core/finely stranded
• Output	+: 1 screw terminal for 0.5 ... 2.5 mm <sup>2</sup> ; -: 2 screw terminals for 0.5 ... 2.5 mm <sup>2</sup>
• Auxiliary	-
Width of the enclosure	22.5 mm

Height of the enclosure	80 mm
Depth of the enclosure	91 mm
Weight, approx.	0.14 kg
Product feature of the enclosure housing for side-by-side mounting	Yes
Installation	Snaps onto DIN rail EN 60715 35x7.5/15
MTBF at 40 °C	1 466 123 h
Other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)