SIEMENS

Data sheet

6EP1731-2BA00



Figure similar

SITOP power 0.375 A, DC/DC Stabilized power supply input: 48-220V DC output: DC 24 V/0,375 A

Input	
Input	DC voltage
Voltage range AC	30 187 V
supply voltage	
• at DC	48 220 V
input voltage	
• at DC	30 264 V
Wide-range input	Yes
Overvoltage resistance	-
Mains buffering	at Vin = 220 V
Mains buffering at lout rated, min.	10 ms; at Vin = 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
l²t, max.	1.2 A ^{2.} 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
Output	
Output	Controlled, isolated DC voltage
Rated voltage Vout DC	24 V
Total tolerance, static ±	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

SITOP POWER/DC/DC/48-220V/24V/0.375A

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On/off behavior	No overshoot of Vout (soft start)
Startup delay, max.	2.5 s
Voltage rise, typ.	90 ms
Rated current value lout rated	0.375 A
Current range	0 0.375 A
Note	+60 +70 °C: Derating 3%/K
supplied active power 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
Efficiency	
Efficiency at Vout rated, lout rated, approx.	66 %
Power loss at Vout rated, lout rated, approx.	4.6 W
Closed-loop control	
Dynamic mains compensation (Vin rated ±15 %), max.	0.3 %
Dynamic load smoothing (lout: 50/100/50 %), Uout ± typ.	0.4 %
Load step setting time 50 to 100%, typ.	2 ms
Load step setting time 100 to 50%, typ.	2 ms
Protection and monitoring	
Output overvoltage protection	Yes, according to EN 60950-1
Current limitation	0.41 0.49 A
	Yes
property of the output short-circuit proof	Electronic shutdown, automatic restart
Short-circuit protection	
enduring short circuit current RMS value	0.0.4
maximum Overload/short-circuit indicator	0.9 A
	•
Safety	N
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	0.5
maximum	3.5 mA
Degree of protection (EN 60529)	IP20
Approvals	
CE mark	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	Recognized (OE 00300, CSA C22.2 No. 00350), The E131275
certificate of suitability NEC Class 2	 No
	-
FM approval	 No
CB approval	-
Marine approval	•
EMC	
Emitted interference	EN 55022 Class B
Supply harmonics limitation	not applicable
Noise immunity	EN 61000-6-2
environmental conditions	
ambient temperature	
during operation	-25 +70 °C
	with natural convection
 during operation — Note during transport 	with natural convection -40 +70 °C
 during operation Note during transport during storage 	with natural convection -40 +70 °C -40 +70 °C
 during operation — Note during transport 	with natural convection -40 +70 °C
 during operation Note during transport during storage 	with natural convection -40 +70 °C -40 +70 °C
during operation — Note during transport during storage Humidity class according to EN 60721	with natural convection -40 +70 °C -40 +70 °C

Connections	
Supply input	L+1, M1, PE: 1 screw terminal each for 0.5 2.5 mm ² single-core/finely stranded
• Output	+: 1 screw terminal for 0.5 2.5 mm²; -: 2 screw terminals for 0.5 2.5 $\rm mm^2$
Auxiliary	-
width of the enclosure	22.5 mm
height of the enclosure	80 mm
depth of the enclosure	91 mm
required spacing	
• top	50 mm
bottom	50 mm
• left	0 mm
● right	0 mm
Weight, approx.	0.14 kg
product feature of the enclosure housing can be lined up	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)

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