SIEMENS

Data sheet 6EP1731-2BA00



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

Figure similar

Technical specifications		
Product	SITOP power	
Power supply, type	24 V/0.375 A	
Input		
Input	DC voltage	

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Input	DC voltage
Supply voltage for DC	48 220 V
Voltage range AC	30 187 V
Input voltage for DC	30 264 V
Wide-range input	Yes
Overvoltage resistance	-
Mains buffering at lout rated, min.	10 ms; at Vin = 220 V
Input current at rated input voltage 48 V Rated value	0.3 A
Input current at rated input voltage 220 V Rated value	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 A²·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
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
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
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 %),	0.3 %
max.	
Dynamic load smoothing (lout: 50/100/50 %), Uout ±	0.4 %
typ.	
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
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 Uout 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
Ambient temperature during transport	-40 +70 °C
Ambient temperature 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 mm² single-core/finely stranded
Connections Output	+: 1 screw terminal for 0.5 2.5 mm ² ; -: 2 screw terminals for 0.5 2.5 mm ²
Connections 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 property of the enclosure housing for side- by-side mounting	Yes
Installation	Snaps onto DIN rail EN 60715 35x7.5/15
Other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)