SIEMENS

Data sheet 6EP1731-2BA00



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

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

Figure similar

Input	
type of the power supply network	DC voltage
supply voltage at AC	
initial value	30 V
full-scale value	187 V
supply voltage	
at DC	48 220 V
input voltage	
at DC	30 264 V
design of input wide range input	Yes
overvoltage overload capability	
operating condition of the mains buffering	at Vin = 220 V
buffering time for rated value of the output current in the event of power failure minimum	10 ms
operating condition of the mains buffering	at Vin = 220 V
input current	
 at rated input voltage 48 V 	0.3 A
at rated input voltage 220 V	0.06 A
current limitation of inrush current at 25 °C maximum	35 A
duration of inrush current limiting at 25 °C	
• typical	3 ms
I2t value maximum	1.2 A ² ·s
fuse protection type	F 4 A/250 V (not accessible)
• in the feeder	Recommended miniature circuit breaker: from 6 A characteristic C, suitable for DC
Output	
voltage curve at output	Controlled, isolated DC voltage
output voltage at DC rated value	24 V
output voltage	
at output 1 at DC rated value	24 V
relative overall tolerance of the voltage	3 %
relative control precision of the output voltage	
 on slow fluctuation of input voltage 	0.1 %
on slow fluctuation of ohm loading	0.1 %
residual ripple	
• maximum	150 mV
typical	50 mV
voltage peak	
• maximum	240 mV

• typical	50 mV
product function output voltage adjustable	No
type of output voltage setting	INU
display version for normal operation	Green LED for 24 V OK
behavior of the output voltage when switching on	No overshoot of Vout (soft start)
response delay maximum	2.5 s
voltage increase time of the output voltage	00
• typical	90 ms
output current	
rated value	0.375 A
rated range	0 0.375 A; +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
product feature	
 bridging of equipment 	No
Efficiency	
efficiency in percent	66 %
power loss [W]	
at rated output voltage for rated value of the output	4.6 W
current typical	
Closed-loop control	
relative control precision of the output voltage with rapid	0.3 %
fluctuation of the input voltage by +/- 15% typical	
relative control precision of the output voltage load step of resistive load 50/100/50 % typical	0.4 %
setting time	
load step 50 to 100% typical	2 ms
 load step 100 to 50% typical 	2 ms
Protection and monitoring	
design of the overvoltage protection	Yes, according to EN 60950-1
response value current limitation	0.41 0.49 A
property of the output short-circuit proof	Yes
design of short-circuit protection	Electronic shutdown, automatic restart
enduring short circuit current RMS value	
• maximum	0.9 A
display version for overload and short circuit	-
Safety	
	Vac
galvanic isolation between input and output	Yes
galvanic isolation	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178
operating resource protection class	Class I
leakage current	0.5 4
• maximum	3.5 mA
protection class IP	IP20
Approvals	
certificate of suitability	
CE marking	Yes
UL approval	Yes; cULus-Listed (UL 508, CSA C22.2 No. 142), File E143289; cURus-Recognized (UL 60950, CSA C22.2 No. 60950), File E151273
CSA approval	Yes; cULus-Listed (UL 508, CSA C22.2 No. 142), File E143289, cURus-Recognized (UL 60950, CSA C22.2 No. 60950), File E151273
 cCSAus, Class 1, Division 2 	No
• ATEX	No
certificate of suitability	
• IECEx	No
NEC Class 2	No
 ULhazloc approval 	No
FM registration	No
type of certification CB-certificate	No

certificate of suitability	
EAC approval	Yes
certificate of suitability shipbuilding approval	No
shipbuilding approval	INO
Marine classification association	
	No
 American Bureau of Shipping Europe Ltd. (ABS) French marine classification society (BV) 	No
Prench manne classification society (BV) DNV GL	No
	No
Lloyds Register of Shipping (LRS) Nippen Kajii Kyakaj (NK)	
Nippon Kaiji Kyokai (NK)	No
EMC	
standard	EN 55000 CI D
for emitted interference	EN 55022 Class B
for mains harmonics limitation	not applicable
for interference immunity	EN 61000-6-2
environmental conditions	
ambient temperature	
during operation	-25 +70 °C; with natural convection
 during transport 	-40 +70 °C
during storage	40 +70 °C
environmental category according to IEC 60721	Climate class 3K3, 5 95% no condensation
Mechanics	
type of electrical connection	screw-type terminals
• at input	L+1, M1, PE: 1 screw terminal each for 0.5 2.5 mm² single-core/finely stranded
• at output	+: 1 screw terminal for 0.5 2.5 mm²; -: 2 screw terminals for 0.5 2.5 mm²
for auxiliary contacts	-
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
net weight	0.14 kg
product feature of the enclosure housing can be lined up	Yes
fastening method	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)

