



Figure similar

SIPLUS POWER DC 24V/ 0,375 A

SIPLUS PS 24 V/0.375 A based on 6EP1731-2BA00 with conformal coating, -25...+70 °C, in: 48...220 V DC out: 24 V DC/0.375 A

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 $V_{in} = 220\text{ V}$
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 $V_{in} = 220\text{ V}$
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
I ² t 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	-
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 <ul style="list-style-type: none"> • typical 	90 ms
output current <ul style="list-style-type: none"> • rated value • rated range 	0.375 A 0 ... 0.375 A; +60 ... +70 °C: Derating 3%/K
supplied active power typical	9 W
short-term overload current <ul style="list-style-type: none"> • at short-circuit during operation typical 	2.7 A
duration of overloading capability for excess current <ul style="list-style-type: none"> • at short-circuit during operation 	200 ms
product feature <ul style="list-style-type: none"> • bridging of equipment 	No
Efficiency	
efficiency in percent	66 %
power loss [W] <ul style="list-style-type: none"> • at rated output voltage for rated value of the output current typical 	4.6 W
Closed-loop control	
relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical	0.3 %
relative control precision of the output voltage load step of resistive load 50/100/50 % typical	0.4 %
setting time <ul style="list-style-type: none"> • load step 50 to 100% typical • load step 100 to 50% typical 	2 ms 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 <ul style="list-style-type: none"> • maximum 	0.9 A
display version for overload and short circuit	-
Safety	
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 <ul style="list-style-type: none"> • maximum 	3.5 mA
protection class IP	IP20
Approvals	
certificate of suitability <ul style="list-style-type: none"> • CE marking 	Yes
EMC	
standard <ul style="list-style-type: none"> • for emitted interference • for mains harmonics limitation • for interference immunity 	EN 55022 Class B not applicable EN 61000-6-2
environmental conditions	
ambient temperature <ul style="list-style-type: none"> • in horizontal mounting position during operation • during storage and transport 	-25 ... +70 °C; with natural convection -40 ... +85 °C
installation altitude at height above sea level maximum	6 000 m
ambient condition relating to ambient temperature - air pressure - installation altitude	In case of operation at altitudes of 2000 - 6000 m above sea level: Output power derating of -7.5 %/1000 m or reduction of the ambient temperature by 5 K/1000 m
relative humidity with condensation according to IEC 60068-2-	100 %; RH incl. condensation/frost (no commissioning if condensation is

38 maximum	present), horizontal installation
chemical resistance to commercially available cooling lubricants	Yes; incl. diesel and oil droplets in the air
resistance to biologically active substances conformity according to EN 60721-3-3	Yes; Class 3B2 mold, fungal, sponge spores (except fauna); class 3B3 upon request
resistance to chemically active substances conformity according to EN 60721-3-3	Yes; Class 3C4 (RH < 75%) incl. salt spray acc. to EN 60068-2-52 (severity level 3)
resistance to mechanically active substances conformity according to EN 60721-3-3	Yes; Class 3S4 incl. sand, dust
resistance to biologically active substances conformity according to EN 60721-3-6	Yes; Class 6B2 mold, fungal, sponge spores (except fauna)
resistance to chemically active substances conformity according to EN 60721-3-6	Yes; Class 6C3 (RH < 75%) incl. salt spray acc. to EN 60068-2-52 (severity level 3)
resistance to mechanically active substances conformity according to EN 60721-3-6	Yes; Class 6S3 incl. sand, dust
coating for equipped printed circuit board according to EN 61086	Yes; Class 2 for high availability
type of coating protection against pollution according to EN 60664-3	Yes; Type 1 protection
type of test of the coating according to MIL-I-46058C	Yes; Discoloration of the coating during service life possible
product conformity of the coating Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A	Yes; Conformal Coating, Class A

Mechanics

type of electrical connection	screw-type terminals
<ul style="list-style-type: none"> • at input • at output 	L+1, M1, PE: 1 screw terminal each for 0.5 ... 2.5 mm ² single-core/finely stranded +: 1 screw terminal for 0.5 ... 2.5 mm ² ; -: 2 screw terminals for 0.5 ... 2.5 mm ²
width of the enclosure	22.5 mm
height of the enclosure	80 mm
depth of the enclosure	91 mm
required spacing	
<ul style="list-style-type: none"> • top • bottom • left • right 	50 mm 50 mm 0 mm 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)

