

SIPLUS LOGO! POWER 24V 4A
 SIPLUS LOGO! Power 24V 4A for medial stress -40...+70°C start up
 at -25°C based-on 6EP3333-6SB00-0AY0 . stabilized power supply
 input: 100-240 V AC output: 24 V / 1.3 A DC

Input	
Input	1-phase AC or DC
Rated voltage value V_{in} rated	100 ... 240 V
Voltage range AC	85 ... 264 V
Input voltage	
• at DC	110 ... 300 V
Wide-range input	Yes
Mains buffering at I_{out} rated, min.	40 ms; at $V_{in} = 187$ V
Rated line frequency 1	50 Hz
Rated line frequency 2	60 Hz
Rated line range	47 ... 63 Hz
Input current	
• at rated input voltage 120 V	1.95 A
• at rated input voltage 230 V	0.97 A
Switch-on current limiting (+25 °C), max.	31 A
I^2t , max.	2.5 A ² ·s
Built-in incoming fuse	internal
Protection in the mains power input (IEC 898)	Recommended miniature circuit breaker: from 10 A characteristic B or from 6 A characteristic C

Output	
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.	200 mV
Residual ripple peak-peak, typ.	30 mV
Spikes peak-peak, max. (bandwidth: 20 MHz)	300 mV
Spikes peak-peak, typ. (bandwidth: 20 MHz)	50 mV
Adjustment range	22.2 ... 26.4 V
Product function Output voltage adjustable	Yes
Output voltage setting	via potentiometer
Status display	Green LED for output voltage OK
On/off behavior	No overshoot of V_{out} (soft start)
Startup delay, max.	0.5 s

Voltage rise, typ.	100 ms
Rated current value I _{out} rated	4 A
Current range	0 ... 4 A
• Note	+55 ... +70 °C: Derating 2%/K
Supplied active power typical	96 W
Parallel switching for enhanced performance	Yes
Numbers of parallel switchable units for enhanced performance	2

Efficiency

Efficiency at V _{out} rated, I _{out} rated, approx.	89 %
Power loss at V _{out} rated, I _{out} rated, approx.	12 W
Power loss [W] during no-load operation maximum	0.3 W

Closed-loop control

Dynamic mains compensation (V _{in} rated ±15 %), max.	0.2 %
Dynamic load smoothing (I _{out} : 10/90/10 %), U _{out} ± typ.	2 %
Load step setting time 10 to 90%, typ.	1 ms
Load step setting time 90 to 10%, typ.	1 ms

Protection and monitoring

Output overvoltage protection	Yes, according to EN 60950-1
Current limitation, typ.	5 A
Property of the output Short-circuit proof	Yes
Short-circuit protection	Constant current characteristic
Enduring short circuit current RMS value	
• maximum	5 A
Overcurrent overload capability in normal operation	overload capability 150% I _{out} rated typ. 200 ms
Overload/short-circuit indicator	-
measuring point for output current	50 mV = [^] 4 A

Safety

Primary/secondary isolation	Yes
Galvanic isolation	Safety extra-low output voltage U _{out} acc. to EN 60950-1 and EN 50178
Protection class	Class II (without protective conductor)
CE mark	Yes
Degree of protection (EN 60529)	IP20

EMC

Emitted interference	EN 55022 Class B
Supply harmonics limitation	EN 61000-3-2
Noise immunity	EN 61000-6-2

Operating data

Ambient temperature	
<ul style="list-style-type: none"> • during operation <li style="padding-left: 20px;">— Note • during transport • during storage • on cold restart minimum 	<p>-40 ... +70 °C with natural convection</p> <p>-40 ... +85 °C</p> <p>-40 ... +85 °C</p> <p>-25 °C</p>
Relative humidity with condensation maximum	100 %; Relative humidity, incl. condensation/frost permitted (no commissioning under condensation conditions)
Resistance to biologically active substances conformity acc. to EN 60721-3-3	Yes
Resistance to chemically active substances conformity acc. to EN 60721-3-3	Yes
Resistance to mechanically active substances conformity acc. to EN 60721-3-3	Yes

Mechanics

Connection technology	screw-type terminals
Connections	
<ul style="list-style-type: none"> • Supply input • Output • Auxiliary 	<p>L, N: 1 screw terminal each for 0.5 ... 2.5 mm² single-core/finely stranded</p> <p>+, -: 2 screw terminals each for 0.5 ... 2.5 mm²</p> <p>-</p>
Width of the enclosure	72 mm
Height of the enclosure	90 mm
Depth of the enclosure	53 mm
Required spacing	
<ul style="list-style-type: none"> • top • bottom • left • right 	<p>20 mm</p> <p>20 mm</p> <p>0 mm</p> <p>0 mm</p>
Weight, approx.	0.29 kg
Product feature of the enclosure housing for side-by-side mounting	Yes
Installation	Snaps onto DIN rail EN 60715 35x7.5/15, direct mounting in different mounting positions
MTBF at 40 °C	2 391 480 h
Other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)