SIEMENS

Data sheet 6AG1333-3BA10-7AA0

SIPLUS PS PSU200M 5A
SIPLUS PS PSU200M 5A with conformal coating based on 6EP1333-3BA10 . STABILIZED Power-Supply Input: 120/230-500V AC Output: 24 V/5 A DC

Figure similar

Input	
Input	1-phase and 2-phase AC
Supply voltage	
• 1 at AC	120 ... 230 V
• 2 at AC	230 ... 500 V
• Note	Set by means of selector switch on the device; starting from Vin > 90/180 V
Input voltage	
• 1 at AC	85 ... 264 V
• 2 at AC	176 ... 550 V
Wide-range input	Yes
Overvoltage resistance	1300 Vpeak, 1.3 ms
Mains buffering at Iout rated, min.	25 ms; at Vin = 120/230 V, typ. 150 ms at Vin = 400 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	2.2 A
• at rated input voltage 230 V	1.2 A
• at rated input voltage 500 V	0.61 A
Switch-on current limiting (+25 °C), max.	35 A
I^2t, max.	1.7 $A^2 \cdot s$
Built-in incoming fuse	T 3.15 A (not accessible)
Protection in the mains power input (IEC 898)	Recommended miniature circuit breaker at 1-phase operation: from 6 A (10 A) characteristic C (B); required at 2-phase operation: circuit breaker 2-pole connected or circuit breaker 3RV2011-1EA10 (setting 3.8 A) or 3RV2711-1ED10 (UL 489) at 230 V; 3RV2011-1DA10 (setting 3 A) or 3RV2711-1DD10 (UL 489) at 400/500 V

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.	50 mV
Spikes peak-peak, max. (bandwidth: 20 MHz)	200 mV
Adjustment range	24 ... 28.8 V
Product function Output voltage adjustable	Yes
Output voltage setting	via potentiometer
Status display	Green LED for 24 V OK
Signaling	Relay contact (NO contact, rating 60 V DC/ 0.3 A) for "24 V OK"
On/off behavior	Overshoot of Vout approx. 3 %
Startup delay, max.	1 s
Voltage rise, typ.	50 ms
Rated current value Iout rated	5 A
Current range	0 ... 5 A
Supplied active power typical	120 W
Short-term overload current	
• at short-circuit during operation typical	15 A
Duration of overloading capability for excess current	
• at short-circuit during operation	25 ms
Constant overload current	
• on short-circuiting during the start-up typical	6 A
Parallel switching for enhanced performance	Yes; switchable characteristic
Numbers of parallel switchable units for enhanced performance	2

Efficiency	
Efficiency at Vout rated, Iout rated, approx.	88 %
Power loss at Vout rated, Iout rated, approx.	17 W

Power loss [W] during no-load operation maximum	4 W

Closed-loop control	
Dynamic mains compensation (Vin rated ±15 %), max.	0.1 %
Dynamic load smoothing (Iout: 50/100/50 %), Uout ± typ.	3 %
Load step setting time 50 to 100%, typ.	2 ms
Load step setting time 100 to 50%, typ.	2 ms
Setting time maximum	5 ms

Protection and monitoring	
Output overvoltage protection	< 35 V
Current limitation, typ.	6 A
Property of the output Short-circuit proof	Yes
Short-circuit protection	Alternatively, constant current characteristic approx. 5.5 A or latching shutdown
Enduring short circuit current RMS value	
• typical	6 A
Overload/short-circuit indicator	LED yellow for "overload", LED red for "latching shutdown"

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
• typical	0.25 mA
CE mark	Yes
Explosion protection	in preparation: ATEX (EX) II 3G Ex nA nC IIC T3 Gc; cCSAus (CSA C22.2 No. 213, ANSI/ISA-12.12.01) Class I, Div. 2, Group ABCD, T3
CB approval	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	
• during operation	-25 ... +70 °C
— Note	with natural convection
• during transport	-40 ... +85 °C
• during storage	-40 ... +85 °C

Humidity class according to EN 60721	Climate class 3K3, with condensation
Ambient condition relating to ambient temperature - air pressure - installation altitude	Tmin ... Tmax at 1140 hPa ... 795 hPa (-1000 m ... +2000 m)
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; Conformity with EN 60721-3-3, Class 3B2 mold, fungus and dry rot spores (with the excepion of fauna). The supplied connector covers must remain on the unused interfaces during operation!
Resistance to chemically active substances conformity acc. to EN 60721-3-3	Yes; Conformity with EN 60721-3-3, Class 3C4 incl. salt spray according to EN 60068-2-52 (degree of severity 3). The supplied connector covers must remain on the unused interfaces during operation!
Resistance to mechanically active substances conformity acc. to EN 60721-3-3	Yes; Conformity with EN 60721-3-3, Class 3S4 incl. Sand, dust. The supplied connector covers must remain on the unused interfaces during operation!

Mechanics	
Connection technology	screw-type terminals
Connections	
• Supply input	L, N, PE: 1 screw terminal each for 0.2 ... 2.5 mm² single-core/finely stranded
• Output	+, -: 2 screw terminals each for 0.2 ... 2.5 mm²
• Auxiliary	13, 14 (alarm signal): 1 screw terminal each for 0.14 ... 1.5 mm²
Width of the enclosure	70 mm
Height of the enclosure	125 mm
Depth of the enclosure	121 mm
Required spacing	
• top	50 mm
• bottom	50 mm
• left	0 mm
• right	0 mm
Weight, approx.	0.6 kg
Product feature of the enclosure housing for side-by-side mounting	Yes
Installation	Snaps onto DIN rail EN 60715 35x7.5/15
Electrical accessories	Buffer module
Other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)