



Figure similar

### SIPLUS PS PSU8200 40A

SIPLUS PS PSU8200 40A based on 6EP3337-8SB00-0AY0 with conformal coating, -40...+70 °C, stabilized power supply input: 120/230 V AC output: 24 V DC/40 A

Input	
type of the power supply network	1-phase and 2-phase AC
supply voltage at AC	
• initial value	Automatic selection; startup starting from $U_e \geq 90/180$ V
supply voltage	
• 1 at AC rated value	120 V
• 2 at AC rated value	230 V
input voltage	
• 1 at AC	85 ... 132 V
• 2 at AC	170 ... 264 V
design of input wide range input	No
operating condition of the mains buffering	at $V_{in} = 230$ V
buffering time for rated value of the output current in the event of power failure minimum	25 ms
operating condition of the mains buffering	at $V_{in} = 230$ V
line frequency	
• 1 rated value	50 Hz
• 2 rated value	60 Hz
line frequency	45 ... 65 Hz
input current	
• at rated input voltage 120 V	15 A
• at rated input voltage 230 V	9 A
current limitation of inrush current at 25 °C maximum	50 A
I <sup>2</sup> t value maximum	8 A <sup>2</sup> ·s
fuse protection type	Yes
• in the feeder	Recommended miniature circuit breaker at 1-phase operation: 16 A characteristic C; required at 2-phase operation: circuit breaker 2-pole connected or circuit breaker 3RV2421-4BA10 (120 V) or 3RV2411-1JA10 (230 V)
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	100 mV

• typical	50 mV
voltage peak	
• maximum	240 mV
• typical	220 mV
adjustable output voltage	24 ... 28 V
product function output voltage adjustable	Yes
type of output voltage setting	via potentiometer; max. 960 W
display version for normal operation	Green LED for 24 V OK; LED yellow for overload; LED red for short-circuit or latching shutdown
type of signal at output	Relay contact (NO contact, rating 60 V DC/ 0.3 A) for "24 V OK"
behavior of the output voltage when switching on	Overshoot of Vout approx. 3 %
response delay maximum	1.5 s
voltage increase time of the output voltage	
• typical	30 ms
output current	
• rated value	40 A
• rated range	0 ... 40 A; +60 ... +70 °C: Derating 3%/K
supplied active power typical	960 W
short-term overload current	
• on short-circuiting during the start-up typical	120 A
• at short-circuit during operation typical	120 A
duration of overloading capability for excess current	
• on short-circuiting during the start-up	25 ms
• at short-circuit during operation	25 ms
constant overload current	
• on short-circuiting during the start-up typical	60 A
product feature	
• bridging of equipment	Yes; switchable characteristic
number of parallel-switched equipment resources for increasing the power	2
<b>Efficiency</b>	
efficiency in percent	92 %
power loss [W]	
• at rated output voltage for rated value of the output current typical	82 W
• during no-load operation maximum	6.8 W
<b>Closed-loop control</b>	
relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical	1 %
relative control precision of the output voltage load step of resistive load 50/100/50 % typical	1.9 %
setting time	
• load step 50 to 100% typical	2 ms
• load step 100 to 50% typical	2 ms
relative control precision of the output voltage at load step of resistive load 10/90/10 % typical	3.8 %
setting time	
• load step 10 to 90% typical	1 ms
• load step 90 to 10% typical	1 ms
• maximum	1 ms
<b>Protection and monitoring</b>	
design of the overvoltage protection	< 32 V
• typical	41 A
property of the output short-circuit proof	Yes
design of short-circuit protection	Alternatively, constant current characteristic approx. 41 A or latching shutdown
enduring short circuit current RMS value	
• typical	41 A
overcurrent overload capability in normal operation	250% Iout rated up to 25 ms, 150% Iout rated up to 5 s/min
display version for overload and short circuit	LED yellow for "overload", LED red for "latching shutdown" or "short-circuit"
<b>Safety</b>	
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	
• maximum	0.1 mA
• typical	0.1 mA
protection class IP	IP20
<b>Approvals</b>	
certificate of suitability	
• CE marking	Yes
<b>EMC</b>	
standard	
• for emitted interference	EN 55022 Class B
• for mains harmonics limitation	-
• for interference immunity	EN 61000-6-2
<b>environmental conditions</b>	
ambient temperature	
• in horizontal mounting position during operation	-40 ... +70 °C; with natural convection
• during storage and transport	-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 60068-2-38 maximum	100 %; RH incl. condensation/frost (no commissioning if condensation is 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
<b>Mechanics</b>	
type of electrical connection	screw-type terminals
• at input	L, N, PE: 1 screw terminal each for 0.2 ... 4 mm <sup>2</sup> single-core/finely stranded
• at output	+, -: 2 screw terminals each for 0.5 ... 10 mm <sup>2</sup>
• for auxiliary contacts	13, 14 (alarm signal): 1 screw terminal each for 0.14 ... 1.5 mm <sup>2</sup>
width of the enclosure	145 mm
height of the enclosure	145 mm
depth of the enclosure	150 mm
required spacing	
• top	40 mm
• bottom	40 mm
• left	0 mm
• right	0 mm
net weight	3.1 kg
product feature of the enclosure housing can be lined up	Yes
fastening method	Snaps onto DIN rail EN 60715 35x15
electrical accessories	Buffer module, redundancy module
mechanical accessories	Device identification label 20 mm × 7 mm, TI-grey 3RT2900-1SB20
MTBF at 40 °C	838 156 h
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

