



Figure similar

SIPLUS PS PSU300S 24 V/5 A

SIPLUS PS PSU300S 5A based on 6EP1433-2BA20 with conformal coating, -40...+70 °C, start up -25 °C, stabilized power supply input: 400-500 V 3 AC output: 24 V DC/5 A

Technical Product Detail Page

<https://i.siemens.com/1P6AG1433-2BA20-7AA0>

input	
type of the power supply network	3-phase AC
supply voltage at AC	
• minimum rated value	400 V
• maximum rated value	500 V
• initial value	340 V
• full-scale value	550 V
wide range input	Yes
buffering time for rated value of the output current in the event of power failure minimum	18 ms
operating condition of the mains buffering	at $V_{in} = 400\text{ V}$
line frequency	50/60 Hz
line frequency	47 ... 63 Hz
input current	
• at rated input voltage 400 V	0.45 A
• at rated input voltage 500 V	0.4 A
current limitation of inrush current at 25 °C maximum	20 A
I <sup>2</sup> t value maximum	0.5 A <sup>2</sup> ·s
fuse protection type	none
fuse protection type in the feeder	Required: 3-pole connected miniature circuit breaker 3 ... 16 A characteristic C or circuit breaker 3RV2011-1DA10 (setting 3 A) or 3RV2711-1DD10 (UL 489-listed, DIVQ)
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
output voltage adjustable	Yes; via potentiometer
adjustable output voltage	24 ... 28 V; max. 120 W
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	200 mV
voltage peak	
• maximum	240 mV
display version for normal operation	Green LED for 24 V OK

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 $V_{out} < 5\%$
response delay maximum	1.5 s
voltage increase time of the output voltage <ul style="list-style-type: none"> <li>• typical</li> <li>• maximum</li> </ul>	60 ms 500 ms
output current <ul style="list-style-type: none"> <li>• rated value</li> <li>• rated range</li> </ul>	5 A 0 ... 5 A; 6 A up to +45°C; +60 ... +70 °C: Derating 5%/K
supplied active power typical	120 W
bridging of equipment	Yes
number of parallel-switched equipment resources for increasing the power	2
<b>efficiency</b>	
efficiency in percent	89.5 %
power loss [W] <ul style="list-style-type: none"> <li>• at rated output voltage for rated value of the output current typical</li> </ul>	14 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 %
setting time <ul style="list-style-type: none"> <li>• load step 50 to 100% typical</li> <li>• load step 100 to 50% typical</li> </ul>	3 ms 3 ms
relative control precision of the output voltage at load step of resistive load 10/90/10 % typical	3 %
setting time <ul style="list-style-type: none"> <li>• load step 10 to 90% typical</li> <li>• load step 90 to 10% typical</li> <li>• maximum</li> </ul>	4 ms 4 ms 10 ms
<b>protection and monitoring</b>	
design of the overvoltage protection	protection against overvoltage in case of internal fault $V_{out} < 35\text{ V}$
property of the output short-circuit proof	Yes
design of short-circuit protection <ul style="list-style-type: none"> <li>• typical</li> </ul>	Constant current characteristic 6.6 A
overcurrent overload capability <ul style="list-style-type: none"> <li>• in normal operation</li> </ul>	overload capability 150 % $I_{out}$ rated up to 5 s/min
enduring short circuit current RMS value <ul style="list-style-type: none"> <li>• maximum</li> </ul>	8 A
<b>safety</b>	
galvanic isolation between input and output	Yes
galvanic isolation	Safety extra-low output voltage $V_{out}$ acc. to EN 60950-1 and EN 50178, transformer acc. to EN 61558-2-16
operating resource protection class	Class I
protection class IP	IP20
<b>EMC</b>	
standard <ul style="list-style-type: none"> <li>• for emitted interference</li> <li>• for mains harmonics limitation</li> <li>• for interference immunity</li> </ul>	EN 55022 Class B EN 61000-3-2 EN 61000-6-2
<b>standards, specifications, approvals</b>	
certificate of suitability <ul style="list-style-type: none"> <li>• CE marking</li> <li>• UKCA marking</li> <li>• Regulatory Compliance Mark (RCM)</li> </ul>	Yes Yes Yes
MTBF at 40 °C	500 000 h
<b>ambient conditions</b>	
ambient temperature	

<ul style="list-style-type: none"> <li>• in horizontal mounting position during operation</li> <li>• during transport</li> <li>• during storage</li> </ul>	-40; Startup @ -25 °C ... +70 °C; with natural convection -40 ... +85 °C -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>connection method</b>	
type of electrical connection <ul style="list-style-type: none"> <li>• at input</li> <li>• at output</li> <li>• for auxiliary contacts</li> </ul>	screw terminal L1, L2, L3, PE: 1 screw terminal each for 0.05 ... 2.5 mm <sup>2</sup> single-core/finely stranded +, -: 2 screw terminals each for 0.2 ... 2.5 mm <sup>2</sup> 13, 14 (alarm signal): 1 screw terminal each for 0.2 ... 2.5 mm <sup>2</sup>
<b>mechanical data</b>	
width × height × depth of the enclosure	50 × 125 × 120 mm
installation width × mounting height	50 mm × 225 mm
fastening method	Snaps onto DIN rail EN 60715 35x7.5/15
<ul style="list-style-type: none"> <li>• DIN-rail mounting</li> <li>• S7 rail mounting</li> <li>• wall mounting</li> </ul>	Yes No No
housing can be lined up	Yes
net weight	0.5 kg
<b>accessories</b>	
electrical accessories	Redundancy module, buffer module, selectivity module, DC UPS
mechanical accessories	Device identification label 20 mm × 7 mm, pale turquoise 3RT1900-1SB20
<b>further information internet links</b>	
internet link <ul style="list-style-type: none"> <li>• to website: Industry Mall</li> <li>• to website: Industry Online Support</li> </ul>	<a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a> <a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>
<b>additional information</b>	
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)
<b>security information</b>	
security information	Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or

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### Classifications

	Version	Classification
eClass	14	27-04-07-01
eClass	12	27-04-07-01
eClass	9.1	27-04-07-01
eClass	9	27-04-07-01
eClass	8	27-04-90-02
eClass	7.1	27-04-90-02
eClass	6	27-04-90-02
ETIM	10	EC002540
ETIM	9	EC002540
ETIM	8	EC002540
ETIM	7	EC002540
IDEA	4	4130
UNSPSC	15	39-12-10-04

### Approvals Certificates

General Product Approval

EMV

[Manufacturer Declaration](#)



[China RoHS](#)



### For use in hazardous locations



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