SIEMENS

Data sheet 6AG1434-2BA20-7AA0

SIPLUS PS PSU300S 24 V/10 A

SIPLUS PS PSU300S 10A based on 6EP1434-2BA20 with conformal coating, -40…+70 °C, start up -25 °C, stabilized power supply input: 400-500 V 3 AC output: 24 V DC/ 10 A

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	7 ms
operating condition of the mains buffering	at Vin = 400 V
line frequency	50/60 Hz
line frequency	47 ... 63 Hz
input current	
● at rated input voltage 400 V	0.7 A
● at rated input voltage 500 V	0.6 A
current limitation of inrush current at 25 °C maximum	20 A
I2t value maximum	0.5 $A^2 \cdot s$
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. 240 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	0.15 %
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 Vout < 5 %
response delay maximum	1.5 s

voltage increase time of the output voltage	
● typical	50 ms
● maximum	500 ms
output current	
● rated value	10 A
● rated range	0 ... 10 A; 12 A up to +45°C; +60 ... +70 °C: Derating 5%/K
supplied active power typical	240 W
bridging of equipment	Yes
number of parallel-switched equipment resources for increasing the power	2
efficiency	
efficiency in percent	91 %
power loss [W]	
● at rated output voltage for rated value of the output current typical	23 W
closed-loop control	
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	
● load step 50 to 100% typical	3 ms
● load step 100 to 50% typical	3 ms
relative control precision of the output voltage at load step of resistive load 10/90/10 % typical	3 %
setting time	
● load step 10 to 90% typical	4 ms
● load step 90 to 10% typical	4 ms
● maximum	10 ms
protection and monitoring	
design of the overvoltage protection	protection against overvoltage in case of internal fault Vout < 35 V
property of the output short-circuit proof	Yes
design of short-circuit protection	Constant current characteristic
● typical	13 A
overcurrent overload capability	
● in normal operation	overload capability 150 % Iout rated up to 5 s/min
enduring short circuit current RMS value	
● maximum	16 A
safety	
galvanic isolation between input and output	Yes
galvanic isolation	Safety extra-low output voltage Vout 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
EMC	
standard	
● for emitted interference	EN 55022 Class B
● for mains harmonics limitation	EN 61000-3-2
● for interference immunity	EN 61000-6-2
standards, specifications, approvals	
certificate of suitability	
● CE marking	Yes
● UKCA marking	Yes
● Regulatory Compliance Mark (RCM)	Yes
MTBF at 40 °C	500 000 h
ambient conditions	
ambient temperature	
● in horizontal mounting position during operation	-40; Startup @ -25 °C ... +70 °C; with natural convection
● during transport	-40 ... +85 °C
● during storage	-40 ... +85 °C
installation altitude at height above sea level maximum	6 000 m
ambient condition relating to ambient temperature - air pressure	In case of operation at altitudes of 2000 - 6000 m above sea level: Output

- installation altitude	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
connection method	
type of electrical connection	screw terminal
● at input	L1, L2, L3, PE: 1 screw terminal each for 0.05 ... 2.5 mm² single-core/finely stranded
● at output	+, -: 2 screw terminals each for 0.2 ... 2.5 mm²
● for auxiliary contacts	13, 14 (alarm signal): 1 screw terminal each for 0.2 ... 2.5 mm²
mechanical data	
width × height × depth of the enclosure	70 × 125 × 120 mm
installation width × mounting height	70 mm × 225 mm
fastening method	Snaps onto DIN rail EN 60715 35x7.5/15
● standard rail mounting	Yes
● S7 rail mounting	No
● wall mounting	No
housing can be lined up	Yes
net weight	0.7 kg
accessories	
electrical accessories	Redundancy module, buffer module, selectivity module, DC UPS
mechanical accessories	Device identification label 20 mm × 7 mm, pale turquoise 3RT1900-1SB20
further information internet links	
internet link	
● to website: Industry Mall	https://mall.industry.siemens.com
● to website: Industry Online Support	https://support.industry.siemens.com
additional information	
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)
security information	
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 network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit www.siemens.com/cybersecurity-industry. Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under

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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	9	EC002540
ETIM	8	EC002540
ETIM	7	EC002540
IDEA	4	4130
UNSPSC	15	39-12-10-04

Approvals Certificates

General Product Approval

Miscellaneous

Manufacturer Declaration

EMV

For use in hazardous locations

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