SIEMENS

Data sheet 6EP1433-2BA20



SITOP PSU300S/3AC/24VDC/5A

SITOP PSU300S 24 V/5 A stabilized power supply input: 400-500 V 3 AC output: 24 V DC/5 A

nput		
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 Vin = 400 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	
I2t value maximum	0.5 A²-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)	
utput		
utput voltage curve at output	Controlled, isolated DC voltage	
	Controlled, isolated DC voltage 24 V	
voltage curve at output	·	
voltage curve at output output voltage at DC rated value	·	
voltage curve at output output voltage at DC rated value output voltage	24 V	
voltage curve at output output voltage at DC rated value output voltage • at output 1 at DC rated value	24 V 24 V	
voltage curve at output output voltage at DC rated value output voltage • at output 1 at DC rated value output voltage adjustable	24 V 24 V Yes; via potentiometer	
voltage curve at output output voltage at DC rated value output voltage • at output 1 at DC rated value output voltage adjustable adjustable output voltage	24 V 24 V Yes; via potentiometer 24 28 V; max. 120 W	
voltage curve at output output voltage at DC rated value output voltage • at output 1 at DC rated value output voltage adjustable adjustable output voltage relative overall tolerance of the voltage	24 V 24 V Yes; via potentiometer 24 28 V; max. 120 W	
voltage curve at output output voltage at DC rated value output voltage • at output 1 at DC rated value output voltage adjustable adjustable output voltage relative overall tolerance of the voltage relative control precision of the output voltage	24 V 24 V Yes; via potentiometer 24 28 V; max. 120 W 3 %	
voltage curve at output output voltage at DC rated value output voltage • at output 1 at DC rated value output voltage adjustable adjustable output voltage relative overall tolerance of the voltage relative control precision of the output voltage • on slow fluctuation of input voltage	24 V 24 V Yes; via potentiometer 24 28 V; max. 120 W 3 % 0.1 %	
voltage curve at output output voltage at DC rated value output voltage • at output 1 at DC rated value output voltage adjustable adjustable output voltage relative overall tolerance of the voltage relative control precision of the output voltage • on slow fluctuation of input voltage • on slow fluctuation of ohm loading	24 V 24 V Yes; via potentiometer 24 28 V; max. 120 W 3 % 0.1 %	
voltage curve at output output voltage at DC rated value output voltage • at output 1 at DC rated value output voltage adjustable adjustable output voltage relative overall tolerance of the voltage relative control precision of the output voltage • on slow fluctuation of input voltage • on slow fluctuation of ohm loading residual ripple	24 V 24 V Yes; via potentiometer 24 28 V; max. 120 W 3 % 0.1 % 0.1 %	
voltage curve at output output voltage at DC rated value output voltage	24 V 24 V Yes; via potentiometer 24 28 V; max. 120 W 3 % 0.1 % 0.1 %	
voltage curve at output output voltage at DC rated value output voltage	24 V 24 V Yes; via potentiometer 24 28 V; max. 120 W 3 % 0.1 % 0.1 % 200 mV	
voltage curve at output output voltage at DC rated value output voltage	24 V 24 V Yes; via potentiometer 24 28 V; max. 120 W 3 % 0.1 % 0.1 % 200 mV	
output voltage • at output 1 at DC rated value output voltage • at output 1 at DC rated value output voltage adjustable adjustable output voltage relative overall tolerance of the voltage relative control precision of the output voltage • on slow fluctuation of input voltage • on slow fluctuation of ohm loading residual ripple • maximum voltage peak • maximum display version for normal operation	24 V 24 V Yes; via potentiometer 24 28 V; max. 120 W 3 % 0.1 % 0.1 % 200 mV 240 mV Green LED for 24 V OK	

voltage increase time of the output voltage		
• typical	60 ms	
• maximum	500 ms	
output current		
rated value	5 A	
rated range	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	2	
the power	4	
efficiency		
efficiency in percent	89.5 %	
power loss [W]		
 at rated output voltage for rated value of the output current typical 	14 W	
closed-loop control		
relative control precision of the output voltage with rapid	1 %	
fluctuation of the input voltage by +/- 15% typical relative control precision of the output voltage load step of	1 %	
resistive load 50/100/50 % typical	1 /0	
setting time	2 ma	
load step 50 to 100% typical load step 100 to 50% typical	3 ms	
load step 100 to 50% typical relative control precision of the authors stated at an effective control precision of the authors stated at a state of the sta	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	6.6 A	
overcurrent overload capability		
in normal operation	overload capability 150 % lout rated up to 5 s/min	
enduring short circuit current RMS value		
• maximum	8 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	
UL approval	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus	
CSA approval	(CSA C22.2 No. 60950-1, UL 60950-1) Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (UL 62368-1, CSA C22.2 No. 62368-1-19)	
UKCA marking	Yes	
EAC approval	Yes	
• NEC Class 2	No	
type of certification		
• BIS	Yes; R-41183539	
CB-certificate	Yes	

MTBF at 40 °C	500 000 h	
standards, specifications, approvals hazardous environments		
certificate of suitability		
• IECEx	No	
• ATEX	No	
ULhazloc approval	No	
• cCSAus, Class 1, Division 2	No	
FM registration	No	
standards, specifications, approvals marine classification		
shipbuilding approval	Yes	
Marine classification association		
 American Bureau of Shipping Europe Ltd. (ABS) 	Yes	
 French marine classification society (BV) 	No	
 Det Norske Veritas (DNV) 	Yes	
Lloyds Register of Shipping (LRS)	No	
standards, specifications, approvals Environmental Product Dec	claration	
Environmental Product Declaration	Yes	
Global Warming Potential [CO2 eq]		
• total	451.2 kg	
during manufacturing	12.9 kg	
during operation	437.8 kg	
after end of life	0.35 kg	
ambient conditions		
ambient temperature		
during operation	-25 +70 °C; with natural convection	
 during transport 	-40 +85 °C	
during storage	-40 +85 °C	
environmental category according to IEC 60721	Climate class 3K3, 5 95% no condensation	
connection method		
type of electrical connection	screw terminal	
at input	L1, L2, L3, PE: 1 screw terminal each for 0.05 2.5 mm ² single-core/finely stranded	
• at output	+, -: 2 screw terminals each for 0.2 2.5 mm ²	
for auxiliary contacts	13, 14 (alarm signal): 1 screw terminal each for 0.2 2.5 mm ²	
mechanical data		
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	
standard rail mounting	Yes	
S7 rail mounting	No No	
wall mounting	No Yea	
housing can be lined up	Yes	
net weight	0.5 kg	
accessories	Podundanav modula, huffor modula, calcativity, modula, DO LIDO	
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	https://mall.industry.siamans.com	
 to website: Industry Mall to website: Industrial communication 	https://mall.industry.siemens.com https://siemens.com/industrial-communication	
to website: Industrial communication to website: CAx-Download-Manager	https://siemens.com/cax	
to website: CAx-Download-inlanager to website: Industry Online Support	https://support.industry.siemens.com	
additional information	imporroupportainuusii ytsieriieristottii	
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	

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	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



Manufacturer Declaration

Declaration of Conformity







General Product Ap-

proval

Marine / Shipping

Environment

BIS CRS







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