SIEMENS

Data sheet 6EP1933-2EC51



SITOP UPS500S/DC/24VDC/15A/5KWS

SITOP UPS500S Maintenance free uninterruptible power supply with USB interface basic device 5 kWs input: 24 V DC output: 24 V DC/15 A degree of protection IP20 *Ex approval no longer available*

Input	
supply voltage at DC rated value	24 V
voltage curve at input	DC
input voltage range	22 29 V DC
adjustable response value voltage for buffer connection preset	22.5 V
adjustable response value voltage for buffer connection	22 25.5 V; Adjustable in 0.5 V increments
input current at rated input voltage 24 V rated value	15.2 A; + approx. 2.3 A with empty energy storage (capacitor)
Mains buffering	
type of energy storage	with capacitors
design of the mains power cut bridging-connection	15 A for 9 s or 10 A for 15 s or 5 A for 31 s or 2 A for 76 s; longer buffering times with expansion modules
energy content of energy storage	5 kW.s
charging current	1 A, 2 A
adjustable charging current maximum note	factory setting approx. 1 A
Output	
output voltage	
 in normal operation at DC rated value 	24 V
 in buffering mode at DC rated value 	24 V
formula for output voltage	24 V ± 3 %
startup delay time typical	0.6 s
voltage increase time of the output voltage typical	25 ms
output voltage in buffering mode at DC	24 24.7 V
output current	
rated value	15 A
in normal operation	0 15 A
in buffering mode	0 15 A
peak current	25 A
property of the output short-circuit proof	Yes
supplied active power typical	360 W
Efficiency	
efficiency in percent	
at rated output voltage for rated value of the output current typical	97.5 %
power loss [W]	
 at rated output voltage for rated value of the output current typical 	9 W
Protection and monitoring	
product function	
 reverse polarity protection against energy storage 	Yes

unit and ait.	
unit polarity reversal	V
 reverse polarity protection against input voltage polarity reversal 	Yes
Signaling	
display version	
	Normal appration: LED groop (OV) floating abangaayar contact
 for normal operation in buffering mode 	Normal operation: LED green (OK), floating changeover contact "OK/Bat" to setting "OK" ("OK" means: Voltage of the supplying power supply unit is greater than cut-in threshold set at the DC UPS module); lack of buffer standby: LED red (ALARM), floating changeover contact "ALARM/BAT" to setting "ALARM"; energy storage > 85%: LED green (BAT > 85%), floating NO contact "BAT > 85" closed; permissible contact current capacity: DC 60 V/1 A or AC 30 V /1 A Buffered mode: LED yellow (BAT), floating changeover contact "OK/BAT" to setting "BAT"; Prewarning buffer end after expiry of 80% of the available buffer time: LED red (ALARM), floating changeover contact "ALARM/BAT" to setting "ALARM"; Energy storage > 85%: LED green (BAT > 85%), floating NO contact "BAT > 85" closed
Interface	
product component PC interface	Yes
design of the interface	USB
Safety	
galvanic isolation between input and output	No
operating resource protection class	Class III
protection class IP	IP20
Approvals	
certificate of suitability	
CE marking	Yes
UL approval	Yes
as approval for USA	cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus
as approval for OSA	(CSA C22.2 No. 60950-1, UL 60950-1)
certificate of suitability	
• EAC approval	Yes
• C-Tick	Yes
shipbuilding approval	Yes
shipbuilding approval	ABS, DNV GL
Marine classification association	ABO, DIVI GE
	Von
American Bureau of Shipping Europe Ltd. (ABS) DNV CL	Yes
• DNV GL	Yes
EMC	
standard	
 for emitted interference 	EN 55022 Class B
for interference immunity	EN 61000-6-2
environmental conditions	
ambient temperature	
 during operation 	0 60 °C; with natural convection
during transport	-40 +70 °C
during storage	-40 +70 °C
environmental category according to IEC 60721	
Mechanics	Climate class 3K3, 5 95% no condensation
	Climate class 3K3, 5 95% no condensation
type of electrical connection	
type of electrical connection • at input	screw-type terminals
• at input	screw-type terminals 24 V DC: 2 screw terminals for 1 4 mm²/17 11 AWG
at inputat output	screw-type terminals
 at input at output for rechargeable battery module	screw-type terminals 24 V DC: 2 screw terminals for 1 4 mm²/17 11 AWG 24 V DC: 4 screw terminals for 1 4 mm²/17 11 AWG -
 at input at output for rechargeable battery module for control circuit and status message 	screw-type terminals 24 V DC: 2 screw terminals for 1 4 mm²/17 11 AWG 24 V DC: 4 screw terminals for 1 4 mm²/17 11 AWG - 10 screw terminals for 0.5 2.5 mm²/20 13 AWG
 at input at output for rechargeable battery module for control circuit and status message width of the enclosure 	screw-type terminals 24 V DC: 2 screw terminals for 1 4 mm²/17 11 AWG 24 V DC: 4 screw terminals for 1 4 mm²/17 11 AWG - 10 screw terminals for 0.5 2.5 mm²/20 13 AWG 120 mm
at input at output for rechargeable battery module for control circuit and status message width of the enclosure height of the enclosure	screw-type terminals 24 V DC: 2 screw terminals for 1 4 mm²/17 11 AWG 24 V DC: 4 screw terminals for 1 4 mm²/17 11 AWG - 10 screw terminals for 0.5 2.5 mm²/20 13 AWG 120 mm 125 mm
at input at output for rechargeable battery module for control circuit and status message width of the enclosure height of the enclosure depth of the enclosure	screw-type terminals 24 V DC: 2 screw terminals for 1 4 mm²/17 11 AWG 24 V DC: 4 screw terminals for 1 4 mm²/17 11 AWG - 10 screw terminals for 0.5 2.5 mm²/20 13 AWG 120 mm
at input at output for rechargeable battery module for control circuit and status message width of the enclosure height of the enclosure depth of the enclosure required spacing	screw-type terminals 24 V DC: 2 screw terminals for 1 4 mm²/17 11 AWG 24 V DC: 4 screw terminals for 1 4 mm²/17 11 AWG - 10 screw terminals for 0.5 2.5 mm²/20 13 AWG 120 mm 125 mm 125 mm
 at input at output for rechargeable battery module for control circuit and status message width of the enclosure height of the enclosure depth of the enclosure required spacing top 	screw-type terminals 24 V DC: 2 screw terminals for 1 4 mm²/17 11 AWG 24 V DC: 4 screw terminals for 1 4 mm²/17 11 AWG - 10 screw terminals for 0.5 2.5 mm²/20 13 AWG 120 mm 125 mm 125 mm
 at input at output for rechargeable battery module for control circuit and status message width of the enclosure height of the enclosure depth of the enclosure required spacing 	screw-type terminals 24 V DC: 2 screw terminals for 1 4 mm²/17 11 AWG 24 V DC: 4 screw terminals for 1 4 mm²/17 11 AWG - 10 screw terminals for 0.5 2.5 mm²/20 13 AWG 120 mm 125 mm 125 mm
 at input at output for rechargeable battery module for control circuit and status message width of the enclosure height of the enclosure depth of the enclosure required spacing top 	screw-type terminals 24 V DC: 2 screw terminals for 1 4 mm²/17 11 AWG 24 V DC: 4 screw terminals for 1 4 mm²/17 11 AWG - 10 screw terminals for 0.5 2.5 mm²/20 13 AWG 120 mm 125 mm 125 mm

net weight	1 kg
product feature of the enclosure housing can be lined up	Yes
fastening method	Snaps onto DIN rail EN 60715 35x7.5/15
electrical accessories	Extension module SITOP UPS501S
MTBF at 40 °C	459 137 h
reference code according to IEC 81346-2	T
other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

