SIEMENS

Data sheet 6EP1931-2DC21



SITOP DC UPS MODULE/24VDC/6A

SITOP DC UPS module 24 V/6 A uninterruptible power supply without interface input: 24 V DC/6.85 A output: 24 V DC/6 A *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	6 A; + approx. 0.6 A with empty battery
Mains buffering	
type of energy storage	with batteries
design of the mains power cut bridging-connection	Dependent on connected battery and load current, see selection table battery module and mains buffering times as well as the relevant important information notes!
charging current	0.2 A, 0.4 A
adjustable charging current maximum note	factory setting approx. 0.4 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	Vin - approx. 0.5 V
startup delay time typical	1 s
voltage increase time of the output voltage typical	60 ms
output voltage in buffering mode at DC	19 28.5 V
output current	
rated value	6 A
in normal operation	0 6 A
in buffering mode	0 6 A
peak current	6.3 A
property of the output short-circuit proof	Yes
supplied active power typical	144 W
Efficiency	
efficiency in percent	
 at rated output voltage for rated value of the output current typical 	95 %
 in case of operation on rechargeable battery typical 	94.5 %
power loss [W]	
 at rated output voltage for rated value of the output current typical 	7 W
 in case of operation on rechargeable battery typical 	8 W
Protection and monitoring	
product function	
 reverse polarity protection against energy storage 	Yes

unit polarity reversal • reverse polarity protection against input voltage Yes polarity reversal Signaling display version • for normal operation Normal operation: LED green (OK), floating changeover contact "Bat/OK" 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"; Battery replacement required: LED red (alarm) flashing with approx. 0.25 Hz, floating changeover contact "Alarm/Bat" switching with approx. 0.25 Hz; 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 • in buffering mode Buffered mode: LED yellow (Bat), floating changeover contact "OK/Bat" to setting "Bat"; Prewarning battery voltage < 20.4 VDC: 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 No design of the interface without 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 certificate of suitability • EAC approval Yes C-Tick No · shipbuilding approval Yes ABS, DNV GL shipbuilding approval Marine classification association • American Bureau of Shipping Europe Ltd. (ABS) Yes • DNV GL Yes EMC standard EN 55022 Class B for emitted interference • for interference immunity EN 61000-6-2 environmental conditions ambient temperature -25 ... +60 °C; with natural convection · during operation -40 ... +85 °C · during transport · during storage -40 ... +85 °C environmental category according to IEC 60721 Climate class 3K3, 5 ... 95% no condensation type of electrical connection screw-type terminals 24 V DC: 2 screw terminals for 1 ... 4 mm²/17 ... 11 AWG • at input at output 24 V DC: 4 screw terminals for 1 ... 4 mm²/17 ... 11 AWG • for rechargeable battery module 24 V DC: 2 screw terminals for 1 ... 4 mm²/17 ... 11 AWG for control circuit and status message 10 screw terminals for 0.5 ... 2.5 mm²/20 ... 13 AWG width of the enclosure 50 mm 125 mm height of the enclosure 125 mm depth of the enclosure required spacing 50 mm top bottom 50 mm 0 mm left right 0 mm net weight 0.4 kg

product feature of the enclosure housing can be lined up fastening method electrical accessories MTBF at 40 °C reference code according to IEC 81346-2 other information

Yes

Snaps onto DIN rail EN 60715 35x7.5/15

Battery module

1 085 776 h

RB

Specifications at rated input voltage and ambient temperature +25 $^{\circ}\text{C}$ (unless otherwise specified)

