## 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  |  |
| <ul> <li>in normal operation at DC rated value</li> </ul>                                     | 24 V   |
| <ul> <li>in buffering mode at DC rated value</li> </ul>                                       | 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  |  |
| <ul> <li>rated value</li> </ul>   | 6 A  |
| <ul> <li>in normal operation</li> </ul>   | 0 6 A  |
| <ul> <li>in buffering mode</li> </ul>   | 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   |  |
| <ul> <li>at rated output voltage for rated value of the output<br/>current typical</li> </ul> | 95 %   |
| <ul> <li>in case of operation on rechargeable battery typical</li> </ul>                      | 94.5 %   |
| power loss [W]  |  |
| <ul> <li>at rated output voltage for rated value of the output<br/>current typical</li> </ul> | 7 W  |
| <ul> <li>in case of operation on rechargeable battery typical</li> </ul>                      | 8 W  |
| Protection and monitoring   |  |
| product function  |  |
| <ul> <li>reverse polarity protection against energy storage</li> </ul>                        | Yes  |

| unit polarity reversal <ul> <li>reverse polarity protection against input voltage</li> </ul> | Yes  |
|--|--|
| polarity reversal  | 1 55   |
| Signaling  |  |
| display version  |  |
| <ul> <li>for normal operation</li> <li>in buffering mode</li> </ul>                          | Normal operation: LED green (OK), floating changeover contact<br>"Bat/OK" to setting "OK" ("OK" means: Voltage of the supplying power<br>supply unit is greater than cut-in threshold set at the DC UPS module);<br>Lack of buffer standby: LED red (alarm), floating changeover contact<br>"Alarm/Bat" to setting "Alarm"; Battery replacement required: LED red<br>(alarm) flashing with approx. 0.25 Hz, floating changeover contact<br>"Alarm/Bat" switching with approx. 0.25 Hz; Energy storage > 85%: LED<br>green (Bat > 85%), floating NO contact "Bat > 85" closed; Permissible<br>contact current capacity: DC 60 V/1 A or AC 30 V /1 A<br>Buffered mode: LED yellow (Bat), floating changeover contact "OK/Bat"<br>to setting "Bat"; Prewarning battery voltage < 20.4 VDC: LED red<br>(alarm), floating changeover contact "Alarm/Bat" to setting "Alarm";<br>Energy storage > 85%: LED green (Bat > 85%), floating NO contact "Bat<br>> 85" closed |
| Interface  |  |
| product component PC interface   | No   |
| design of the interface  | without  |
| Safety   |  |
| galvanic isolation between input and output  | No   |
| operating resource protection class  | Class III  |
| protection class IP  | IP20   |
| Approvals  |  |
| certificate of suitability   | Vee  |
| <ul> <li>CE marking</li> <li>UL approval</li> </ul>  | Yes  |
| as approval for USA  | cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259   |
| certificate of suitability   | COEd3-El3(Cd (OE 300, COA 022.2 No. 107.17), File E 107203   |
| • EAC approval   | Yes  |
| • C-Tick   | No   |
| <ul> <li>shipbuilding approval</li> </ul>  | Yes  |
| shipbuilding approval  | ABS, DNV GL  |
| Marine classification association  |  |
| American Bureau of Shipping Europe Ltd. (ABS)  | Yes  |
| • DNV GL<br>EMC  | Yes  |
| standard   |  |
| for emitted interference   | EN 55022 Class B   |
| for interference immunity  | EN 61000-6-2   |
| environmental conditions   |  |
| ambient temperature  |  |
| during operation   | -25 +60 °C; with natural convection  |
| <ul> <li>during transport</li> </ul>   | -40 +85 °C   |
| during storage   | -40 +85 °C   |
| environmental category according to IEC 60721  | Climate class 3K3, 5 95% no condensation   |
| Mechanics  |  |
| type of electrical connection  | screw-type terminals<br>24 V DC: 2 screw terminals for 1 4 mm²/17 11 AWG   |
| <ul><li>at input</li><li>at output</li></ul>   | 24 V DC: 2 screw terminals for 1 4 mm <sup>2</sup> /17 11 AWG<br>24 V DC: 4 screw terminals for 1 4 mm <sup>2</sup> /17 11 AWG   |
| <ul> <li>for rechargeable battery module</li> </ul>  | 24 V DC: 2 screw terminals for 1 4 mm²/17 11 AWG   |
| <ul> <li>for control circuit and status message</li> </ul>                                   | 10 screw terminals for 0.5 2.5 mm <sup>2</sup> /20 13 AWG  |
| width of the enclosure   | 50 mm  |
| height of the enclosure  | 125 mm   |
| depth of the enclosure   | 125 mm   |
| required spacing   |  |
| • top  | 50 mm  |
| bottom   | 50 mm  |
| ● left<br>● right  | 0 mm<br>0 mm   |
| • right<br>net weight  | 0.4 kg   |
|  | g  |

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 °C (unless otherwise specified)