## **SIEMENS**

Data sheet 6EP1931-2EC21



## SITOP DC UPS MODULE/24VDC15A

SITOP DC UPS module 24 V/15 A uninterruptible power supply without interface input: 24 V DC/16 A output: 24 V DC/15 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   | 15 A; + approx. 1 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  | 0.35 A, 0.7 A  |
| adjustable charging current maximum note  | factory setting approx. 0.7 A  |
| Output  |  |
| output voltage  |  |
| <ul> <li>in normal operation at DC rated value</li> </ul>                                     | 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  |  |
| <ul> <li>rated value</li> </ul>   | 15 A   |
| <ul> <li>in normal operation</li> </ul>   | 0 15 A   |
| in buffering mode   | 0 15 A   |
| peak current  | 15.7 A   |
| property of the output short-circuit proof  | Yes  |
| supplied active power typical   | 360 W  |
| Efficiency  |  |
| efficiency in percent   |  |
| <ul> <li>at rated output voltage for rated value of the output<br/>current typical</li> </ul> | 96.2 %   |
| in case of operation on rechargeable battery typical  | 96 %   |
| power loss [W]  |  |
| <ul> <li>at rated output voltage for rated value of the output<br/>current typical</li> </ul> | 14 W   |
| <ul> <li>in case of operation on rechargeable battery typical</li> </ul>                      | 15 W   |
| Protection and monitoring   |  |

| product function  |   |
|---|---|
| <ul> <li>reverse polarity protection against energy storage<br/>unit polarity reversal</li> </ul> | Yes   |
| <ul> <li>reverse polarity protection against input voltage<br/>polarity reversal</li> </ul>       | Yes   |
| Signaling   |   |
| display version   |   |
| for normal operation  | Normal operation: LED green (OK), floating changeover contact   |
| in buffering mode   | "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  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   |
| 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  |
| certificate of suitability  |   |
| <ul> <li>EAC approval</li> </ul>  | Yes   |
| C-Tick  | No  |
| shipbuilding approval   | Yes   |
| shipbuilding approval   | ABS, DNV GL   |
| Marine classification association   |   |
| <ul> <li>American Bureau of Shipping Europe Ltd. (ABS)</li> </ul>                                 | Yes   |
| • DNV GL  | Yes   |
| EMC   |   |
| standard  |   |
| <ul> <li>for emitted interference</li> </ul>  | EN 55022 Class B  |
| for interference immunity   | EN 61000-6-2  |
| environmental conditions  |   |
| ambient temperature   |   |
| <ul><li>during operation</li></ul>  | -25 +60 °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  |
| Mechanics   |   |
| type of electrical connection   | screw-type terminals  |
| • at input  | 24 V DC: 2 screw terminals for 1 4 mm²/17 11 AWG  |
| 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   |
| height of the enclosure   | 125 mm  |
| depth of the enclosure  | 125 mm  |
| required spacing  • top   | 50 mm   |
| • tob   | JU IIIIII   |

| • bottom   | 50 mm   |
|--|---|
| • left   | 0 mm  |
| • right  | 0 mm  |
| net weight   | 0.4 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                                   | Battery module  |
| MTBF at 40 °C  | 791 139 h   |
| reference code according to IEC 81346-2                  | Т   |
| other information  | Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified) |

