SIEMENS

Data sheet

6EP1931-2DC31



SITOP Module 24 V USC DC /6 A Uninterrupted Power supply With serial interface input: 24 V DC/6.85 A output: 24 V DC/6 A

| 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 % |

SITOP DC UPS MODULE/24VDC/6A/SERIAL

| 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 polarity reversal | Yes |
| 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 | Yes |
| design of the interface | serial |
| Safety | |
| galvanic isolation between input and output | No |
| operating resource protection class | Class III |
| certificate of suitability | |
| CE marking | Yes |
| as approval for USA | cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259 |
| relating to ATEX | - |
| • C-Tick | No |
| shipbuilding approval | ABS, DNV GL |
| protection class IP | IP20 |
| EMC | |
| standard | |
| for emitted interference for interference | EN 55022 Class B |
| for interference immunity environmental conditions | EN 61000-6-2 |
| ambient temperature | |
| during operation | -25 +60 °C; with natural convection |
| during operation or | -40 +85 °C |
| | -40 +85 °C |
| • during storage environmental category acc. 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 mm ² /17 11 AWG |
| at output | 24 V DC: 2 screw terminals for 1 4 mm ² /17 11 AWG |
| for rechargeable battery module | 24 V DC: 4 screw terminals for 1 4 mm ² /17 11 AWG |
| for control circuit and status message | 10 screw terminals for 0.5 2.5 mm ² /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 | 0 mm |
|--|---|
| • right | 0 mm |
| net weight | 0.45 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 | 966 183 h |
| reference code acc. to IEC 81346-2 | Т |
| other information | Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified) |

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