SIEMENS

Data sheet 6EP1931-2FC42



SITOP DC UPS MODULE 40A WITH USB INTERF.
SITOP DC UPS MODULE 24 V/40 A UNINTERRUPTIBLE POWER
SUPPLY WITH USB INTERFACE INPUT: 24 V DC/42.6 A OUTPUT:
24 V DC/40 A

| Input | | |
|----------------------------------|------------|--|
| Supply voltage at DC Rated value | 24 V | |
| Voltage curve at input | DC | |
| input voltage range | 22 29 V DC | |
| Mains buffering | | |

| Mains buffering | |
|------------------------|----------------|
| Type of energy storage | with batteries |
| Charging current | |
| • 1 | 1 A |
| • 2 | 2 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 |
| ON-delay time typical | 1 s |
| Voltage increase time of the output voltage typical | 360 ms |
| Output current Rated value | 40 A |
| Active power supplied typical | 960 W |

| Efficiency | |
|---|--|
| Efficiency in percent | |
| at rated output current at rated output current typical | 97.2 % |
| • in case of accumulator operation typical | 96.9 % |
| Power loss [W] | |
| at rated output current at rated output current typical | 28.6 W |
| • in case of accumulator operation typical | 33.6 W |
| Protection and monitoring | |
| Product function | |
| reverse polarity protection against energy storage unit polarity reversal | Yes |
| 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 |

| | floating NO contact "Bat > 85" closed |
|--------------------------------|---------------------------------------|
| Interface | |
| Product component PC interface | Yes |
| Design of the interface | USB |

"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%),

| Safety | |
|--|--|
| Galvanic isolation between entrance and outlet | No |
| Operating resource protection class | Class III |
| 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 |
| relating to ATEX | - |

| • C-Tick | No |
|---|------------------|
| Shipbuilding approval | GL |
| Protection class IP | IP20 |
| EMC | |
| ENIC | |
| Standard | |
| for emitted interference | EN 55022 Class B |
| for interference immunity | EN 61000-6-2 |

| Operating data | |
|--|------------------------------------|
| Ambient temperature | |
| during operation | -25 +60 °C |
| during transport | -40 +85 °C |
| during storage | -40 +85 °C |
| Environmental category acc. to IEC 60721 | Climate class 3K3, no condensation |

| Mechanics | |
|--|---|
| Type of electrical connection | screw-type terminals |
| • at input | 24 V DC: 2 screw terminals for 0.33 10 mm²/22 7 AWG |
| • at output | 24 V DC: 2 screw terminals for 0.33 10 mm²/22 7 AWG |
| • for battery module | 24 V DC: 2 screw terminals for 0.33 10 mm²/22 7 AWG |
| for control circuit and status message | 10 screw terminals for 0.5 2.5 mm²/20 13 AWG |
| Width of the enclosure | 102 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 | 1.1 kg |
| Product feature of the enclosure housing for side-by- side mounting | Yes |
| Mounting type | Snaps onto DIN rail EN 60715 35x7.5/15 |
| Electrical accessories | Battery module |
| MTBF at 40 °C | 493 340 h |
| Other information | Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified) |

• for interference immunity