



Figure similar

SIPLUS DC-USV-MODUL 24V/40A

SIPLUS PS DC UPS module 24 V/40 A based on 6EP1931-2FC21 with conformal coating, -25...+70 °C, uninterruptible power supply without interface input: 24 V DC/43 A output: 24 V DC/40 A

| Input | |
|---|--|
| supply voltage at DC rated value | 24 V |
| input voltage | DC 22 ... 29 V |
| 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 | 40 A; + approx. 2.6 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 | 1 A, 2 A |
| adjustable charging current maximum note | factory setting approx. 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 | $V_{in} - \text{approx. } 0.5 \text{ V}$ |
| startup delay time typical | 1 s |
| voltage increase time of the output voltage typical | 360 ms |
| output voltage in buffering mode at DC | 19 ... 28.5 V |
| output current | |
| • rated value | 40 A |
| • in normal operation | 0 ... 40 A |
| • in buffering mode | 0 ... 40 A |
| peak current | 42 A |
| supplied active power typical | 960 W |
| Efficiency | |
| efficiency in percent | |
| • at rated output voltage for rated value of the output current typical | 97.2 % |
| • in case of operation on rechargeable battery typical | 96.9 % |
| power loss [W] | |
| • at rated output voltage for rated value of the output current typical | 28.6 W |
| • in case of operation on rechargeable battery typical | 33.6 W |
| Protection and monitoring | |
| product function | |
| • reverse polarity protection against energy storage unit polarity reversal | Yes |

| | |
|---|--|
| <ul style="list-style-type: none"> reverse polarity protection against input voltage polarity reversal | Yes |
| Signaling | |
| display version | |
| <ul style="list-style-type: none"> 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 |
| <ul style="list-style-type: none"> 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 |
| Safety | |
| galvanic isolation between input and output | No |
| operating resource protection class | Class III |
| protection class IP | IP20 |
| Approvals | |
| certificate of suitability | |
| <ul style="list-style-type: none"> CE marking | Yes |
| EMC | |
| standard | |
| <ul style="list-style-type: none"> for emitted interference | EN 55022 Class B |
| <ul style="list-style-type: none"> for interference immunity | EN 61000-6-2 |
| environmental conditions | |
| ambient temperature in horizontal mounting position during operation | -25 ... +70; with natural convection |
| ambient temperature during storage and transport | -40 ... +85 |
| installation altitude at height above sea level maximum | 6 000 m |
| ambient condition relating to ambient temperature - air pressure - installation altitude | In case of operation at altitudes of 2000 - 6000 m above sea level: Output power derating of -7.5 %/1000 m or reduction of the ambient temperature by 5 K/1000 m |
| relative humidity with condensation according to IEC 60068-2-38 maximum | 100 %; RH incl. condensation/frost (no commissioning if condensation is present), horizontal installation |
| chemical resistance to commercially available cooling lubricants | Yes; incl. diesel and oil droplets in the air |
| resistance to biologically active substances conformity according to EN 60721-3-3 | Yes; Class 3B2 mold, fungal, sponge spores (except fauna); class 3B3 upon request |
| resistance to chemically active substances conformity according to EN 60721-3-3 | Yes; Class 3C4 (RH < 75%) incl. salt spray acc. to EN 60068-2-52 (severity level 3) |
| resistance to mechanically active substances conformity according to EN 60721-3-3 | Yes; Class 3S4 incl. sand, dust |
| resistance to biologically active substances conformity according to EN 60721-3-6 | Yes; Class 6B2 mold, fungal, sponge spores (except fauna) |
| resistance to chemically active substances conformity according to EN 60721-3-6 | Yes; Class 6C3 (RH < 75%) incl. salt spray acc. to EN 60068-2-52 (severity level 3) |
| resistance to mechanically active substances conformity according to EN 60721-3-6 | Yes; Class 6S3 incl. sand, dust |
| coating for equipped printed circuit board according to EN 61086 | Yes; Class 2 for high availability |
| type of coating protection against pollution according to EN 60664-3 | Yes; Type 1 protection |
| type of test of the coating according to MIL-I-46058C | Yes; Discoloration of the coating during service life possible |
| product conformity of the coating Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A | Yes; Conformal Coating, Class A |
| Mechanics | |
| type of electrical connection | screw-type terminals |
| <ul style="list-style-type: none"> at input | 24 V DC: 2 screw terminals for 0.33 ... 10 mm ² /22 ... 7 AWG |
| <ul style="list-style-type: none"> at output | 24 V DC: 2 screw terminals for 0.33 ... 10 mm ² /22 ... 7 AWG |
| <ul style="list-style-type: none"> for rechargeable battery module | 24 V DC: 2 screw terminals for 0.33 ... 10 mm ² /22 ... 7 AWG |
| <ul style="list-style-type: none"> for control circuit and status message | 10 screw terminals for 0.5 ... 2.5 mm ² /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 can be lined up | Yes |
| fastening method | Snaps onto DIN rail EN 60715 35x7.5/15 |
| electrical accessories | Battery module |
| MTBF at 40 °C | 522 739 h |
| reference code according to IEC 81346-2 | RB |
| other information | Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified) |

