

MINI-DC-UPS/12DC/4

Order No.: 2866598



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Uninterruptible power supply with integrated power supply unit, 4 A, in combination with MINI-BAT/12/DC 1.6 Ah or 2.6 Ah

| Commercial data | |
|--------------------------|--------------------|
| EAN | 4046356418522 |
| sales group | H063 |
| Pack | 1 pcs. |
| Weight/Piece | 0.4912 KG |
| Catalog page information | Page 589 (IF-2009) |

Product notes

WEEE/RoHS-compliant since:
06/09/2008



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Product description

The MINI-DC-UPS provide an uninterruptible DC voltage both in case of AC power supply network and in the event of mains interferences. The wide-range input allows input voltages from 85 V AC to 264 V AC; 4 A is provided at the output with a regulated and adjustable output voltage from 10 V DC to 16 V DC. The rechargeable battery module supplies an output voltage from 13.6 V DC to 9.6 V DC in buffer mode.

A 1.6 Ah or a 2.6 Ah rechargeable battery module is optionally used depending on the required buffer time. The buffer time varies depending on the load current.

Technical data

Input data

| | |
|------------------------------|---|
| Nominal input voltage | 100 V AC ... 240 V AC |
| AC input voltage range | 85 V AC ... 264 V AC |
| DC input voltage range | 100 V DC ... 350 V DC (UL508: 100...250 V DC) |
| Current consumption | Approx. 0.5 A |
| | 0.65 A (for 230 V AC) |
| | Approx. 1.15 A |
| | 1.35 A (for 120 V AC) |
| Inrush surge current | < 34 A |
| Power failure bypass | (refer to the diagram) |
| Buffer period | (Depending on the storage medium, e.g. 20 min / 4A) |
| Input fuse | 3.15 A (slow-blow, internal) |
| Power factor (cos phi) | Approx. 0.5 |
| Protective circuit/component | Varistor |

Output data

| | |
|--------------------------------------|---|
| Nominal output voltage | 12 V DC (AC input voltage available: 10 to 16 V DC, AC input voltage not available: 13.6 to 9.6 V DC) |
| Setting range of the output voltage | 10 V DC ... 16 V DC (AC input voltage available, AC input voltage not available: Output voltage depending on the battery voltage: 13.6 V DC ... 9.6 V DC) |
| Output current | 4 A |
| Derating | From +60°C to 70°C: 2.5% per Kelvin |
| Connection in parallel | No |
| Max. capacitive load | Unlimited |
| Control deviation | < 1 % (change in load, static 10% ... 90%) |
| Residual ripple | < 50 mV _{PP} |
| Peak switching voltages nominal load | < 100 mV _{PP} |
| Maximum power dissipation idling | 3.8 W |
| Power loss nominal load max. | 10.5 W |

General data

| | |
|--------|---------|
| Width | 67.5 mm |
| Height | 99 mm |
| Depth | 115 mm |
| Weight | 0.45 kg |

| | |
|--|---|
| Memory medium | External, rechargeable battery 1.6 Ah / 2.6 Ah |
| Efficiency | > 82 % |
| Insulation voltage input/output | 2 kV (routine test) |
| | 4 kV (type test) |
| Degree of protection | IP20 |
| Class of protection | II (in an enclosed control cabinet) |
| MTBF | > 500 000 h in acc. with IEC 61709 (SN 29500) |
| Ambient temperature (operation) | -25 °C ... 70 °C (> 60 °C derating) |
| Ambient temperature (storage/transport) | -40 °C ... 80 °C |
| Max. permissible relative humidity (operation) | 95 % (at 25 °C, no condensation) |
| Mounting position | Horizontal DIN rail NS 35, EN 60715 |
| Assembly instructions | Can be aligned: Horizontal 0 cm, vertical 5 cm |
| Electromagnetic compatibility | Conformance with EMC guideline 2004/108/EC and for low-voltage guideline 2006/95/EC |
| Emitted interference | EN 50081-2 |
| Immunity to interference | EN 61000-6-2:2005 |
| Standard – Electrical equipment of machines | EN 60204 |
| Standard - Safety of transformers | EN 61558-2-17 |
| Standard - Electrical safety | EN 60950/VDE 0805 (SELV) |
| | EN 61558-2-17 |
| Standard – Electronic equipment for use in electrical power installations and their assembly into electrical power installations | EN 50178/VDE 0160 (PELV) |
| Standard – Safety extra-low voltage | EN 60950 (SELV) |
| | EN 60204 (PELV) |
| Standard - Safe isolation | DIN VDE 0100-410 |
| | DIN VDE 0106-1010 |
| Standard – Protection against shock currents, basic requirements for protective separation in electrical equipment | DIN VDE 0106-101 |
| UL approvals | UL Listed UL 508 |
| | UL/C-UL Recognized UL 60950 |

Connection data, input

| | |
|---------------------------------------|---------------------------------------|
| Type of connection | Pluggable COMBICON screw connections, |
| Conductor cross section solid min. | 0.2 mm ² |
| Conductor cross section solid max. | 2.5 mm ² |
| Conductor cross section stranded min. | 0.2 mm ² |

| | |
|--|---------------------|
| Conductor cross section stranded max. | 2.5 mm ² |
| Conductor cross section AWG/kcmil min. | 24 |
| Conductor cross section AWG/kcmil max | 12 |
| Stripping length | 8 mm |
| Screw thread | M3 |

Connection data, output

| | |
|--|---------------------------------------|
| Type of connection | Pluggable COMBICON screw connections, |
| Conductor cross section solid min. | 0.2 mm ² |
| Conductor cross section solid max. | 2.5 mm ² |
| Conductor cross section stranded min. | 0.2 mm ² |
| Conductor cross section stranded max. | 2.5 mm ² |
| Conductor cross section AWG/kcmil min. | 24 |
| Conductor cross section AWG/kcmil max | 12 |
| Stripping length | 8 mm |

Signaling

| | |
|--|--|
| Continuous load current | ≤ 20 mA |
| Status display | LED "Power Good", green |
| Note on status display | Buffer module is loaded: LED ON |
| Conductor cross section solid min. | 0.2 mm ² |
| Conductor cross section solid max. | 2.5 mm ² |
| Conductor cross section stranded min. | 0.2 mm ² |
| Conductor cross section stranded max. | 2.5 mm ² |
| Conductor cross section AWG/kcmil min. | 24 |
| Conductor cross section AWG/kcmil max | 12 |
| Tightening torque, min | 0.5 Nm |
| Tightening torque max | 0.6 Nm |
| Screw thread | M3 |
| Output name | Alarm |
| Output description | Relay output |
| Maximum switching voltage | ≤ 12 V |
| Output voltage | 12 V |
| Continuous load current | ≤ 200 mA |
| Status display | LED red |
| Note on status display | Malfunction/alarm: LED permanently lit |

| | |
|---------------------------|---|
| Output name | Battery charge |
| Output description | Relay output |
| Maximum switching voltage | ≤ 12 V |
| Output voltage | 12 V |
| Continuous load current | ≤ 200 mA |
| Status display | LED yellow, flashing |
| Note on status display | Battery charge/battery is being charged: LED flashing |
| Output name | Battery mode |
| Output description | Relay output |
| Type of signaling | LED, active switching output |
| Maximum switching voltage | ≤ 12 V |
| Output voltage | 12 V |
| Continuous load current | ≤ 200 mA |
| Status display | Yellow LED |
| Note on status display | Battery mode/buffer mode: LED permanently lit |

Certificates / Approvals



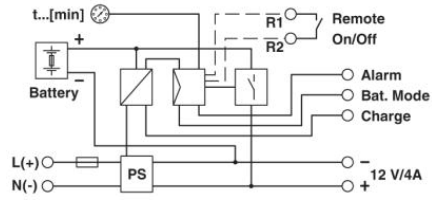
Certification CUL, UL, UL Listed

Accessories

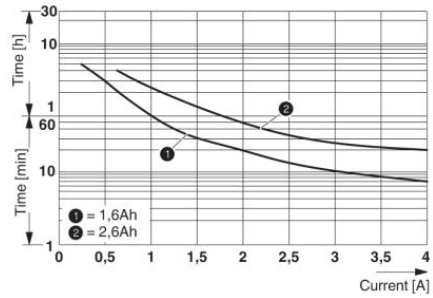
| Item | Designation | Description |
|----------------|---------------------|--|
| General | | |
| 2866572 | MINI-BAT/12DC/1.6AH | Rechargeable battery module, 12 V DC, 1.6 Ah, for use with DC-UPS/4A |
| 2866569 | MINI-BAT/12DC/2.6AH | Rechargeable battery module, 12 V DC, 2,6 Ah, for use with DC-UPS/4A |

Diagrams/Drawings

Block diagram



Diagram



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