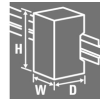


CP DC UPS 24V 40A**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

The UPS control unit together with the associated battery module and the power supply unit form a complete DC UPS system. In normal operation, the input voltage from the UPS control unit is connected directly to the load. In the event of a mains failure (drop of the DC input voltage) the system switches instantly to battery operation. Once the mains supply has been restored, the system switches back to normal operation and the battery is fully recharged by the integrated charger.

Three relay outputs, as well as three additional active transistor outputs and a control input to lock battery operation, provide full remote control by means of SPS or DCS control. Numerous modes of operation and an easy-to-use status display provide rapid fault diagnosis and optimum customisation to the application.

General ordering data

| | |
|------------|----------------------------|
| Version | UPS control unit |
| Order No. | 1370040010 |
| Type | CP DC UPS 24V 40A |
| GTIN (EAN) | 4050118202342 |
| Qty. | 1 pc(s). |

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Technical data

Dimensions and weights

| | | | |
|------------|-----------|-----------------|------------|
| Depth | 150 mm | Depth (inches) | 5.905 inch |
| Height | 130 mm | Height (inches) | 5.118 inch |
| Width | 66 mm | Width (inches) | 2.598 inch |
| Net weight | 1,051.8 g | | |

Temperatures

| | | | |
|---------------------|---------------------------|-----------------------|----------------|
| Storage temperature | -40 °C...85 °C | Operating temperature | -25 °C...70 °C |
| Humidity | 5...95 %, no condensation | | |

Battery module

| | | | |
|----------------------------|---|---------------|------|
| Parallel connection option | yes, max. 2 | Rated voltage | 24 V |
| Storage medium | 3.4 Ah, 7.2 Ah, 12 Ah, 17 Ah, Selectable with rotary switch | | |

Integrated battery charger

| | | | |
|---------------------------|-------------------------|--|-----------------|
| Battery availability test | every minute | Charging current | 0.15 cA |
| Charging feature | IU characteristic curve | Charging voltage (temperature compensated) | 27, 48 V @ 20°C |
| Temperature coefficient | - 48 mV / °C | | |

Operating interfaces and control inputs

| | | | |
|-------------------------|--|----------------------------------|--|
| Function DIP switch | Inversion of transistor outputs, Operation without temperature probe | Remote disconnection (Interlock) | Yes |
| Selector switch battery | 3.4 Ah, 7.2 Ah, 12 Ah, 17 Ah, No Battery, Service | Selector switch buffer times | 0.5 min, 1 min, 3 min, 5 min, 10 min, 20 min, 30 min, 45 min, ∞, ∞ w/0 |
| Temperature probe | NTC 100 kΩ | | |

Input

| | | | |
|-----------------------------|--|------------------------|--------------|
| DC current consumption | max. 200 mA (without battery), max. 0.5 A (with fully charged battery) | DC input voltage range | 20...30 V DC |
| Input current | ≤ 43 A | Input fuse (internal) | Yes |
| Max. approved input current | 52 A | Rated input voltage | 24 V DC |
| Wire connection method | Screw connection | | |

Output

| | | | |
|--|---|---|--|
| Continuous output current @ U _{Nominal} | 48 A @ 45 °C, 24 A @ 70 °C, 40 A @ 60 °C | Nominal output current for U _{nom} | 40 A @ 60 °C |
| Output current, max. | 48 A | Output voltage, note | Vo = Vin - 0.2 V normal operation (Imax), Vo = Vin - 0.3 V battery supply (Imax) |
| Overload protection | Yes | Parallel connection option | yes, max. 2, Yes, with diode module |
| Protection against inverse voltage | Yes | Rated output voltage | 24 V DC ± 1 % |
| Residual ripple, breaking spikes | < 50 mV _{pp} @ 24 V DC, I _N | Temperature coefficient | - 48 mV / °C |
| Temperature probe | NTC 100 kΩ | Wire connection method | Screw connection |

Creation date July 22, 2024 5:08:31 AM CEST

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Technical data

General data

| | | | |
|---|---|----------------------|---|
| Buffer times | Depending on the connected battery | Clip-in foot | metal |
| Current limiting | > 120% I _N | Degree of efficiency | ≥ 96% normal mode, battery is being charged, ≥ 98% normal mode, battery is charged, ≥ 98% buffer mode |
| Housing version | Metal, corrosion resistant | Humidity | 5...95 %, no condensation |
| Mounting position, installation notice | Horizontal on TS35 mounting rail. 50 mm of clearance at top & bottom for air circ. Can mount side by side with no space in between. | Power loss | < 10 W |
| Protection against reverse voltages from the load | 32...34 V DC | Protection degree | IP20 |
| Short-circuit protection | Yes | Storage medium | 3.4 Ah, 7.2 Ah, 12 Ah, 17 Ah, Selectable with rotary switch |
| Surge voltage category | III | | |

EMC / shock / vibration

| | | | |
|------------------------------------|--|---|---------|
| Interference immunity test acc. to | EN 61000-4-2 (ESD) EN 61000-4-3 and EN 61000-4-8 (fields) EN 61000-4-4 (burst) EN 61000-4-5 (surge) EN 61000-4-6 (conducted) EN 61000-4-11 (dips) | Noise emission in accordance with EN55032 | Class B |
| Shock resistance IEC 60068-2-27 | 30 g in all directions | Vibration resistance IEC 60068-2-6 | 2.3 g |

Insulation coordination

| | | | |
|-----------------------------------|--|------------------------------------|------|
| Insulation voltage | 1 kV DC | Pollution severity | 2 |
| Protection class | III, with no ground connection, for SELV | Surge voltage category | III |
| electrical isolation, input-earth | 1 kV | electrical isolation, output-earth | 1 kV |

Electrical safety (applied standards)

| | | | |
|--|----------------------------|---|------------------------------------|
| Electrical machine equipment | Acc. to EN60204 | For use with electronic equipment | Acc. to EN50178 / VDE0160 |
| Protection against dangerous shock currents | Acc. to VDE0106-101 | Protective separation / protection against electrical shock | VDE0100-410 / acc. to DIN57100-410 |
| Safety transformers for switch-mode power supplies | According to EN 61558-2-16 | | |

Connection data (input)

| | | | |
|---|---------------------|--|--------------------|
| Conductor cross-section, AWG/kcmil, max. | 6 | Conductor cross-section, AWG/kcmil, min. | 26 |
| Conductor cross-section, flexible, min. | 0.5 mm ² | Conductor cross-section, rigid, max. | 16 mm ² |
| Conductor cross-section, rigid, min. | 0.5 mm ² | Reverse polarity protection | Yes |
| Tightening torque, max. | 1.5 Nm | Tightening torque, min. | 1.2 Nm |
| Wire connection cross section, flexible (input), max. | 16 mm ² | | |

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Technical data

Connection data (output)

| | | | |
|---|--------------------|---|---------------------|
| Conductor cross-section, AWG/kcmil , max. | 6 | Conductor cross-section, AWG/kcmil , min. | 26 |
| Conductor cross-section, flexible , max. | 16 mm ² | Conductor cross-section, flexible , min. | 0.5 mm ² |
| Conductor cross-section, rigid , max. | 16 mm ² | Conductor cross-section, rigid , min. | 0.6 mm ² |
| Reverse polarity protection | Yes | Tightening torque, max. | 1.5 Nm |
| Tightening torque, min. | 1.2 Nm | | |

Connection data (signal)

| | | | |
|--|---------------------|--|---------------------|
| Wire connection cross-section, flexible (signal), max. | 1.5 mm ² | Wire connection cross-section, flexible (signal), min. | 0.2 mm ² |
| Wire connection method | Screw connection | Wire cross-section, AWG/kcmil , max. | 15 |
| Wire cross-section, AWG/kcmil , min. | 30 | Wire cross-section, solid , max. | 1.5 mm ² |
| Wire cross-section, solid , min. | 0.2 mm ² | | |

Signalling

| | | |
|--------------------------|--|--|
| Floating contact | Status indicator | Three-colour LED: Battery capacity >85% green, >40% yellow, >20% red, <20% red (Flashing), Green/yellow LED: normal / buffering, Yellow/red LED: temperature alarm / alarm, Yellow/red LED: switch-off / battery fault |
| Status relay (max. load) | Yes Fault (alarm) (30 V AC/DC 0.1 A), Battery operation (buff.) (30 V AC/DC 0.1 A), Laden (Charg.) (30V AC/DC 0,1A) | Transistor outputs (24&...27 V DC max. load 150 mA) Battery operation (buff.), Charging, Fault (alarm) |

Approbations

| | | | |
|-------------------------|---------|-------------------|-------|
| Certificate no. (cULus) | E258476 | Institute (cULus) | CULUS |
|-------------------------|---------|-------------------|-------|

Classifications

| | | | |
|-------------|-------------|-------------|-------------|
| ETIM 6.0 | EC002850 | ETIM 7.0 | EC002850 |
| ETIM 8.0 | EC002850 | ETIM 9.0 | EC002850 |
| ECLASS 9.0 | 27-04-06-92 | ECLASS 9.1 | 27-04-92-01 |
| ECLASS 10.0 | 27-04-06-92 | ECLASS 11.0 | 27-04-06-92 |
| ECLASS 12.0 | 27-04-06-92 | ECLASS 13.0 | 27-04-06-92 |

Environmental Product Compliance

| | |
|------------------------|--------------------------------------|
| REACH SVHC | Lead 7439-92-1 |
| SCIP | d6c68c9e-3e33-4fa9-920e-331473bf0422 |
| RoHS Compliance Status | Compliant |

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Technical data

Approvals

Approvals



| | |
|-------------------------|------------|
| ROHS | Conform |
| UL File Number Search | UL Website |
| Certificate no. (cULus) | E258476 |

Downloads

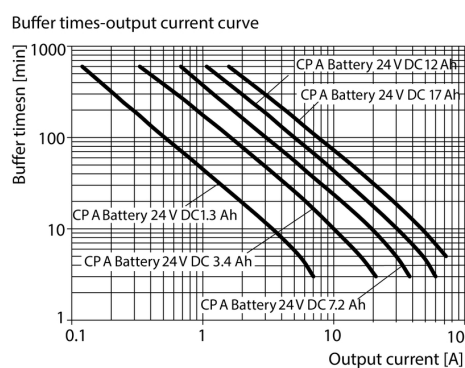
| | |
|---|--|
| Approval/Certificate/Document of Conformity | UL 508 Certificate.pdf UL 60950 Certificate.pdf DNV Certificate.pdf BV Certificate Declaration of Conformity |
| Engineering Data | CAD data – STEP Quick start guide – OSG0009 PS-Selection Guide AC Backup Guide for AC backup for power supplies |
| User Documentation | Operating instructions |
| Catalogues | Catalogues in PDF-format |

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Drawings



Buffer Time

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www.weidmueller.com**Accessories****Slotted screwdriver**

VDE insulated screwdriver sets, for working on live parts up to 1000 V AC and 1500 V DC, DIN EN 60900. IEC 900. Each piece is "GS" safety tested. Blade made from fully hardened, high-alloy chromium-vanadium-molybdenum steel, gun-metal finish.

General ordering data

| | | |
|------------|----------------------------|----------------------------|
| Type | SDIS SL 1.0X5.5X125 | Version |
| Order No. | 1274680000 | Screwdriver, Mounting tool |
| GTIN (EAN) | 4050118073263 | |
| Qty. | 1 pc(s). | |
| Type | SDIS SL 0.6X3.5X100 | Version |
| Order No. | 1274660000 | Screwdriver, Mounting tool |
| GTIN (EAN) | 4050118072631 | |
| Qty. | 1 pc(s). | |

Temperature probe

External temperature probe for battery modules in combination with the Weidmüller UPS control unit.

General ordering data

| | |
|------------|----------------------------|
| Type | CP DC UPS TF05 |
| Order No. | 1444480000 |
| GTIN (EAN) | 4050118249767 |
| Qty. | 1 pc(s). |
| Type | CP DC UPS TF25 |
| Order No. | 1444540000 |
| GTIN (EAN) | 4050118249880 |
| Qty. | 1 pc(s). |

CP DC UPS 24V 40A

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Accessories

Crosshead screwdriver, Pozidrive



VDE insulated screwdriver sets, for working on live parts up to 1000 V AC and 1500 V DC, DIN EN 60900. IEC 900. Each piece is "GS" safety tested. Blade made from fully hardened, high-alloy chromium-vanadium-molybdenum steel, gun-metal finish.

General ordering data

| | | |
|------------|----------------------------|--------------------------|
| Type | SDIK PZ2 SL | Version |
| Order No. | 1274740000 | Screwdriver, Screwdriver |
| GTIN (EAN) | 4050118073218 | |
| Qty. | 1 pc(s). | |

W-Series



Weidmüller's range of products includes end brackets that guarantee a permanent, reliable mounting on the terminal rail and prevent sliding. Versions with and without screws are available. The end brackets include marking options, also for group markers, and also a test plug holder.

General ordering data

| | | |
|------------|----------------------------|---|
| Type | WEW 35/1 V0 GF SW | Version |
| Order No. | 1478990000 | End bracket, black, TS 35, V-0, Wemid, Width: 12 mm, 130 °C |
| GTIN (EAN) | 4050118286892 | |
| Qty. | 50 pc(s). | |
| Type | WEW 35/2 V0 GF SW | Version |
| Order No. | 1479000000 | End bracket, black, TS 35, V-0, Wemid, Width: 8 mm, 130 °C |
| GTIN (EAN) | 4050118286779 | |
| Qty. | 50 pc(s). | |

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www.weidmueller.com**Accessories****Installation**

Mounting accessory for Weidmüller Power Supplies.

General ordering data

| | | |
|------------|----------------------------|---------------------------------------|
| Type | MTA 45 MF | Version |
| Order No. | 1251310000 | Electronics housings, Mounting flange |
| GTIN (EAN) | 4050118042719 | |
| Qty. | 1 pc(s). | |