

Power supply unit - UNO-PS/1AC/ 5DC/ 40W - 2904375

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Primary-switched UNO POWER power supply for DIN rail mounting, input: 1-phase, output: 5 V DC/40 W

Product Description

UNO POWER power supplies with basic functionality

Thanks to their high power density, compact UNO POWER power supplies are the ideal solution for loads up to 240 W, particularly in compact control boxes. The power supply units are available in various performance classes and overall widths. Their high degree of efficiency and low idling losses ensure a high level of energy efficiency.

Your advantages

- Flexible mounting by simply snapping onto the DIN rail
- More space in the control cabinet with up to 20 % higher power density
- Maximum energy efficiency, thanks to over 90 % efficiency and extremely low idling losses under 0.3 W
- Outdoor installation, thanks to the wide temperature range from -25°C to +70°C



Key Commercial Data

| | |
|--------------------------------------|--------------------------------|
| Packing unit | 1 pc |
| GTIN | |
| GTIN | 4046356897105 |
| Weight per Piece (excluding packing) | 210.000 g |
| Custom tariff number | 85044030 |
| Country of origin | Poland |
| Note | Made to Order (non-returnable) |

Technical data

Dimensions

| | |
|--------|-------|
| Width | 35 mm |
| Height | 90 mm |
| Depth | 84 mm |

Ambient conditions

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Ambient conditions

| | |
|--|--|
| Degree of protection | IP20 |
| Ambient temperature (operation) | -25 °C ... 70 °C (> 55 °C Derating: 2.5 %/K) |
| Ambient temperature (storage/transport) | -40 °C ... 85 °C |
| Max. permissible relative humidity (operation) | ≤ 95 % (at 25 °C, non-condensing) |
| Climatic class | 3K3 (in acc. with EN 60721) |
| Degree of pollution | 2 |

Input data

| | |
|-------------------------------------|---|
| Nominal input voltage range | 100 V AC ... 240 V AC |
| Input voltage range | 85 V AC ... 264 V AC |
| Current consumption | 0.8 A (100 V AC) 0.4 A (240 V AC) |
| Nominal power consumption | 97.1 VA |
| Inrush surge current | < 30 A (typical) |
| Mains buffering | typ. 30 ms (120 V AC) typ. 120 ms (230 V AC) |
| Input fuse | 2 A (slow-blow, internal) |
| Choice of suitable circuit breakers | 6 A ... 16 A (Characteristics B, C, D, K) |
| Power factor (cos phi) | 0.49 |
| Type of protection | Transient surge protection |
| Protective circuit/component | Varistor |

Output data

| | |
|--|---|
| Nominal output voltage | 5 V DC ±1 % |
| Nominal output current (I _N) | 8 A (-25 °C ... 55 °C) |
| Derating | 55 °C ... 70 °C (2.5%/K) |
| Connection in parallel | Yes, for redundancy and increased capacity |
| Connection in series | yes |
| Feedback resistance | < 10 V DC |
| Protection against surge voltage on the output | ≤ 10 V DC |
| Control deviation | < 1 % (change in load, static 10 % ... 90 %) < 3 % (Dynamic load change 10 % ... 90 %, 10 Hz) < 0.1 % (change in input voltage ±10 %) |
| Residual ripple | < 100 mV _{pp} (with nominal values) |
| Output power | 40 W |
| Typical response time | < 1 s |
| Maximum power dissipation in no-load condition | < 0.3 W |
| Power loss nominal load max. | < 7.5 W |

General

| | |
|------------|----------------------|
| Net weight | 0.21 kg |
| Efficiency | typ. 84 % (120 V AC) |

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General

| | |
|---------------------------------|--|
| | typ. 85 % (230 V AC) |
| Insulation voltage input/output | 4 kV AC (type test) |
| | 3 kV AC (routine test) |
| Protection class | II (in closed control cabinet) |
| Degree of protection | IP20 |
| MTBF (IEC 61709, SN 29500) | > 1201000 h (40 °C) |
| Mounting position | horizontal DIN rail NS 35, EN 60715 |
| Assembly instructions | alignable: 0 mm horizontally, 30 mm vertically |

Connection data, input

| | |
|---------------------------------------|---------------------|
| Connection method | Screw connection |
| Conductor cross section solid min. | 0.2 mm ² |
| Conductor cross section solid max. | 2.5 mm ² |
| Conductor cross section flexible min. | 0.2 mm ² |
| Conductor cross section flexible max. | 2.5 mm ² |
| Conductor cross section AWG min. | 24 |
| Conductor cross section AWG max. | 14 |
| Stripping length | 8 mm |
| Screw thread | M3 |

Connection data, output

| | |
|---------------------------------------|---------------------|
| Connection method | Screw connection |
| Conductor cross section solid min. | 0.2 mm ² |
| Conductor cross section solid max. | 2.5 mm ² |
| Conductor cross section flexible min. | 0.2 mm ² |
| Conductor cross section flexible max. | 2.5 mm ² |
| Conductor cross section AWG min. | 24 |
| Conductor cross section AWG max. | 14 |
| Stripping length | 8 mm |
| Screw thread | M3 |

Standards and Regulations

| | |
|----------------------------------|---|
| Electromagnetic compatibility | Conformance with EMC Directive 2014/30/EU |
| Noise immunity | EN 61000-6-2:2005 |
| Connection in acc. with standard | CUL |
| Standards/regulations | EN 61000-4-2 |
| Contact discharge | 4 kV (Test Level 2) |
| Standards/regulations | EN 61000-4-3 |
| Frequency range | 80 MHz ... 1 GHz |
| Test field strength | 10 V/m |
| Frequency range | 1.4 GHz ... 2 GHz |
| Test field strength | 3 V/m |

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Standards and Regulations

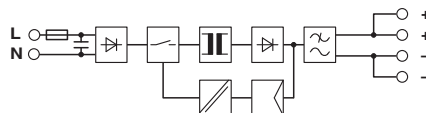
| | |
|--|--|
| Standards/regulations | EN 61000-4-4 |
| Comments | Criterion B |
| Standards/regulations | EN 61000-6-3 |
| | EN 61000-4-6 |
| Frequency range | 10 kHz ... 80 MHz |
| Voltage | 10 V (Test Level 3) |
| Standards/regulations | EN 61000-4-11 |
| Low Voltage Directive | Conformance with LV directive 2006/95/EC |
| Standard - Safety of transformers | EN 61558-2-16 |
| Standard - Electrical safety | IEC 60950-1/VDE 0805 (SELV) |
| 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 | IEC 60950-1 (SELV) and EN 60204-1 (PELV) |
| Standard - Safe isolation | DIN VDE 0100-410 |
| Standard – Limitation of mains harmonic currents | EN 61000-3-2 |
| UL approvals | UL/C-UL listed UL 508 |
| | UL/C-UL Recognized UL 60950-1 |
| | UL/C-UL Listed ANSI/ISA-12.12.01 Class I, Division 2, Groups A, B, C, D T4A (Hazardous Location) |
| Shock | 18 ms, 30g, in each space direction (according to IEC 60068-2-27) |
| Vibration (operation) | < 15 Hz, amplitude ±2.5 mm (according to IEC 60068-2-6) |
| | 15 Hz ... 150 Hz, 2.3g, 90 min. |
| Approval - requirement of the semiconductor industry with regard to mains voltage dips | EN 61000-4-11 |
| Information technology equipment - safety (CB scheme) | CB Scheme |

Environmental Product Compliance

| | |
|------------|---|
| REACH SVHC | Lead 7439-92-1 |
| China RoHS | Environmentally Friendly Use Period = 25; |
| | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

Drawings

Block diagram



Power supply unit - UNO-PS/1AC/ 5DC/ 40W - 2904375

Classifications

eCl@ss

| | |
|------------|----------|
| eCl@ss 4.0 | 27040702 |
| eCl@ss 4.1 | 27040702 |
| eCl@ss 5.0 | 27049002 |
| eCl@ss 5.1 | 27049000 |
| eCl@ss 6.0 | 27049000 |
| eCl@ss 7.0 | 27049002 |
| eCl@ss 8.0 | 27049002 |
| eCl@ss 9.0 | 27040701 |

ETIM

| | |
|----------|----------|
| ETIM 4.0 | EC000599 |
| ETIM 5.0 | EC002540 |
| ETIM 6.0 | EC002540 |

UNSPSC

| | |
|-------------|----------|
| UNSPSC 13.2 | 39121004 |
|-------------|----------|

Approvals

Approvals

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UL Listed / UL Recognized / cUL Recognized / IECCEB Scheme / cUL Listed / EAC / EAC / UL Recognized / IECCEB Scheme / UL Listed / cUL Listed / cUL Recognized / EAC / EAC / cULus Recognized / cULus Listed

Ex Approvals

UL Listed / cUL Listed / UL Listed / cUL Listed / cULus Listed

Approval details

| | | | |
|-----------|--|---|---------------|
| UL Listed | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 123528 |
|-----------|--|---|---------------|

| | | | |
|---------------|--|---|---------------|
| UL Recognized | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 214596 |
|---------------|--|---|---------------|

| | | | |
|----------------|--|---|---------------|
| cUL Recognized | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 214596 |
|----------------|--|---|---------------|

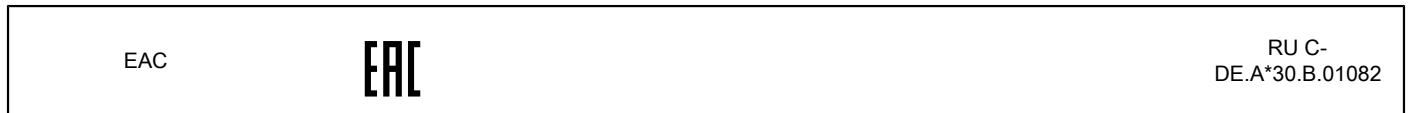
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Approvals

| | | | |
|-----------------|--|---|--------------------------|
| IECEE CB Scheme | | http://www.iecee.org/ | DK-35014-UL |
| cUL Listed | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 123528 |
| EAC | | | EAC-Zulassung |
| EAC | | | EAC-Zulassung |
| UL Recognized | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 214596 |
| IECEE CB Scheme | | http://www.iecee.org/ | DK-35014-UL |
| UL Listed | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 123528 |
| cUL Listed | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 123528 |
| cUL Recognized | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 214596 |
| EAC | | | RU C- DE.A*30.B.01082 |

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Approvals



Accessories

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Device circuit breakers

Electronic device circuit breaker - CBMC E4 24DC/1-4A NO - 2906031



Multi-channel electronic device circuit breaker for protecting four loads at 24 V DC in the event of overload and short circuit. With electronic locking of the set nominal currents. For installation on DIN rails.

Electronic device circuit breaker - CBMC E4 24DC/1-10A NO - 2906032



Multi-channel electronic device circuit breaker for protecting four loads at 24 V DC in the event of overload and short circuit. With electronic locking of the set nominal currents. For installation on DIN rails.

Device protection

Type 3 surge protection device - PLT-SEC-T3-230-FM-UT - 2907919



Type 2/3 surge protection, consisting of protective plug and base element, with integrated status indicator and remote signaling for single-phase power supply networks. Nominal voltage 230 V AC/DC.

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Accessories

Type 3 surge protection device - PLT-SEC-T3-24-FM-UT - 2907916



Type 3 surge protection, consisting of protective plug and base element, with integrated status indicator and remote signaling for single-phase power supply networks. Nominal voltage 24 V AC/DC.

Redundancy module

Redundancy module - UNO-DIODE/5-24DC/2X10/1X20 - 2905489



Redundancy module, 5 V - 24 V DC, 2 x 10 A, 1 x 20 A.