

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

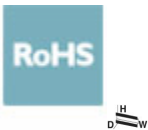
Product Description

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 |  4 046356 897105 |
| GTIN | 4046356897105 |
| Weight per Piece (excluding packing) | 240.000 g |
| Custom tariff number | 85044030 |
| Country of origin | Poland |

Technical data

Dimensions

| | |
|--------|-------|
| Width | 35 mm |
| Height | 90 mm |

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Dimensions

| | |
|----------------------------------|---------------|
| Depth | 84 mm |
| Installation distance right/left | 0 mm / 0 mm |
| Installation distance top/bottom | 30 mm / 30 mm |

Ambient conditions

| | |
|---------------------------------------------------------------------|----------------------------------------------|
| Degree of protection | IP20 |
| Inflammability class in acc. with UL 94 (housing / terminal blocks) | V0 |
| 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 |
| Frequency range (f _N) | 50 Hz ... 60 Hz #10 % |
| Current consumption | 0.8 A (100 V AC) |
| | 0.4 A (240 V AC) |
| Nominal power consumption | 97.1 VA |
| Inrush current | < 30 A (typical) |
| Mains buffering time | > 30 ms (120 V AC) |
| | > 120 ms (230 V AC) |
| Input fuse | 2 A (slow-blow, internal) |
| Recommended breaker for input protection | 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 voltage resistance | < 10 V DC |
| Protection against overvoltage at the output (OVP) | ≤ 10 V DC |
| Control deviation | < 1 % (change in load, static 10 % ... 90 %) |
| | < 3 % (Dynamic load change 10 % ... 90 %, 10 Hz) |

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Output data

| | |
|------------------------------------------------|----------------------------------------------|
| | < 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) |
| | typ. 85 % (230 V AC) |
| MTBF (IEC 61709, SN 29500) | > 1201000 h (40 °C) |
| Insulation voltage input/output | 4 kV AC (type test) |
| | 3 kV AC (routine test) |
| Degree of protection | IP20 |
| Protection class | II (in closed control cabinet) |
| Inflammability class in acc. with UL 94 (housing / terminal blocks) | V0 |
| Housing material | Polycarbonate |
| Foot latch material | POM (Polyoxymethylen) |
| 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 |
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Connection data, output

| | |
|----------------------------------|------|
| Conductor cross section AWG min. | 24 |
| Conductor cross section AWG max. | 14 |
| Stripping length | 8 mm |
| Screw thread | M3 |

Standards

| | |
|----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|
| EMC requirements for noise immunity | EN 61000-6-1 |
| | EN 61000-6-2 |
| EMC requirements for noise emission | EN 61000-6-3 |
| | EN 61000-6-4 |
| Standard - Safety of transformers | EN 61558-2-16 |
| Standard - Electrical safety | IEC 62368-1/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 62368-1 (SELV) und EN 60204-1 (PELV) |
| Standard - Safe isolation | DIN VDE 0100-410 |
| Standard – Limitation of mains harmonic currents | EN 61000-3-2 |
| Mains variation/undervoltage | EN 61000-4-11 |

Conformance/approvals

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|--------------|--------------------------------------------------------------------------------------------------|
| UL approvals | UL/C-UL listed UL 508 |
| | UL/C-UL Listed ANSI/ISA-12.12.01 Class I, Division 2, Groups A, B, C, D T4A (Hazardous Location) |
| | UL/C-UL Recognized UL 60950-1 |
| CSA | CAN/CSA-C22.2 No. 60950-1-07 |
| | CSA-C22.2 No. 107.1-01 |
| | CAN/CSA-C22.2 No. 213 Class I, Division 2, Groups A, B, C, D T4A (Hazardous Location) |

EMC data

| | |
|-------------------------------|---------------------------------------------------|
| Electromagnetic compatibility | Conformance with EMC Directive 2014/30/EU |
| Low Voltage Directive | Conformance with Low Voltage Directive 2014/35/EC |
| Electrostatic discharge | EN 61000-4-2 |
| Contact discharge | 6 kV (Test Level 3) |
| Discharge in air | 8 kV (Test Level 3) |
| Electromagnetic HF field | EN 61000-4-3 |
| Frequency range | 80 MHz ... 1 GHz |
| Test field strength | 10 V/m |
| Frequency range | 1 GHz ... 2 GHz |
| Test field strength | 10 V/m |

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EMC data

| | |
|----------------------------|--------------------------------------------------------------------------------------|
| Frequency range | 2 GHz ... 3 GHz |
| Test field strength | 10 V/m |
| Comments | Criterion A |
| Fast transients (burst) | EN 61000-4-4 |
| Input | 4 kV (Test Level 4 - asymmetrical) |
| Output | 2 kV (Test Level 3 - asymmetrical) |
| Comments | Criterion B |
| Surge voltage load (surge) | EN 61000-4-5 |
| Input | 2 kV (Test Level 3 - symmetrical) |
| | 4 kV (Test Level 4 - asymmetrical) |
| Output | 1 kV (Test Level 2 - symmetrical) |
| | 2 kV (Test Level 3 - asymmetrical) |
| Comments | Criterion B |
| Conducted interference | EN 61000-4-6 |
| Frequency range | 10 kHz ... 80 MHz |
| Voltage | 10 V (Test Level 3) |
| Comments | Criterion A |
| Voltage dips | EN 61000-4-11 |
| Criterion A | Normal operating behavior within the specified limits. |
| Criterion B | Temporary impairment to operational behavior that is corrected by the device itself. |

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" |