

Power supply unit - UNO-PS/2AC/24DC/90W/C2LPS - 2904371

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Primary-switched UNO POWER power supply for DIN rail mounting, input: 2-phase, output: 24 V DC/90 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 100 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.

Product Features

- 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



Key Commercial Data

| | |
|--------------------------------------|---------|
| Packing unit | 1 pc |
| Weight per Piece (excluding packing) | 363.6 g |
| Country of origin | Germany |

Technical data

Dimensions

| | |
|--------|-------|
| Width | 55 mm |
| Height | 90 mm |
| Depth | 84 mm |

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 |

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Ambient conditions

| | |
|--|-----------------------------------|
| Max. permissible relative humidity (operation) | ≤ 95 % (at 25 °C, non-condensing) |
| Noise immunity | EN 61000-6-2:2005 |

Input data

| | |
|-------------------------------------|---|
| Nominal input voltage range | 2x 400 V AC ... 500 V AC |
| Input voltage range | 2x 264 V AC ... 575 V AC |
| AC frequency range | 45 Hz ... 65 Hz |
| Current consumption | 0.6 A (400 V AC) |
| | 0.5 A (500 V AC) |
| Inrush surge current | < 30 A (typical) |
| Power failure bypass | > 65 ms (400 V AC) |
| | > 100 ms (500 V AC) |
| Input fuse | 2 A (slow-blow, internal) |
| Choice of suitable circuit breakers | 6 A ... 16 A (Characteristics B, C, D, K) |
| Type of protection | Transient surge protection |
| Protective circuit/component | Varistor |

Output data

| | |
|--|--|
| Nominal output voltage | 24 V DC ±1 % |
| Nominal output current (I _N) | 3.75 A |
| | 3.38 A (Derating 10 %) |
| Derating | 55 °C ... 70 °C (2.5%/K) |
| Connection in parallel | No |
| Connection in series | No |
| 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 | < 50 mV _{PP} (with nominal values) |
| Output power | 90 W |
| Maximum power dissipation in no-load condition | < 0.7 W |
| Power loss nominal load max. | < 12 W |

General

| | |
|---------------------------------|--------------------------------|
| Net weight | 0.32 kg |
| Efficiency | > 89.5 % |
| Insulation voltage input/output | 4 kV AC (type test) |
| | 3 kV AC (routine test) |
| Protection class | II (in closed control cabinet) |
| MTBF (IEC 61709, SN 29500) | > 828000 h (40°C) |

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General

| | |
|-----------------------|--|
| 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 2004/108/EC |
| Noise immunity | EN 61000-6-2:2005 |
| Connection in acc. with standard | CUL |
| Standards/regulations | EN 61000-4-2 |
| | EN 61000-4-3 |
| | EN 61000-4-4 |
| | EN 61000-4-5 |
| | EN 61000-4-6 |
| | EN 61000-4-11 |
| Standard – Electrical equipment of machines | EN 60204-1 |
| 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) |

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Standards and Regulations

| | |
|--|---|
| 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 |
| | NEC Class 2 as per UL 1310 |
| | UL ANSI/ISA-12.12.01 Class I, Division 2, Groups A, B, C, D T4 (Hazardous Location) |
| Vibration (operation) | < 15 Hz, amplitude ±2.5 mm (according to IEC 60068-2-6) |
| | 15 Hz ... 150 Hz, 2.3g, 90 min. |
| Low Voltage Directive | Conformance with LV directive 2006/95/EC |
| Approval - requirement of the semiconductor industry with regard to mains voltage dips | EN 61000-4-11 |
| Information technology equipment - safety (CB scheme) | CB Scheme |

Classifications

eCl@ss

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

ETIM

| | |
|----------|----------|
| ETIM 4.0 | EC002540 |
| ETIM 5.0 | EC002540 |

Approvals

Approvals

Approvals

UL Recognized / UL Listed / cUL Recognized / cUL Listed / IEC EE CB Scheme / cULus Recognized / cULus Listed

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Approvals

Ex Approvals

UL Listed / cUL Listed / cULus Listed

Approvals submitted


Approval details

UL Recognized 


UL Listed 

cUL Recognized 

cUL Listed 

IECEE CB Scheme 

cULus Recognized 

cULus Listed 

Drawings

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Block diagram

