

Power supply unit - MINI-PS-100-240AC/24DC/C2LPS - 2866336

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Primary-switched MINI POWER power supply for DIN rail mounting, input: 1-phase, output: 24 V DC/100 W

Product Description

MINI POWER power supplies for MCR technology

In measurement and control technology (MCR), modular electronics housing has become the industry standard. MINI POWER is the power supply unit to go with it. The devices are flexible, thanks to special voltages and special versions.

Your advantages

- ✓ Easy-maintenance connection technology thanks to keyed COMBICON connectors
- ✓ Remote monitoring of output voltage via switching output



Key Commercial Data

| | |
|--------------------------------------|---|
| Packing unit | 1 pc |
| GTIN |  4 017918 975043 |
| GTIN | 4017918975043 |
| Weight per Piece (excluding packing) | 510.800 g |
| Custom tariff number | 85044030 |
| Country of origin | China |

Technical data

Dimensions

| | |
|----------------------------------|-------------|
| Width | 67.5 mm |
| Height | 99 mm |
| Depth | 107 mm |
| Installation distance right/left | 0 mm / 0 mm |

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Technical data

Dimensions

| | |
|----------------------------------|---------------|
| Installation distance top/bottom | 50 mm / 50 mm |
|----------------------------------|---------------|

Ambient conditions

| | |
|--|--|
| Degree of protection | IP20 |
| Ambient temperature (operation) | -25 °C ... 70 °C (> 60 °C Derating: 2.5 %/K) |
| Ambient temperature (storage/transport) | -40 °C ... 85 °C |
| Max. permissible relative humidity (operation) | ≤ 95 % (at 25 °C, non-condensing) |

Input data

| | |
|--|---|
| Nominal input voltage range | 100 V AC ... 240 V AC |
| Input voltage range | 85 V AC ... 264 V AC |
| | 90 V DC ... 350 V DC |
| AC frequency range | 45 Hz ... 65 Hz |
| Current consumption | 1.3 A (120 V AC) |
| | 0.8 A (230 V AC) |
| | 1.3 A (90 V DC) |
| | 0.4 A (350 V DC) |
| Nominal power consumption | 194 VA |
| Inrush current | < 15 A (typical) |
| Mains buffering time | > 20 ms (120 V AC) |
| | > 100 ms (230 V AC) |
| Input fuse | 3.15 A (slow-blow, internal) |
| Recommended breaker for input protection | 6 A ... 16 A (Characteristics B, C, D, K) |

Output data

| | |
|---|---|
| Nominal output voltage | 24 V DC ±1 % |
| Setting range of the output voltage (U_{Set}) | 22.5 V DC ... 26 V DC (> 24 V DC, constant capacity restricted) |
| Nominal output current (I_N) | 3.8 A (-25 °C ... 60 °C) |
| Derating | 60 °C ... 70 °C (2.5%/K) |
| Connection in parallel | Yes, for redundancy and increased capacity |
| Connection in series | yes |
| Residual ripple | < 40 mV _{PP} (20 MHz) |
| Output power | 100 W |
| Typical response time | < 0.4 s |
| Peak switching voltages idling | < 100 mV _{PP} (20 MHz) |
| Maximum power dissipation in no-load condition | 2.5 W |
| Power loss nominal load max. | 12 W |

General

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Technical data

General

| | |
|---------------------------------|--|
| Net weight | 0.4 kg |
| Operating voltage display | Green LED |
| Efficiency | > 88 % (for 230 V AC and nominal values) |
| MTBF (IEC 61709, SN 29500) | > 815000 h (40 °C) |
| Insulation voltage input/output | 3 kV (type test) |
| | 3 kV (routine test) |
| Degree of protection | IP20 |
| Protection class | II (in closed control cabinet) |
| Mounting position | horizontal DIN rail NS 35, EN 60715 |
| Assembly instructions | alignable: horizontally 0 mm, vertically 50 mm |

Connection data, input

| | |
|---------------------------------------|----------------------------|
| Connection method | Pluggable 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. | 12 |
| Stripping length | 7 mm |
| Screw thread | M3 |

Connection data, output

| | |
|---------------------------------------|----------------------------|
| Connection method | Pluggable 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. | 12 |
| Stripping length | 7 mm |
| Screw thread | M3 |

Connection data for signaling

| | |
|---------------------------------------|---------------------|
| 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 |

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Technical data

Connection data for signaling

| | |
|----------------------------------|----|
| Conductor cross section AWG max. | 12 |
| 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 - Electrical safety | EN 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 | EN 60950-1 (SELV) |
| | EN 60204 (PELV) |
| Standard - Safe isolation | DIN VDE 0100-410 |
| Standard – Limitation of mains harmonic currents | EN 61000-3-2 |
| Rail applications | EN 50121-4 |

Conformance/approvals

| | |
|--------------|--|
| UL approvals | UL/C-UL listed UL 508 |
| | UL/C-UL Recognized UL 60950-1 |
| | UL ANSI/ISA-12.12.01 Class I, Division 2, Groups A, B, C, D (Hazardous Location) |
| | NEC Class 2 as per UL 1310 |

EMC data

| | |
|-------------------------------|---|
| Electromagnetic compatibility | Conformance with EMC Directive 2014/30/EU |
| Low Voltage Directive | Conformance with Low Voltage Directive 2014/35/EC |

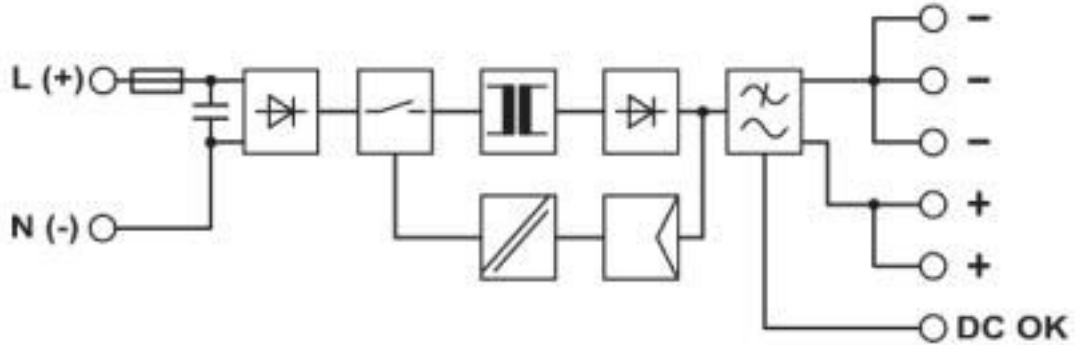
Environmental Product Compliance

| | |
|------------|---|
| 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

Power supply unit - MINI-PS-100-240AC/24DC/C2LPS - 2866336

Block diagram



Classifications

eCl@ss

| | |
|---------------|----------|
| eCl@ss 10.0.1 | 27040701 |
| eCl@ss 4.0 | 27040700 |
| eCl@ss 4.1 | 27040700 |
| eCl@ss 5.0 | 27049000 |
| 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 2.0 | EC001039 |
| ETIM 3.0 | EC001039 |
| ETIM 4.0 | EC000599 |
| ETIM 5.0 | EC002540 |
| ETIM 6.0 | EC002540 |
| ETIM 7.0 | EC002540 |

UNSPSC

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|---------------|----------|
| UNSPSC 6.01 | 30211502 |
| UNSPSC 7.0901 | 39121004 |
| UNSPSC 11 | 39121004 |
| UNSPSC 12.01 | 39121004 |
| UNSPSC 13.2 | 39121004 |
| UNSPSC 18.0 | 39121004 |
| UNSPSC 19.0 | 39121004 |

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Classifications

UNSPSC

| | |
|-------------|----------|
| UNSPSC 20.0 | 39121004 |
| UNSPSC 21.0 | 39121004 |

Approvals

Approvals

Approvals

UL Listed / UL Recognized / cUL Recognized / cUL Listed / EAC / EAC / cULus Recognized / cULus Listed

Ex Approvals

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 211944 |
|---------------|--|---|---------------|

| | | | |
|----------------|--|---|---------------|
| cUL Recognized | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 211944 |
|----------------|--|---|---------------|

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


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|-----|--|---------------|
| EAC | | EAC-Zulassung |
|-----|--|---------------|

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Approvals

| | | |
|-----|---|---------------------|
| EAC |  | RU*DE*08.B.01873/19 |
|-----|---|---------------------|

| | | |
|------------------|---|--|
| cULus Recognized |  | |
|------------------|---|--|

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| cULus Listed |  | |
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